2022

Annual & Sustainability Report

Contents

Alfa Laval is a world-leading, global provider of first-rate products in the areas of heat transfer, separation and fluid handling. With these as its base, Alfa Laval aims to help enhance the productivity and competitiveness of its customers in various industries throughout the world. We define their challenges and deliver sustainable products and solutions that meet their requirements – mainly in energy, food and the marine industry.

World-leading in three key technologies

Heat transfer. Compact heat exchangers that recycle heat, optimize customers' energy consumption, cut costs and reduce negative environmental impact.

Separation. Separators, decanter centrifuges, filters, strainers and membranes that separate liquids from other liquids and solid particles from liquids or gases.

Fluid handling. Pumps, valves, tank cleaning equipment and installation material for industries with stringent hygiene requirements as well as pumping systems specifically for the marine industry and the offshore market.

Three business divisions with customer needs front and centre

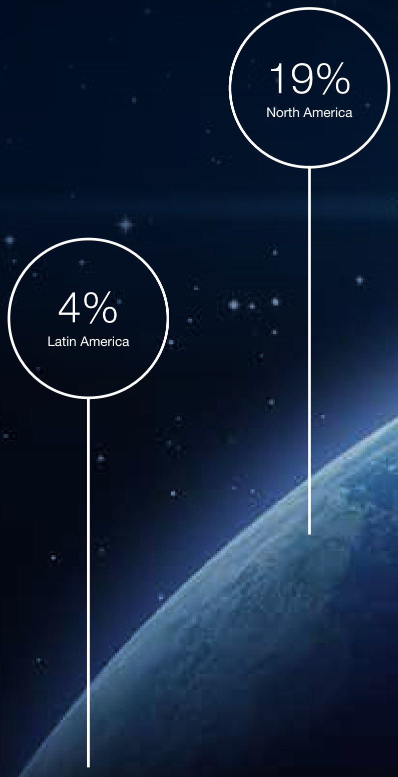
The need to heat, cool, transport and separate arises in many industries: food, energy, pharmaceuticals, refineries or petrochemicals – Alfa Laval can help in the majority of them. End customers are reached through the **Energy, Food & Water** and **Marine divisions**.

>100

Alfa Laval's products, systems and services are sold in more than 100 countries. This means that Alfa Laval is close to its customers, ready to help at a moment's notice when the need arises.

20,300

Alfa Laval's employees are the company's most important resource. Creating a secure, inspiring work environment is therefore a top priority, as is forming a culture that can both attract and retain talent and allow people to thrive.



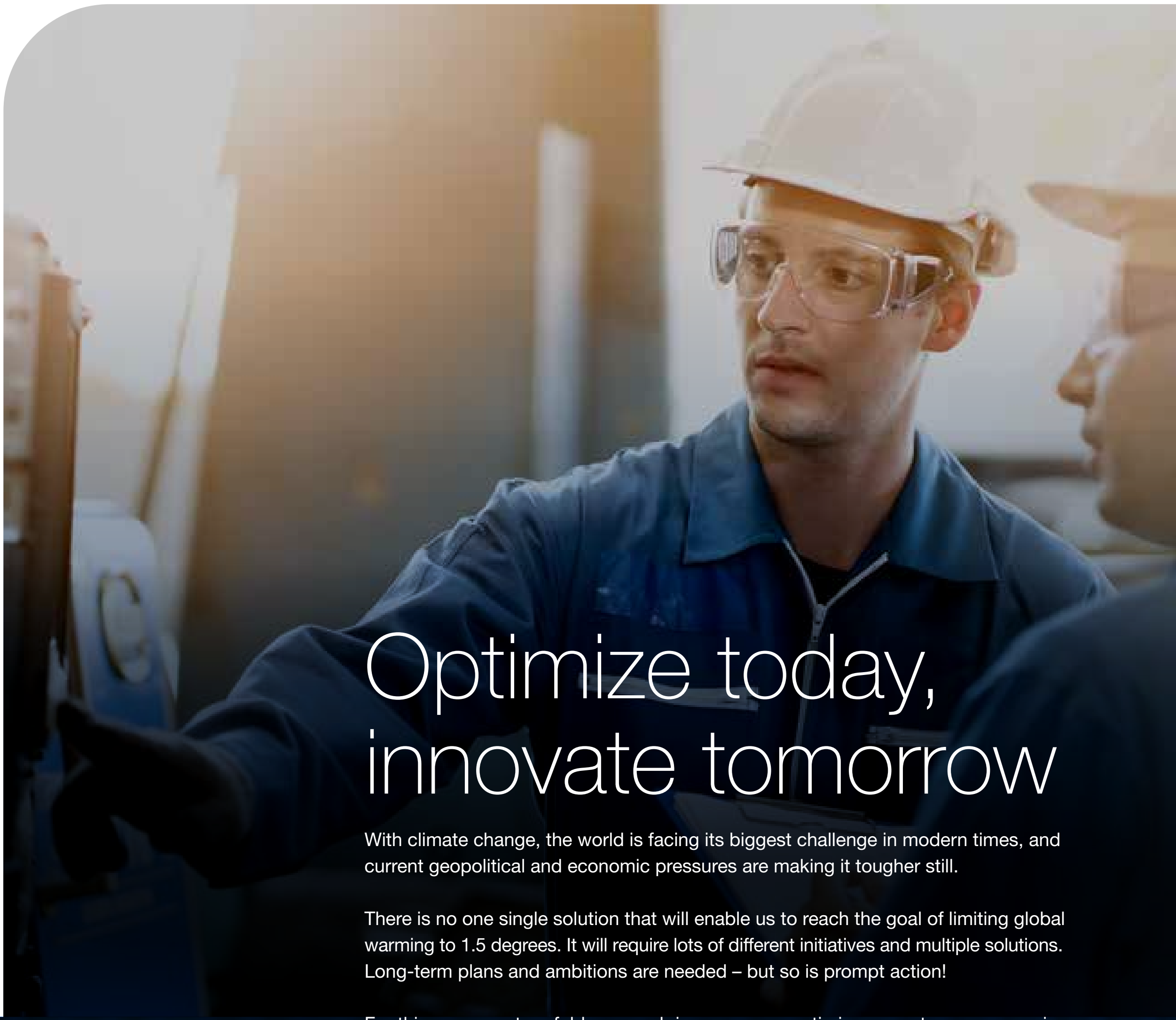
○ Share of Group orders in 2022

A global supply chain with strong regional presence

Operations handles production-related procurement, distribution and logistics on a global basis and ensures that anything sold by the three divisions is produced and delivered in line with the promise made to the customer.

Optimizing today – innovating for the future

With one foot planted in the traditional industrial economy and one foot exploring the new digital and sustainable landscape, Alfa Laval is positioned to play an essential role in transforming the fossil economy into a sustainable, decarbonized, open and inclusive world. This journey is ongoing, and we are constantly optimizing and refining our existing ways of working while pioneering and developing new technologies to meet tomorrow's demands.



Optimize today, innovate tomorrow

With climate change, the world is facing its biggest challenge in modern times, and current geopolitical and economic pressures are making it tougher still.

There is no one single solution that will enable us to reach the goal of limiting global warming to 1.5 degrees. It will require lots of different initiatives and multiple solutions. Long-term plans and ambitions are needed – but so is prompt action!

For this reason, a two-fold approach is necessary: optimise current processes using the technologies already available today and, at the same time, innovate and implement cleaner solutions for tomorrow. There is a need to preserve natural resources while meeting the demands of a growing global population.

Alfa Laval is a front runner and in the unique position to contribute to both areas. The company already offers a broad portfolio of cutting-edge technologies that can reduce energy consumption and emissions in a wide range of different industries and industrial processes. Its products can minimise waste and maximize natural resources in food and beverage production, as well as clean and reuse wastewater.

Additionally, it has the experience, expertise and resources to innovate and create new solutions for the future, and is investing significantly in R&D capabilities and working in close collaboration with a range of partners to help accelerate the transition to a cleaner, more sustainable planet. Alfa Laval is taking action now.

An extraordinary year

It was in many ways an exceptional year, in both a positive and a negative way. On the one hand, it was a year with very strong growth ending with a record high order book and a high confidence in the future. On the other hand, it was a year with an unprecedented amount of crisis situations. Let me start with some reflections on the crises.

In February, Russia attacked Ukraine and we faced a major war in Europe for the first time in decades. The first priority at that time was for Alfa Laval was to secure the situation for our employees in Ukraine. The second priority was to resolve how to deal with the business in Russia. The decision in February regarding Russia was to stop all new orders, cancel the existing order book affected by the sanctions, and to deliver the already existing orders in compliance with the sanctions. It was effectively an organized way of winding down the complete business activities in Russia. By the end of 2022 the number of employees in Russia had been reduced from 250 to approximately 70, the order backlog had been reduced by more than 95 percent, and as a result our business activities is expected to be discontinued during 2023.

The indirect effect of the war was an additional pressure on global supply chains. After years of mitigating the effects from the pandemic, an emerging energy crisis and volatile commodity markets had to be addressed. Together with several shutdowns of manufacturing units in China due to covid, there were many operational uncertainties throughout the year. In all, the challenges were managed in a good way during the year. Early steps in price management back in 2021, in combination with increased volumes, partly compensated for the cost inflation. Gradually from 2020, we have learnt how to manage covid-related shutdowns and could keep production running with limited negative effects.

The main financial impact from the crises was a build-up of inventory levels to ensure customer service and invoicing lagging behind order intake. In a year with a new all-time high order intake of 59 BSEK, it resulted in a record order book of almost 37 BSEK at the year-end. Despite macro-economic concerns, global demand remained strong across all three divisions. If there was one single factor driving demand in 2022 it would have to be sustainability!

The Energy division increased efforts and investments into the energy transition. The need to improve energy efficiency as part of the Paris agreement is now visible in many applications, like residential heating and data centre cooling. An already fast-growing market for residential heat pumps in Europe was further escalated, as small gas boilers dependent on Russian gas imports became an unattractive part of the mix. The longer-term effects of rebuilding the global energy system away from fossil fuels started to show in the order intake for the first time. Two major examples were the large order in Saudi Arabia related to the largest hydrogen production plant so far, and the first large order for LiquidWind, which will use carbon capture as a source to produce e-methanol as fuel for the merchant fleet. Order intake for the division reached a new record of 17 BSEK.

The Food&Water division also set a new record of 22 BSEK in order intake for the year. Customers are increasingly looking to reduce energy and water consumption in their production processes, driving demand for more advanced fluid handling equipment. Biofuels is another application driving growth, with several large orders booked during the year. Converting vegetable and animal fats into biodiesel and jet fuel will remain an important transitional fuel for combustion engines over the coming decades. The acquisition of Desmet was completed in 2022, with the objective to strengthen Alfa Laval´s position in the vegetable oil and biofuel markets. Desmet is expected to add approximately 4 BSEK in annual business volume in the coming years.

The Marine division faced some challenges during the year with a modest contracting market for new ship building combined with the expected completion of the retrofit period for both scrubbers and ballast water applications. Still, the division grew in 2022 and booked orders to a value of 19 BSEK. The big driver of demand for the division is that shipowners need to decarbonize the global merchant fleet by 40 percent by 2030. In the short-term, increased demand for gas and multi-fuel solutions will support the order intake. The acquisition of StormGeo in 2021, providing digital tools to optimize the fuel consumption onboard, grew to a new record level. Investments to build a broader toolbox for decarbonization is running at full speed. The solutions for wind propulsion through the joint venture company Oceanbird is progressing as planned with the commercial orders expected in 2025/26. The development of a new air-lubrication system to reduce friction under the hull was completed in 2022 with the first full-scale pilot successfully installed late in the year. Finally, a new product called E-powerpack was launched, providing an efficient solution to generate auxiliary power from waste heat recovery.

Our strategy going forward remains firmly devoted to support the global sustainability transformation based on technological leadership in our core areas. The pace of investment in R&D will continue to grow as existing technologies need to be complemented with new metallurgical processes and new customer applications. The capital investments to support capacity growth and new technology implementation will increase further and is expected to reach 2.5-3 BSEK annually over the next few years. Despite global macro-economic concerns, the business plan is being executed with full commitment. With a strong order book and a reduced exposure to historically volatile end-markets, Alfa Laval will have time to adjust to a more negative market outlook, should it be needed.

To be a leader in providing technologies and solutions to today´s sustainability challenges, requires a firm plan regarding our own operations and impact on the planet. In 2022, we formalized our targets in all areas, with a special focus on carbon emissions. Our target is to become net zero on scopes 1–2, and to cut scope 3 emissions by 50 percent by 2030, compared to 2020. We now have clear targets per operational unit, a well-defined way to measure and report progress, and action plans for how to get there in most areas. While we are dependent on other parts of society doing their part, including the transportation and energy sectors, we can do a lot on our own. I hope you take the time to review our Sustainability Report, which describes what we are doing in further detail.

Finally, if there was ever a time to thank our employees for their contributions it is now. We had crises teams operating 24/7 during long periods of time. We had parts of our Chinese team moving into our factories with sleeping bags for two weeks to be able to operate under the closed-loop procedure during shut-downs. Despite an all-time high order intake of 59 BSEK and a difficult delivery situation, our customer service organization managed the year with the same resource levels as in 2020 and 2021. My wish for 2023 is a more stable operating environment and a little bit of time to recharge the batteries for our great teams around the globe. It may prove to be a bit of wishful thinking, but it is perhaps needed at this point in time.

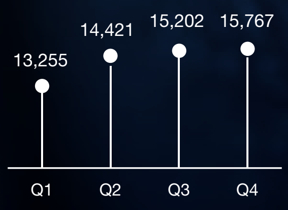
Lund, February 2023

Tom Erixon
President & CEO

> “If there was one single factor driving demand in 2022 it would have to be sustainability!”

58,645

Order intake, SEK million



52,135

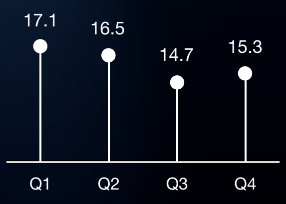
Net sales, SEK million

8,229

Adjusted EBITA, SEK million

15.8%

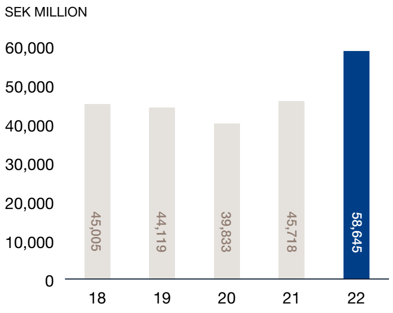
Adjusted EBITA, margin



2022 in brief

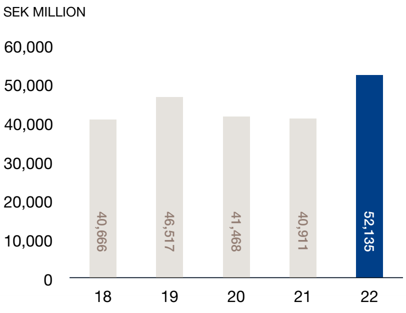
Order intake

Order intake amounted to SEK 58,645 million in 2022, a growth of 28 percent to 2021. Organic order intake grew 14 percent.



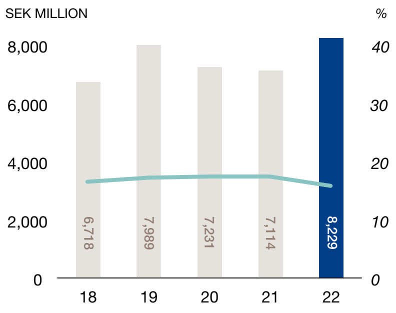
Sales

Net sales amounted to SEK 52,135 million in 2022, a growth of 27 percent to 2021. Organic order intake grew 11 percent.



Adjusted EBITA

Adjusted EBITA amounted to SEK 8,229 million in 2022, a growth of 16 percent to 2021. The adjusted EBITA margin was 15.8 percent.



Amounts in SEK million unless otherwise stated	+/- %[6]	2022	2021	2020	2019	2018
Order intake	28%	58,645	45,718	39,833	44,119	45,005
Net sales	27%	52,135	40,911	41,468	46,517	40,666
Adjusted EBITDA [1]	17%	9,678	8,305	8,365	9,062	7,344
Adjusted EBITA [2]	16%	8,229	7,114	7,231	7,989	6,718
Adjusted EBITA [2], %		15.8	17.4	17.4	17.2	16.5
Result after financial items	1%	6,179	6,142	4,977	7,221	5,896
Return on capital employed, %		17.3	20.0	19.1	23.0	22.4
Return on shareholders' equity, %		13.5	15.8	12.7	21.3	20.3
Earnings per share, SEK	-4%	10.89	11.38	8.47	13.08	10.77
Dividend per share, SEK		6.00 [3]	6.00	5.50	0	5.00
Free cash flow per share, SEK [4]		-5.38	0.57	15.89	10.00	8.56
Solidity, %		43.9	50.3	47.8	43.1	40.6
Net debt to EBITDA, times		1.47	0.87	0.48	0.88	0.93
Number of employees [5]	14%	20,300	17,883	16,882	17,497	17,228

[1] Adjusted EBITDA – Operating income before depreciation and amortization of step-up values, adjusted for items affecting comparability.

[2] Adjusted EBITA – Operating income before amortization of step-up values, adjusted for items affecting comparability.

[3] Board proposal to the Annual General Meeting.

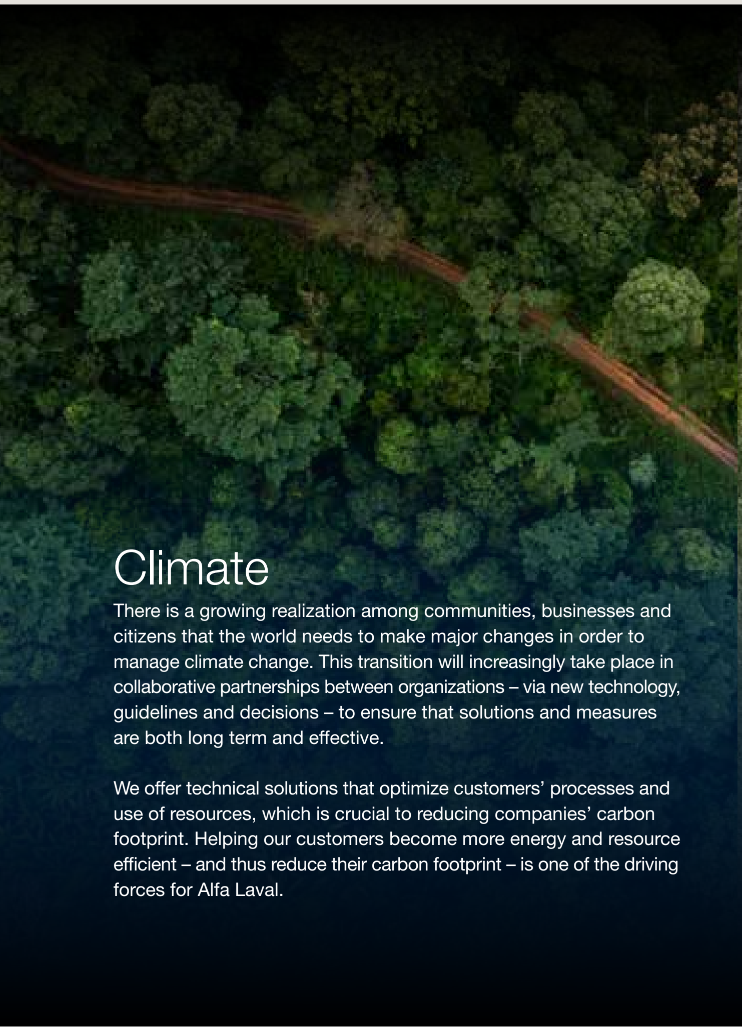
[4] Free cash flow is the sum of cash flow from operating and investing activities.

[5] Number of employees at year-end.

[6] Percentage change between 2021 and 2022.

Drivers for growth

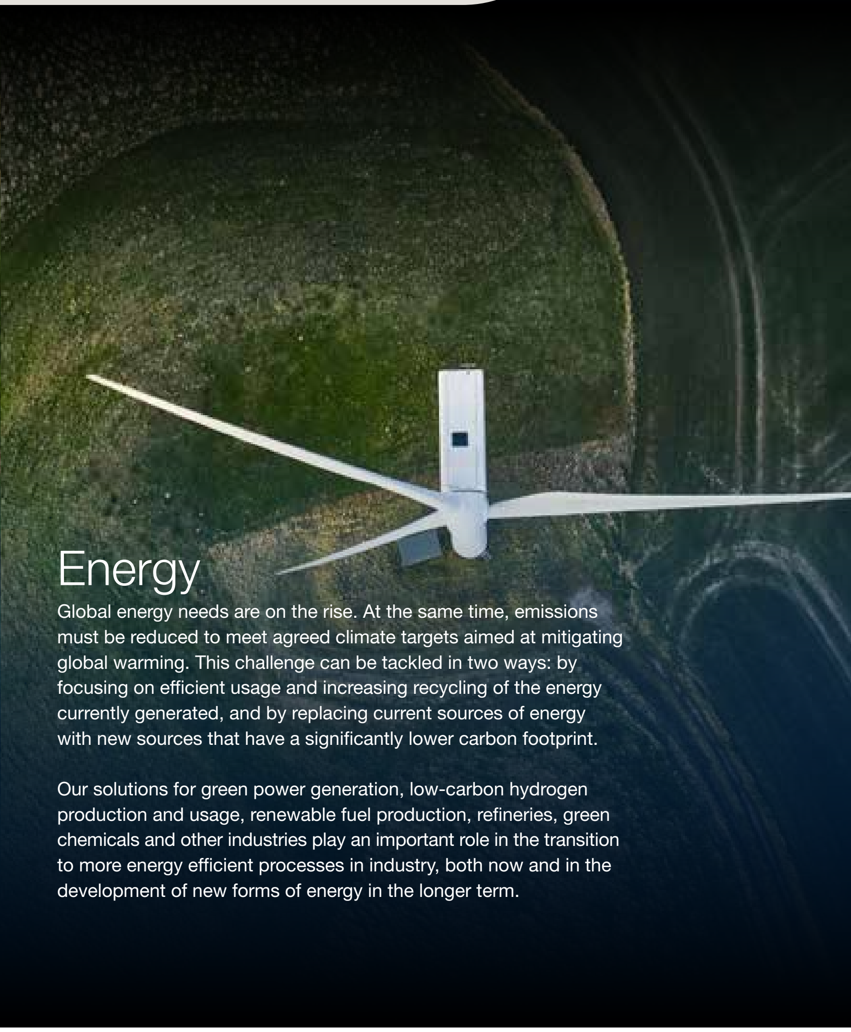
In a changing world we face new challenges, but also opportunities. Global trends in food, transportation and energy are fuelling growth in areas that are new for us. Climate change is one such example. The quest for greener and more sustainable energy sources is also creating new needs and with it interesting business opportunities. The same is true of changes in the food market, where the need for clean water must be secured and the search for new raw materials intensifies as consumers demand products with a lower carbon footprint.



Climate

There is a growing realization among communities, businesses and citizens that the world needs to make major changes in order to manage climate change. This transition will increasingly take place in collaborative partnerships between organizations – via new technology, guidelines and decisions – to ensure that solutions and measures are both long term and effective.

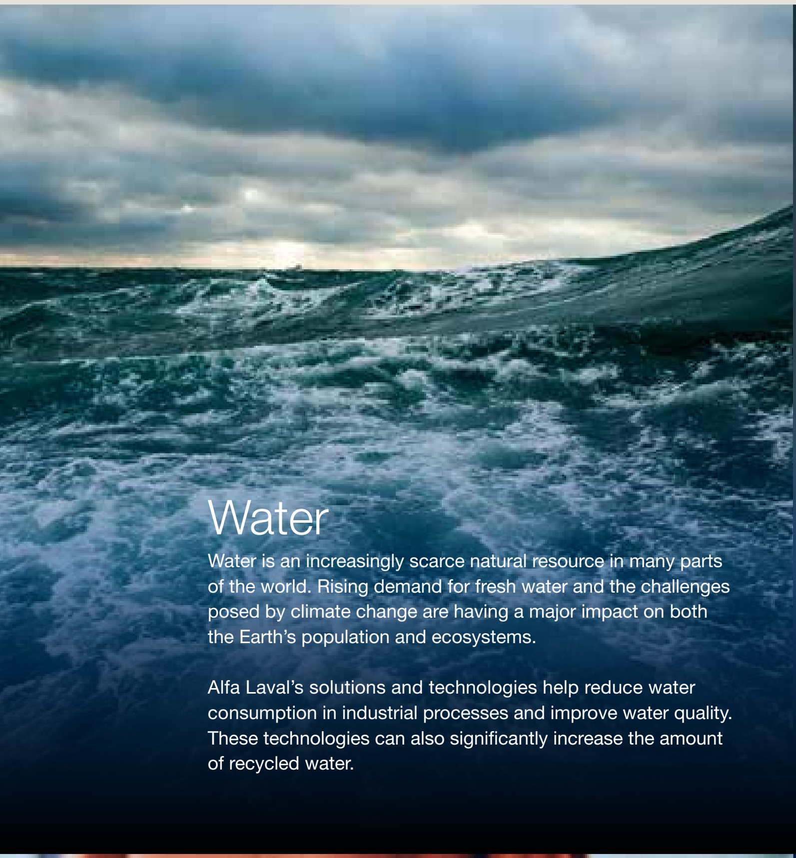
We offer technical solutions that optimize customers' processes and use of resources, which is crucial to reducing companies' carbon footprint. Helping our customers become more energy and resource efficient – and thus reduce their carbon footprint – is one of the driving forces for Alfa Laval.



Energy

Global energy needs are on the rise. At the same time, emissions must be reduced to meet agreed climate targets aimed at mitigating global warming. This challenge can be tackled in two ways: by focusing on efficient usage and increasing recycling of the energy currently generated, and by replacing current sources of energy with new sources that have a significantly lower carbon footprint.

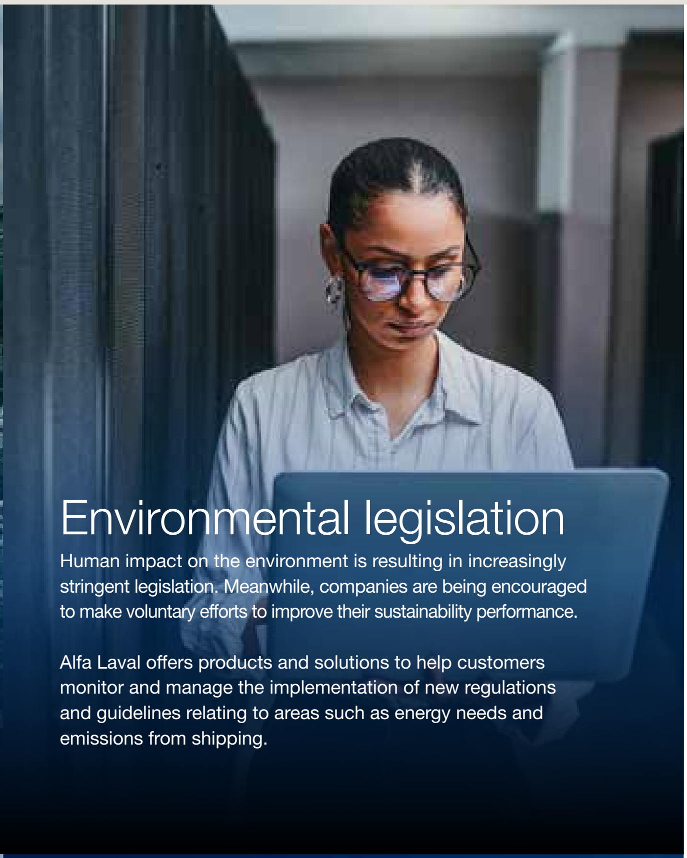
Our solutions for green power generation, low-carbon hydrogen production and usage, renewable fuel production, refineries, green chemicals and other industries play an important role in the transition to more energy efficient processes in industry, both now and in the development of new forms of energy in the longer term.



Water

Water is an increasingly scarce natural resource in many parts of the world. Rising demand for fresh water and the challenges posed by climate change are having a major impact on both the Earth's population and ecosystems.

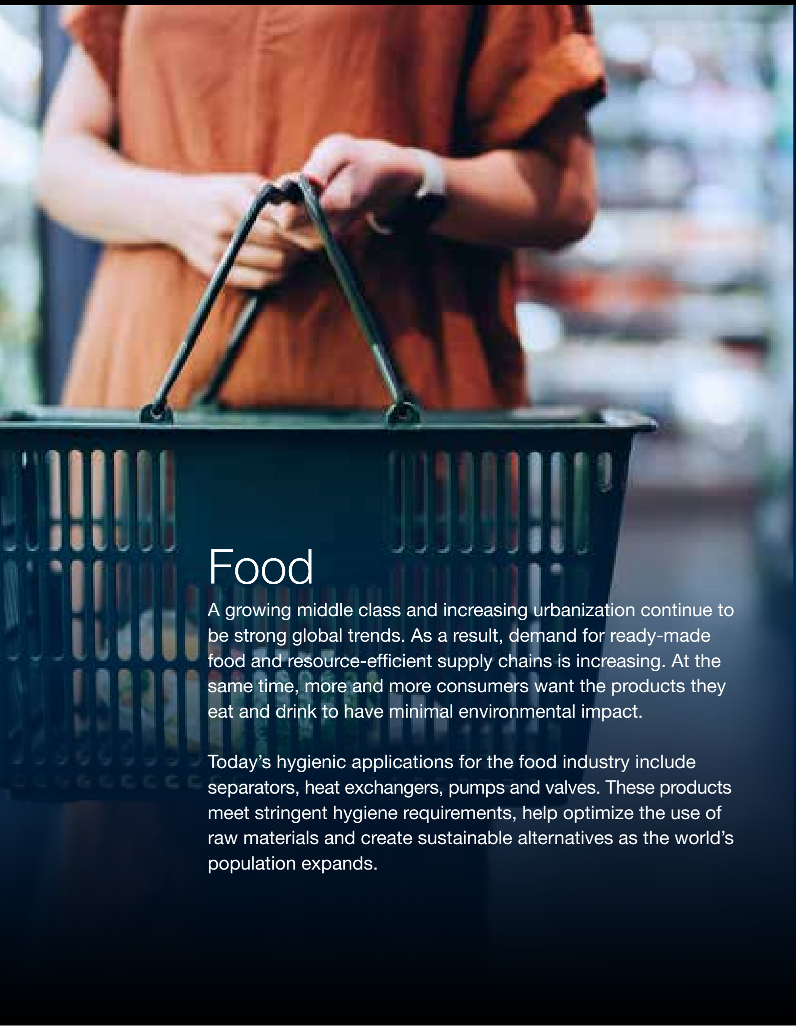
Alfa Laval's solutions and technologies help reduce water consumption in industrial processes and improve water quality. These technologies can also significantly increase the amount of recycled water.



Environmental legislation

Human impact on the environment is resulting in increasingly stringent legislation. Meanwhile, companies are being encouraged to make voluntary efforts to improve their sustainability performance.

Alfa Laval offers products and solutions to help customers monitor and manage the implementation of new regulations and guidelines relating to areas such as energy needs and emissions from shipping.



Food

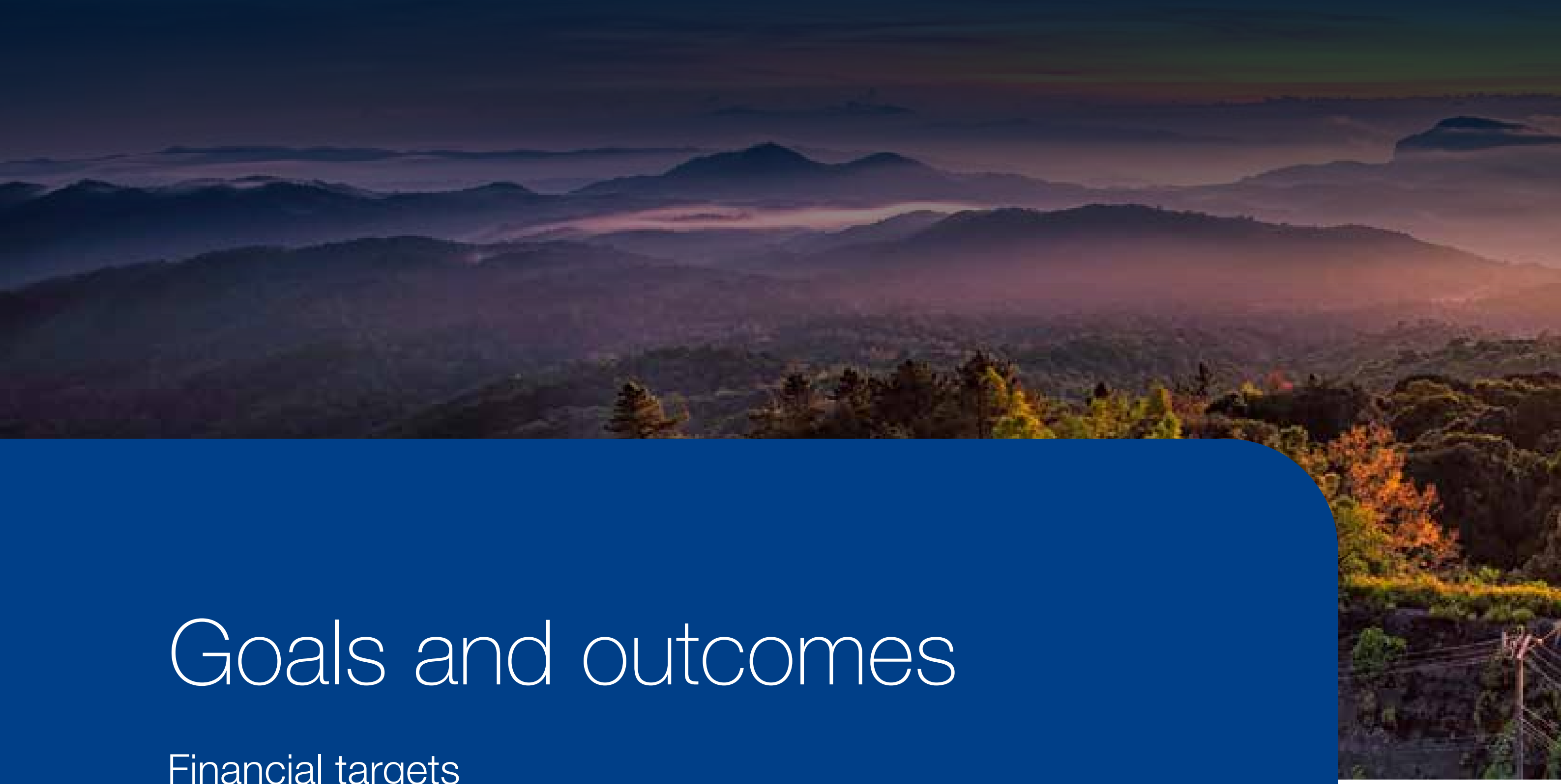
A growing middle class and increasing urbanization continue to be strong global trends. As a result, demand for ready-made food and resource-efficient supply chains is increasing. At the same time, more and more consumers want the products they eat and drink to have minimal environmental impact.

Today's hygienic applications for the food industry include separators, heat exchangers, pumps and valves. These products meet stringent hygiene requirements, help optimize the use of raw materials and create sustainable alternatives as the world's population expands.

Global trade

International trade connects a world where raw materials are extracted in one country and processed in another, and where the finished products are transported to customers all over the world.

Increasing international trade brings growing demands for efficient global value chains. For more than a century, Alfa Laval has been supplying products and systems to the marine industry, including separators for cleaning fuel in engine rooms, heat exchangers that generate fresh water, pumping systems to clean ballast water and technology to reduce the sulphur content of ship exhaust gases.



Goals and outcomes

Financial targets

Alfa Laval aims to realize its business purpose, while at the same time meet its financial targets established with regard to growth, profitability and capital utilization. By achieving or exceeding these targets, Alfa Laval creates the necessary scope for its continued favourable development as well as generating increased value for its shareholders in the form of an annual dividend and by boosting the value of the company.

Goal

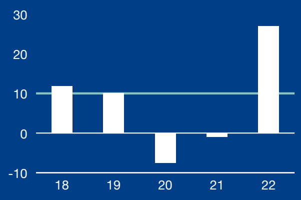
5%

Growth

Alfa Laval's goal is to achieve average annual sales growth of at least 5 percent measured over a business cycle. The target was set in light of the longer-term demand trends for Alfa Laval's key technologies, the prevailing business scenario and against the backdrop of Alfa Laval's achievements in recent years.

Outcome 2022

+27%



Goal

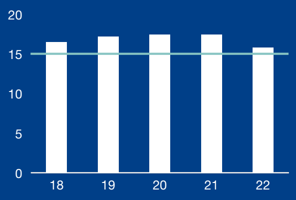
15%

Profitability

Alfa Laval is to achieve an operating margin – adjusted EBITA – of 15 percent measured over a business cycle. This target was established based on the company's ambitions for growth, investments and portfolio development, while also taking historical margins into consideration.

Outcome 2022

15.8



Goal

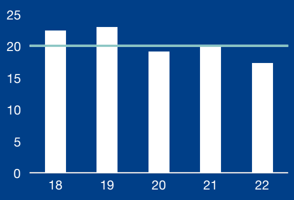
20%

Capital utilization

The goal is to have a return on capital employed of at least 20 percent. The target reflects the company's ambition to optimize the capital utilization by balancing investments and operating working capital.

Outcome 2022

17.3



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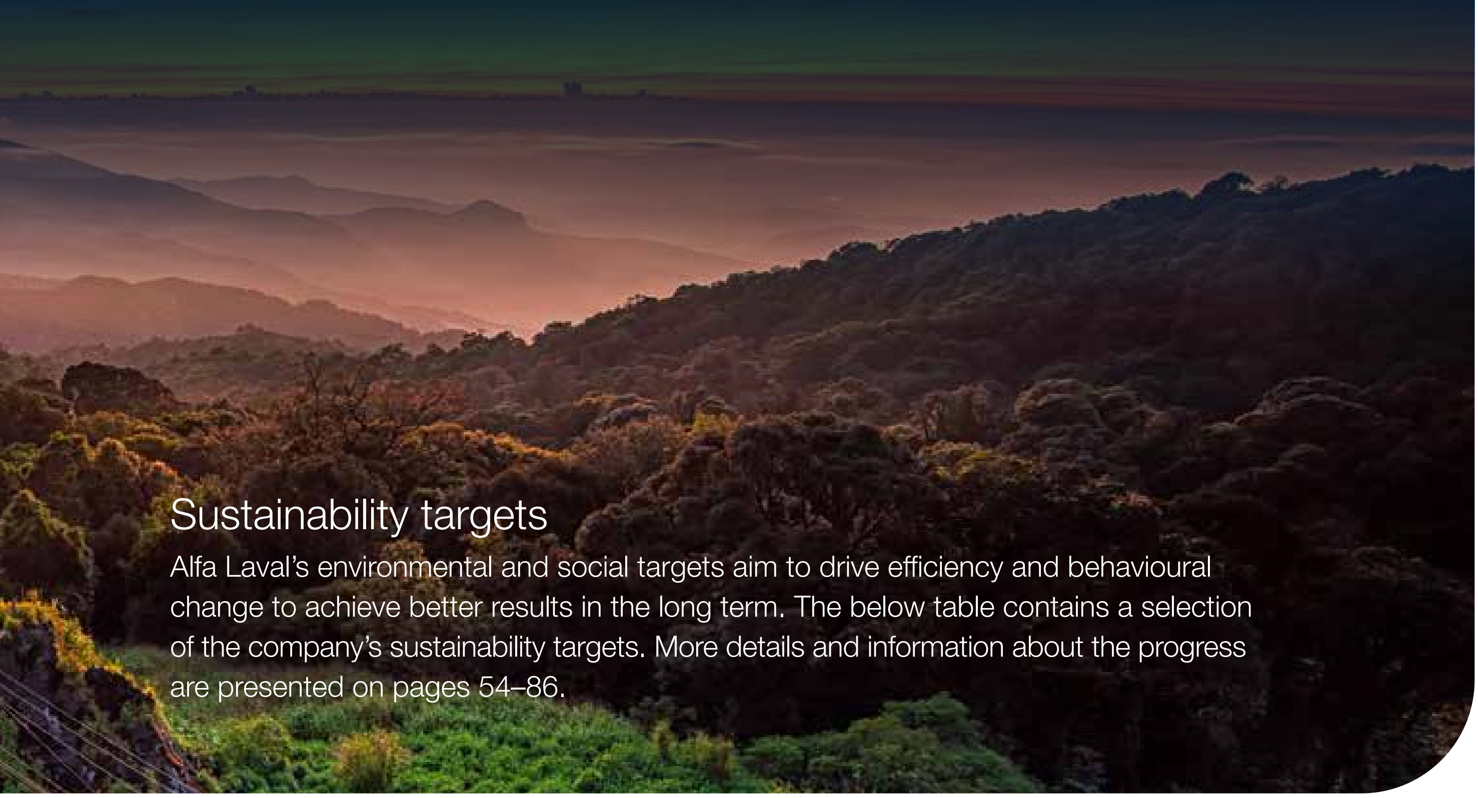
Financial benchmarks

In addition to its financial targets, Alfa Laval also has a number of financial benchmarks reflecting the company's ambitions with respect to the net debt / EBITA ratio and cashflow from operating activities. Further information on the financial benchmarks can be found on page 145.



Sustainability targets

Alfa Laval's environmental and social targets aim to drive efficiency and behavioural change to achieve better results in the long term. The below table contains a selection of the company's sustainability targets. More details and information about the progress are presented on pages 54–86.

❯ Climate ❮ Circularity ⌄ Caring ⌃ Committed

	Area	Targets	Target Year	Trend to achieving target based on results 2022
❯	Carbon emissions	50% reduction Scope 1 & 2 emissions	2023 (base year 2020)	🟢
	Carbon emissions	Carbon neutral in Scope 1 & 2 emissions 50% absolute reduction in Scope 3 emission	2030 (base year 2020)	🟡
❮	Energy	5% improvement in energy efficiency (MWh/k direct hours)	2023 (base year 2020)	🟢
	Water	5% reduction of water consumption in sites located in water stressed areas	2023 (base year 2020)	🟢
	Water	100% recirculation of water in sites located in water stressed areas	2030	🟡
	Waste	85% recycling of waste	Recurring	🔴
	Waste	Zero waste to landfill	2030	🟡
	Materials	30% recycled material content in products	2030	🟢
⌄	Diversity	35% female employees	2025	🟡
	Diversity	25% female managers	2025	🔴
	Diversity	<70% homogeneity (gender and nationality) in highest management groups	2025	🟢
	Health & Safety	30% Lost Time Injury Rate (LTIR)	2023 (base year 2020)	🔴
	Chemicals	No hazardous chemicals used	Recurring	🔴
⌃	Ethics	100% of employees trained in Business Principles, Anti-Bribery, Anti-Corruption and whistleblowing	Recurring	🔴

🟢 Well aligned with target 🟡 Progress made towards target 🔴 Not aligned with target

Our purpose and how we create value

Our purpose provides the motivational force in our daily activities. Dedicated to outstanding customer service, an inspiring and embracing workplace, and with sustainability in our genetic code, we define our purpose as *accelerating success for our customers, people and planet*.

The resources we employ…

BUSINESS

1,356
R&D investments, SEKm

1,853
Capex investments, SEKm

37
Manufacturing sites

>4,000
Patents

>600
Distributors

HUMAN

>100
Present in number of countries

20,300
Employees

NATURAL

312,747
Energy consumption, MWh

18,186
In direct material purchases, SEKm

738,073
Water consumption, m^3

How we apply them…

STRATEGIC PRIORITIES

Sustainability and digitization boost our three key areas
– Customers
– Products
– Services

TECHNOLOGY LEADERSHIP

Growing number of applications based on our three core technologies
– Separation
– Heat transfer
– Fluid handling

THREE DIVISIONS – GLOBAL PRESENCE

Three industry based divisions served by a common manufacturing and supply chain
– Energy
– Food & Water
– Marine

We apply our recourses to develop and broaden application of our three leadership technologies heat transfer, fluid handling and separation and take them to market through our three industry based divisions Food & Water, Energy and Marine and a large network of distributors.

Our operational focus addresses macro trends while leveraging our technology leadership and global market presence through the prioritized areas of products, services, customers, sustainability and digitization.

Based on our Business Principles…

Alfa Laval's four Business Principles describe the way we must act within society whilst achieving our business goals.

CARING

We care about every individual's rights and opportunities including their safety and well-being.

COMMITTED

We are committed to ethical conduct within our organization and in all external business relationships. Honesty, integrity and respect for others are values that we live and work by.

TRANSPARENCY

We engage in open dialogue with all our stakeholders to develop business relationships built on trust.

PLANET

We are in a unique position as our products make a significant contribution to reducing the environmental impact of industrial processes. We also have a responsibility to continuously reduce the environmental impact in all areas of our value chain.

To create stakeholder value.

CUSTOMERS

- Energy savings.
- Lower total cost of ownership.
- Increased productivity.
- High level of innovation.

INVESTORS

Financial targets:
Growth of 5%
Adjusted EBITA-margin of 15%
Return on capital employed of 20%

EMPLOYEES

- Opportunities to learn and develop in the Alfa Laval Group.
- An organization that promotes respect, diversity and is free from discrimination.
- Alfa Laval strives to be a workplace that is free from accidents and work-related illness.

SUPPLIERS & PARTNERS

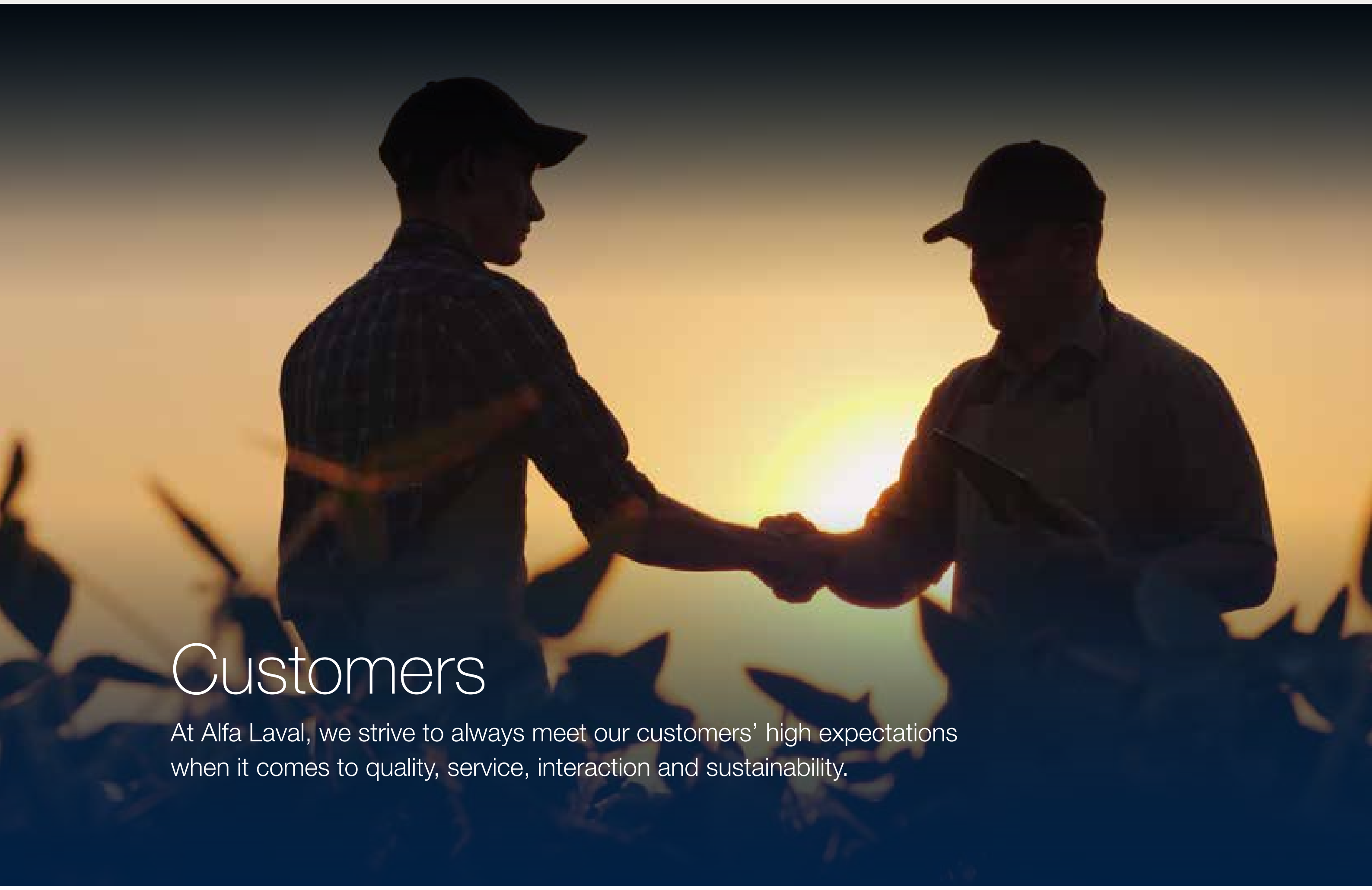
- A reliable partner.
- On-time deliveries.
- Broad market access.
- A global supply chain with strong local presence.

SOCIETY

- Alfa Laval has a target to be carbon neutral by 2030.
- Recycling of 100% of the water used in sites located in water-scarce regions by 2030.
- In 2021 alone, Alfa Laval heat exchangers reduced energy use in heating and cooling applications by around 50 GW while reducing 25 million tonnes of CO_2 emissions.

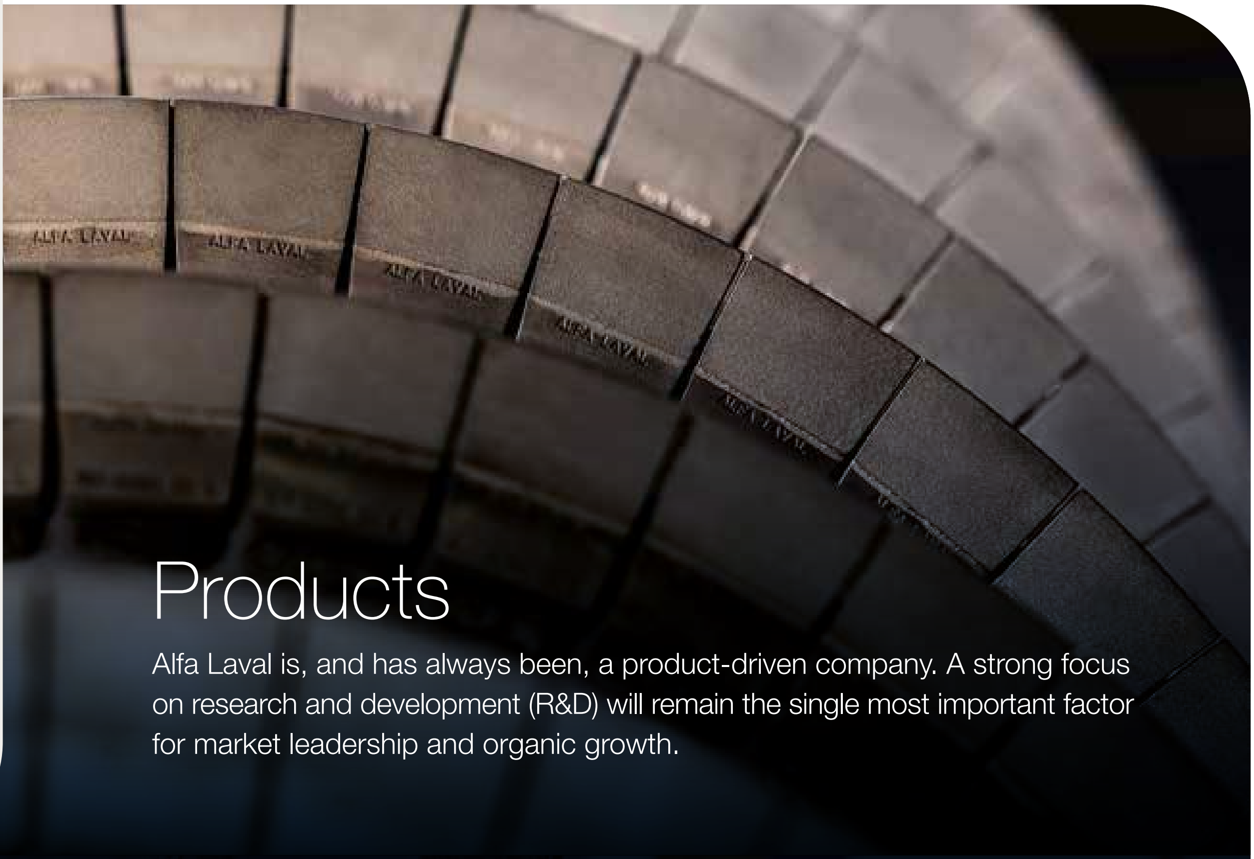
Strategic priorities

To achieve its vision, implement its business purpose and attain its growth, profitability and capital utilization goals, Alfa Laval has established various strategic priorities that encompass customer collaboration, a focus on products and working to further strengthen the aftermarket offering.



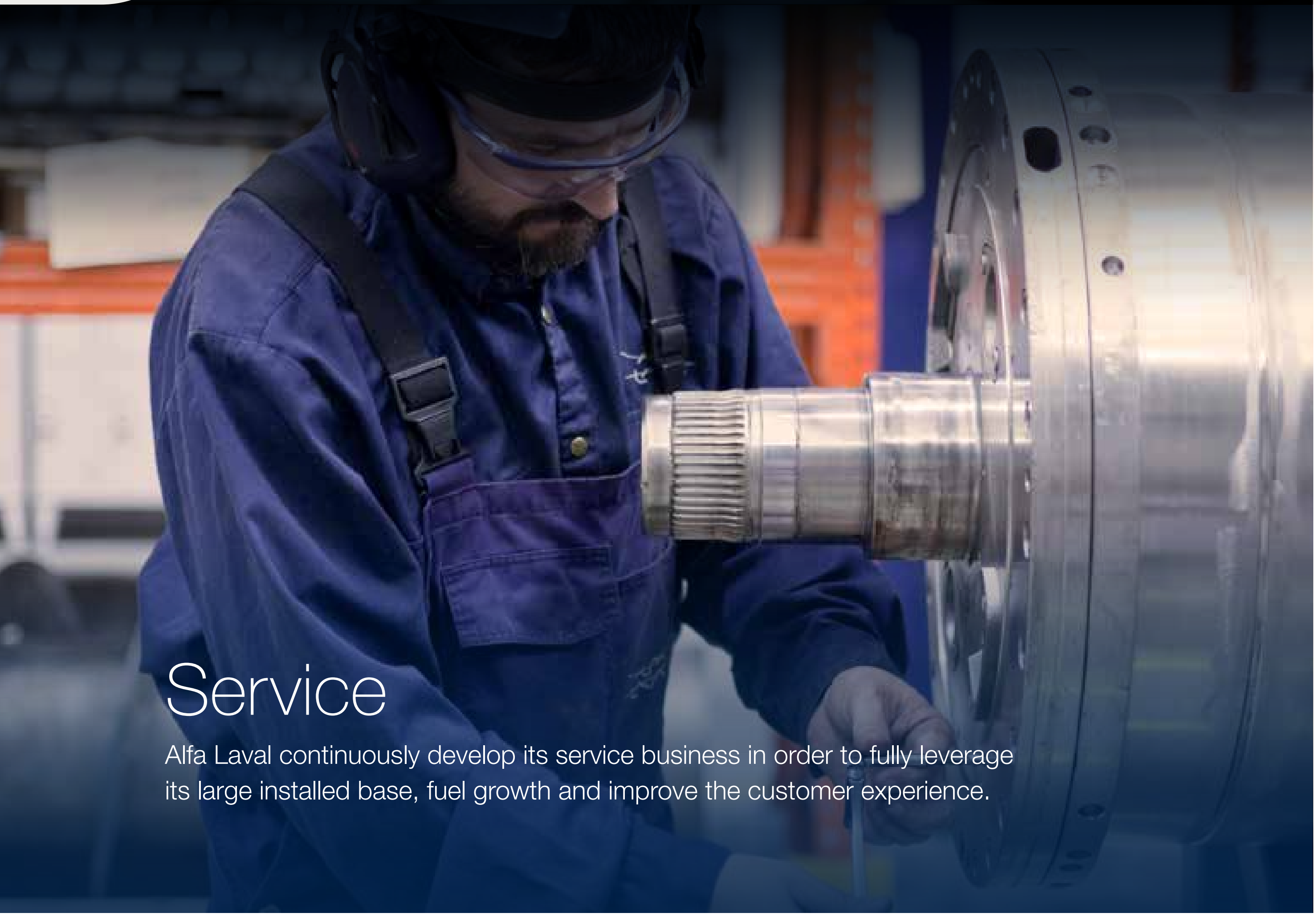
Customers

At Alfa Laval, we strive to always meet our customers' high expectations when it comes to quality, service, interaction and sustainability.



Products

Alfa Laval is, and has always been, a product-driven company. A strong focus on research and development (R&D) will remain the single most important factor for market leadership and organic growth.



Service

Alfa Laval continuously develop its service business in order to fully leverage its large installed base, fuel growth and improve the customer experience.

Customer relevance is everything

Growth through customer relevance is all about understanding the needs of our customers. Customers should feel that Alfa Laval offers the best possible overall experience, from initial contact to subsequent service needs once the products are in operation. Through our local presence and expertise, we continue to gain in-depth knowledge to exceed our customers' demands and fuel the growth of our company. That's how we build long-term relationships and seize new business opportunities.

Doing business with Alfa Laval should be easy. Our global reach and strong local market presence, in combination with deep end-customer understanding through a commitment to service, product development and customer care, allows us to build long-term relationships. We aim to respond quickly and professionally to customer requirements, offering appropriate solutions on time. This is true irrespective of whether the solution is a standardized component or a more advanced system for customers with specific needs.

A seamless experience

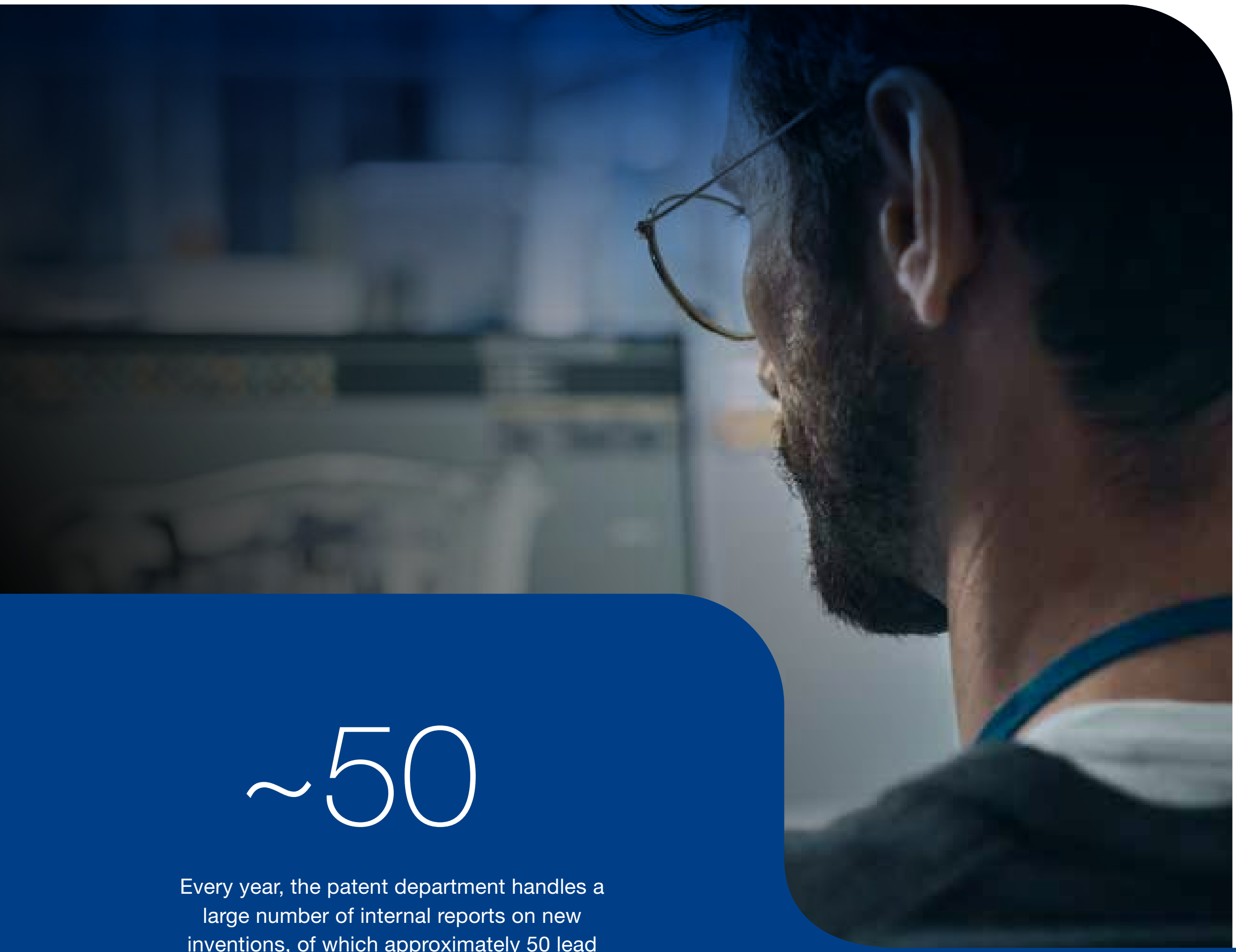
Offering a world-class customer experience is key to enhance new and existing relationships with partners and customers. Our ambition is to ensure that all interaction, whether digital or physical, is as seamless as possible. As in so many other areas, digital tools are playing an increasingly important role in sales and service.

One clear trend emerging is the change in customer purchasing behaviour. Digitallization is a major contributor to this change, and the pandemic has truly accelerated this development. Digital sales meetings, webinars and other types of remote communication have become commonplace. The transition has been about managing technology in digital meetings, but even more so about being able to maintain and develop a customer relationship remotely – an experience that has now become an integral part of day-to-day contact with customers.

By identifying customers' needs early on, we are creating digital platforms with the objective to make it easier for customers to search, purchase, install and service our products. As behaviour continues to change, the focus moving forward is on improving the online customer buying experience and expanding our digital service offering, creating opportunities for new business models.

A common strive to drive change

Alongside digitalization, sustainability factors are becoming an increasingly important aspect influencing customer behaviour. Legislation and a common strive to make a positive change for the environment and the society is impacting decisions on which solutions to install, how to interact, transport of goods and create safe working environments. Alfa Laval is in an excellent position to help customers meet their sustainability targets by offering a growing portfolio of solutions and support that enables an accelerated sustainability agenda. As a result, Alfa Laval must also change traditional ways of working to make sure that we together meet new standards and demands. This allows us to further develop in-house skills and build relationships with customer where we can together make a change.



~50

Every year, the patent department handles a large number of internal reports on new inventions, of which approximately 50 lead to new patent applications.

3%

Investments in R&D are to correspond to 3 percent of sales per year.

100

Approximately 100 new products are launched every year.

Leadership through innovation

Product development is at the core of Alfa Laval and is the most important factor to secure the company's strong position within our three key technologies. With a commitment to develop highly efficient and sustainable products and solutions that meet the new needs and requirements of our customers and the planet, we are now further stepping up our ambition on technology development.

Alfa Laval is a technology leader in our industries with the purpose of developing products and solutions that push industry standards in areas where we believe we can make a difference for customers, people and the planet.

Customer needs are at the heart of our work on developing new products. These needs are often about optimizing an industrial process in which our technology is essential and makes a difference on energy efficiency, durability and productivity. The pace of our development efforts is increasing, and covers not only new technologies and products but also product improvements and upgrades to existing industry standards. With a fast-growing demand for more energy efficient solutions and the need for entirely new energy sources such as hydrogen, energy storage and fuel cells, we are now further accelerating our investments in innovation. Three percent of the Group's annual sales is invested in research and development, and Alfa Laval launches around 100 new products every year, which is the equivalent of two products a week.

Building on our technology leadership

We strive to focus our resources on delivering cost-effective, innovative solutions that drive improvements for our customers in areas where we can truly make a difference. It is equally important that the environmental performance and lifecycle perspective is part of the very first stage of any development process. To meet new demands in a fast-moving innovation environment, we are increasing our investments in new and expanded testing facilities across the world. Tumba in Sweden is home to a test centre for high-speed separators, while the next generation of decanters and digital solutions is being developed at Söborg in Denmark. Denmark also has centres for marine solutions, membrane filtration and hygienic fluid handling. Furthermore, Alfa Laval has a number of product-based business centres across the world. Each has a focus on a specific product category, and are responsible for research and development in their respective areas, but also for further refinement of existing product platforms.

This setup is essential to lead the development of new technologies together with customers and partners. It also allows us to set common ways of working to align strategic initiatives and improve transparency whilst facilitating cross-divisional collaboration and allowing us to retain and attract key talent.

Increasing the customer experience

New customer requirements go beyond traditional industry boundaries, and include new and more advanced specification for connectivity, sustainability and serviceability. This development is moving faster than ever before and brings opportunities to make a difference though innovation and enables new ways to generate value and interact with customers. Alfa Laval offers various services supported by digital tools to make life easier and increase value for its customers. This involves smart products with built-in sensors and tracking systems, but also making it easier to do business with us. As a result, our business is gradually shifting from solely supplying equipment to also delivering services and solutions through the entire lifetime of the product.

Driving for service excellence

Our strong local presence ensures that we are always available for our customers and are able to offer service and support in all markets across the world.

Alfa Laval aims at always being available to customers when they need us, wherever they need us. With local presence in more than 100 countries, we are ready to service and support our customer at all times. This comprehensive network of people and competence where service and maintenance is performed by skilled technicians is an integral part of our offering. Service is the responsibility of dedicated divisions in each business area. This includes the development of service products, sales and marketing, technical support, and service delivery, all supported by data analysis from connected equipment.

A growing offering through productification

Growth in the service business is fuelled by new product launches, with demand for new and more climate-friendly technologies that drive the adaptation of services to meet new needs. At the same time, a new generation of products are equipped with more serviceability, digital capabilities and contracted services as part of the purchase proposition. This means an opportunity to touch more products, more often. Service today accounts for about 30 percent of Alfa Laval sales and provides a strong and stable base for the overall company.

Getting closer to our customers

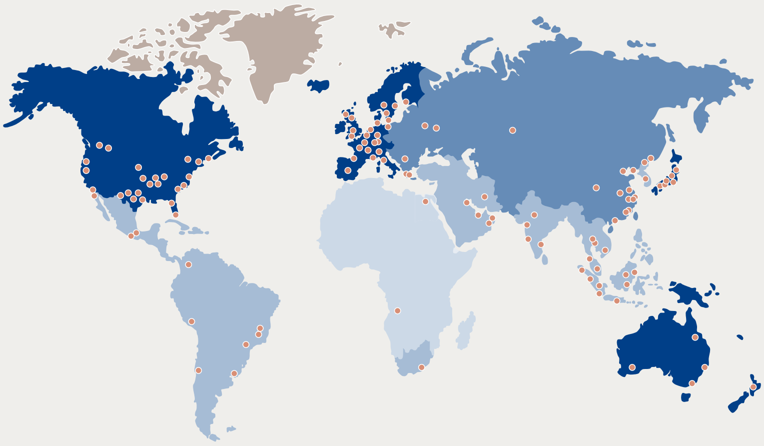
Strategically located service centres and partners ensure that local expertise and equipment are close to our customers whenever they need us. In recent years, four new service centres were opened in Europe. Centres such as these provide preventive maintenance and innovative service solutions that improve their processes, minimize unplanned downtime and improve the operating economy of their equipment. The fact that this service is carried out at Alfa Laval and not at the customer means we can handle equipment more efficiently and in a more sustainable way. Our service centres engage in well-developed sustainability activities, where the focus is on low water consumption, treatment of process water and the safe disposal of chemicals and cleaning fluids as an innovative service.

More and more digital tools are being introduced in the service business, enabling service engineers to connect to customer equipment, identify needs and provide preventive maintenance. The introduction of more digital services also improves the productivity of the service organization, as more routine matters are handled remotely and the time spent on site at the customer can be focused on developing the relationship. The digital services also help make the service organization more stimulating and flexible, which is important both for retaining existing talent and attracting new employees.

Service centres

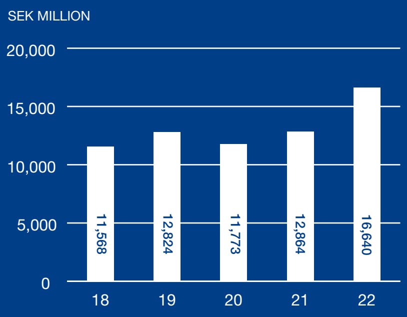
>100

More than 100 service centres with the capacity to deliver services in over 160 countries.

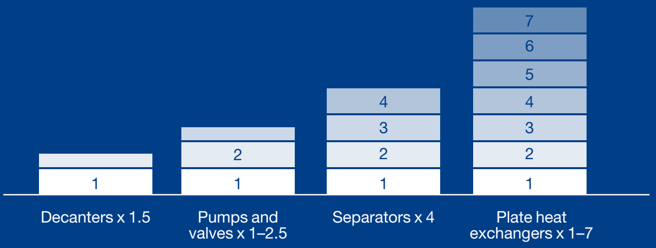


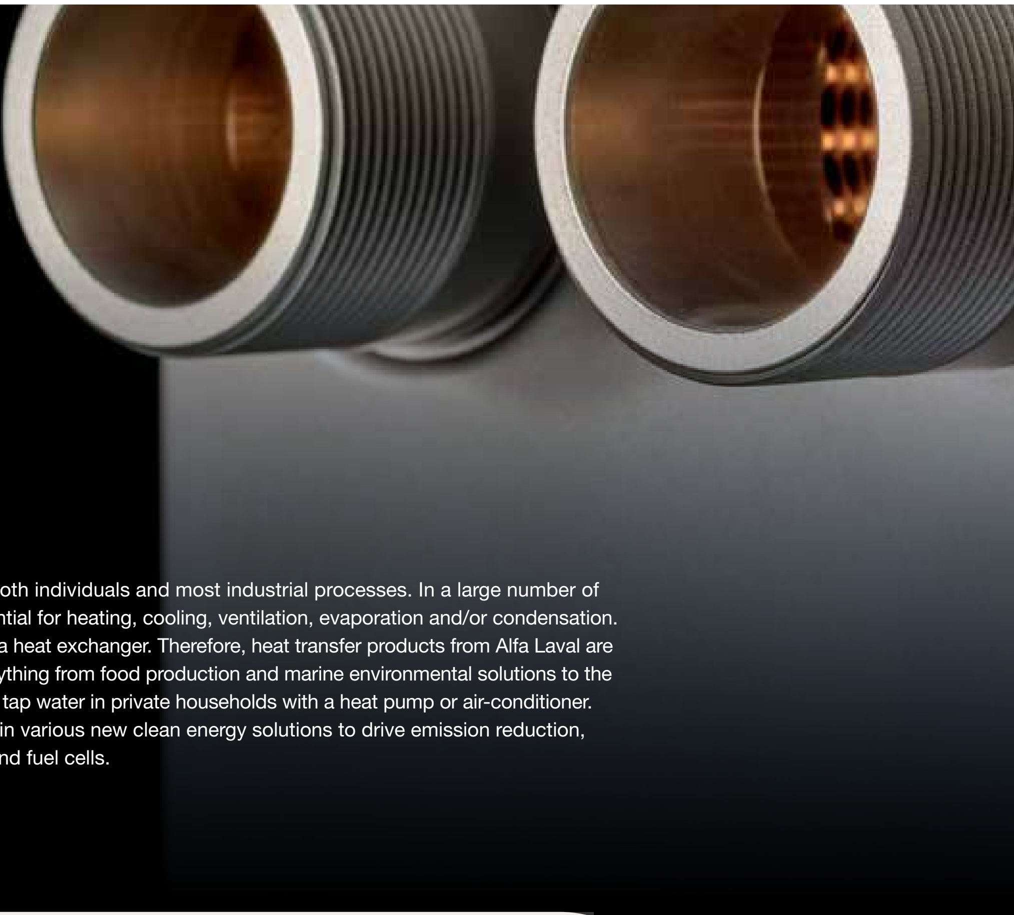
- ● Service centres.
- ● Large and mature installed base that needs to be maintained and renewed.
- ● A combination of fast-growing markets and established niche applications.
- ● Installed base that is growing rapidly.

Service Order intake, SEK million



Long-term potential – Value of the aftermarket relative to new sales



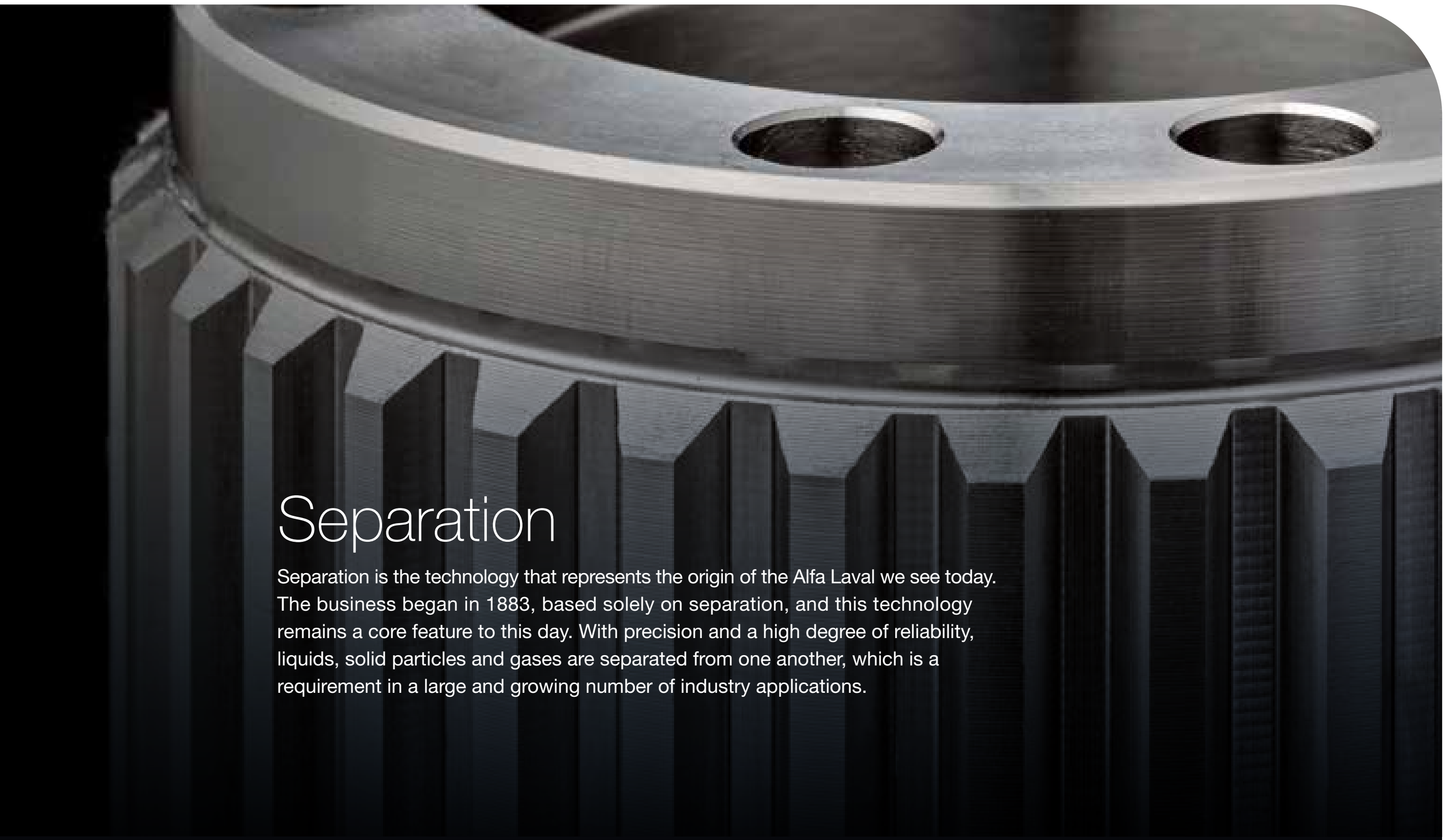


Heat transfer

Heating and cooling are basic needs for both individuals and most industrial processes. In a large number of industries, heat transfer solutions are essential for heating, cooling, ventilation, evaporation and/or condensation. All of this can be achieved efficiently using a heat exchanger. Therefore, heat transfer products from Alfa Laval are now found in numerous areas – within everything from food production and marine environmental solutions to the creation of a pleasant indoor climate or hot tap water in private households with a heat pump or air-conditioner. Heat exchangers is also a key technology in various new clean energy solutions to drive emission reduction, such as green hydrogen, energy storage and fuel cells.

World-leading in three key technologies

Alfa Laval's operations are based on three key technologies – heat transfer, separation and fluid handling. These technologies play a key role in a number of industrial processes and Alfa Laval commands a world-leading position in all three areas.



Separation

Separation is the technology that represents the origin of the Alfa Laval we see today. The business began in 1883, based solely on separation, and this technology remains a core feature to this day. With precision and a high degree of reliability, liquids, solid particles and gases are separated from one another, which is a requirement in a large and growing number of industry applications.

Fluid handling

The transportation and regulation of fluids in an efficient and safe manner is crucial to many industries. Alfa Laval focuses on fluid handling products, such as pumps and valves for food and pharmaceutical industries with stringent hygiene requirements and on pumping systems for the marine industry and the offshore market.

Heat transfer

The energy transition has started

Efficiency is key

Heat exchangers transfer heat or cold – often from one fluid to another – safely and efficiently, in businesses and homes around the world. Alfa Laval's main product is the compact plate heat exchanger, which does this in a more energy-efficient way than alternative solutions. The different types of plate heat exchangers – gasketed, brazed and welded – are each designed to not only withstand different pressure and temperature levels but also specified hygiene and safety requirements. With the industry's broadest product portfolio, Alfa Laval offers efficient solutions that are easy to service and maintain. This reduces costs and lessens the impact on the environment.

Development driven by sustainability

Energy efficiency is today one of the most important ways of reducing global emissions. This can be achieved through innovative heat transfer technologies that reduce energy consumption and by using more efficient solutions in existing processes, such as solutions that capture and reuse waste heat for other purposes. Alfa Laval has solutions in both of these areas, in which industries and societies must now work together to accelerate developments to save energy and reduce carbon emissions. The pace of innovation to find new and clean energy sources is accelerating. This means not only new opportunities for Alfa Laval, but also a responsibility to make sure that we keep up with the technological development to allow for the much needed transition to clean energy solutions in the years to come.

Business units with heat transfer products in their range

ENERGY DIVISION
- Brazed & Fusion Bonded Heat Exchangers
- Gasketed Plate Heat Exchangers
- Welded Heat Exchangers

FOOD & WATER DIVISION
- Food Heat Transfer
- Food Systems

MARINE DIVISION
- Marine Separation & Heat Transfer Equipment
- Boilers
- Environmental products

Sales

39%

Share of Group sales.

Market position

1

30–35 percent of the global market.

Did you know…

… according to the International Energy Agency (IEA), energy efficiency is one of the main factors in reaching the Paris agreement. Energy efficiency can deliver more than 40 percent of the carbon emissions savings needed by 2040, with 50 percent of the energy efficiency savings coming from the industrial sector.

… a plate heat exchanger is all about optimizing the use of energy, and it is up to 50 percent more efficient than traditional technology (shell & tube technology).

… every year, the millions of heat exchangers Alfa Laval install, and service, support customers in reducing their heat capacity needs by 100GW. To put this into perspective, the global wind power capacity from newly installed wind turbines was 93GW in 2021.

… energy efficiency together with the access to renewable energy sources such as solar and wind, will facilitate the switch from fossil fuels to new energy carriers such as hydrogen and biofuels.

Accelerating sustainable energy supply

Hydrogen has the potential to store energy from renewable sources for up to months at a time, and enable transportation over long distances. Alfa Laval will deliver compact heat exchangers to the world's largest green hydrogen plant, which is to be constructed in the Middle East. When completed, the facility is expected to produce 650 tons of hydrogen per day, while being powered by renewable energy. Alfa Laval is a leading supplier of heat exchangers to many of the hydrogen manufacturers, which is so important in the race to net zero emissions.

Separation

Evolving our origin

The benefits of separation
Separation is now a key technology in many industries, such as food, dairy, beverages and pharmaceuticals, as well as in shipyards, shipping, plastics and chemicals, energy and water treatment facilities. There are numerous benefits, including improvements in product quality and guaranteeing the performance of industrial processes, or satisfying strict hygiene and safety requirements. And just as important, the separation process helps boost efficiency, which cuts costs and reduces environmental impact.

Customer need in focus
The needs of our customers' businesses are the driving force behind our innovative solutions, which are reliable and help increase productivity, sustainability and digitalization. Alfa Laval's separation products are dominated by a broad offering of high-speed separators and decanter centrifuges. Separators have high rotation speeds, are generally mounted vertically and can separate small particles from liquids and gases. Decanter centrifuges are normally mounted horizontally, operate at lower speeds and are used to separate larger particles from liquids in applications such as mechanical dewatering of sludge in wastewater treatment plants.

Business units with separation products in their range

ENERGY DIVISION
- Energy Separation

FOOD & WATER DIVISION
- High Speed Separators
- Decanters
- Food Systems

MARINE DIVISION
- Marine Separation & Heat Transfer Equipment

Sales

17%

Share of Group sales.

Market position

1

25–30 percent of the global market.

Did you know...

... the centrifugal separator (on which Alfa Laval was originally founded in 1883) revolutionized the dairy industry by continuously separating cream from milk.

... the technology was introduced to the marine industry in 1917 to separate oil from water – and today centrifugal separators are used in dozens of industries and in scientific research.

... Alfa Laval's separation technology can clean wastewater to the extent it can be used as process water or for irrigation purposes.

... used by municipalities, Alfa Laval's membranes are so effective that they remove particles down to 0.0002 mm in size to prevent harmful microplastics from ending up in our oceans where they cause sever damage to marine life.

... separation technology plays a key role in enabling food producers to get more out of less. This increases yield and turns bi-products into high-quality end-products – or simply turns waste into value.

Turning waste into value

Spent grain accounts for up 85 percent of the leftovers waste from the brewing process. However, a US start-up company (and wholly owned subsidiary of a global brewing giant) has developed a process for extracting high-quality protein from the grain, using Alfa Laval's decanter and membrane technologies. The process takes the inedible waste product, which is usually dried and sold as animal feed, and turns it into valuable quality protein that can be incorporated into a variety of foods, such as energy bars, smoothies, plant-based drinks and plant-based protein powder.

Fluid handling

The importance of being in control

Efficient and precise control
Fluid handling is about transporting, controlling and regulating fluids and other product flows. Pumps transport the fluids, while valves control the flow by opening, closing and redirecting. Optimized fluid handling increases the yield of a manufacturing or processing operation, satisfies hygiene requirements, improves energy efficiency and reduces the amount of waste. As well as increasing productivity and ensuring quality in a flow process, these systems facilitate filling and sampling, and simplify cleaning and monitoring. As a result, our solutions help to both maximize plant uptime and minimize costs in a customer's business.

Advanced systems for different needs
The technology is used in a large variety of industries, for example, in the manufacturing and processing of food, beverages and pharmaceuticals, as well as in shipping and in offshore. For hygienic food and water applications, the offering includes various valves for increased control, but also mixers used to mix both high and low-viscosity fluids, such as milk, wine, juice, yoghurt, desserts and fruit drinks. For the Marine industry, products and solutions include submerged, hydraulic pumping systems for product and chemical tankers and tank cleaning technologies. For the offshore industry, the offering includes pumping systems for collecting sea water for various onboard applications, water injection in drill holes and fire extinguishing, which contribute to safe and efficient operation.

Business units with fluid handling products in their range

FOOD & WATER DIVISION
- Food Systems
- Hygienic Fluid Handling

MARINE DIVISION
- Pumping Systems

Sales

22%

Share of Group sales.

Market position

1

10–15 percent of the global market.

Saving precious seconds

Four and a half seconds: it might not sound like much but for food and beverage producers, it can make a big difference to water and chemical consumption. A typical dairy or brewery houses hundreds of valves and control units, which manage the flow of the beverage itself as well as different cleaning chemicals. Alfa Laval ThinkTops, the leading sensing and control units for hygienic valves, can cut valve cleaning time from five seconds to half a second, which reduces water consumption by up to 90 percent.

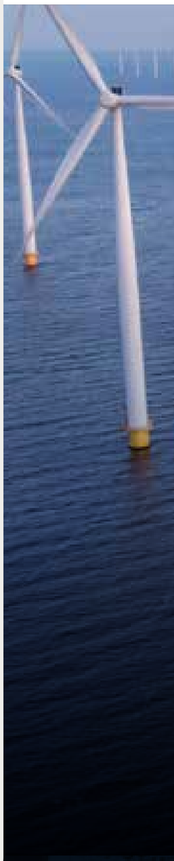
Did you know…

... the Alfa Laval ThinkTop control unit (used for instance in dairies) cuts valve cleaning time from five seconds to half a second, while reducing water consumption by up to 90 percent.

… Alfa Laval valves can handle the simultaneous flow of two fluids while keeping them both separate. This creates flow systems in which cleaning and production take place alongside each other.

... one in every six beers drunk in the world comes from a tank that uses Alfa Laval equipment.

... when designing pumps, Alfa Laval uses the Computational Fluid Dynamics method, which accurately predicts flow patterns to ensure high and efficient fluid transfer in the customer’s process.



Three business divisions with customer needs front and centre

Alfa Laval's business concept is to persistently optimize performance in customer processes. To achieve this, the Group has a solid product offering, a high level of technical expertise and an agile structure that ensures a sound understanding of customer needs, buying behaviour and processes.

Food & Water

The Food & Water Division works with products and systems for food and water applications, for example in industries such as food, pharmaceuticals, biotech, brewing, dairy and water treatment.

Share of Group order intake

Aftermarket's share of the division

16.1%

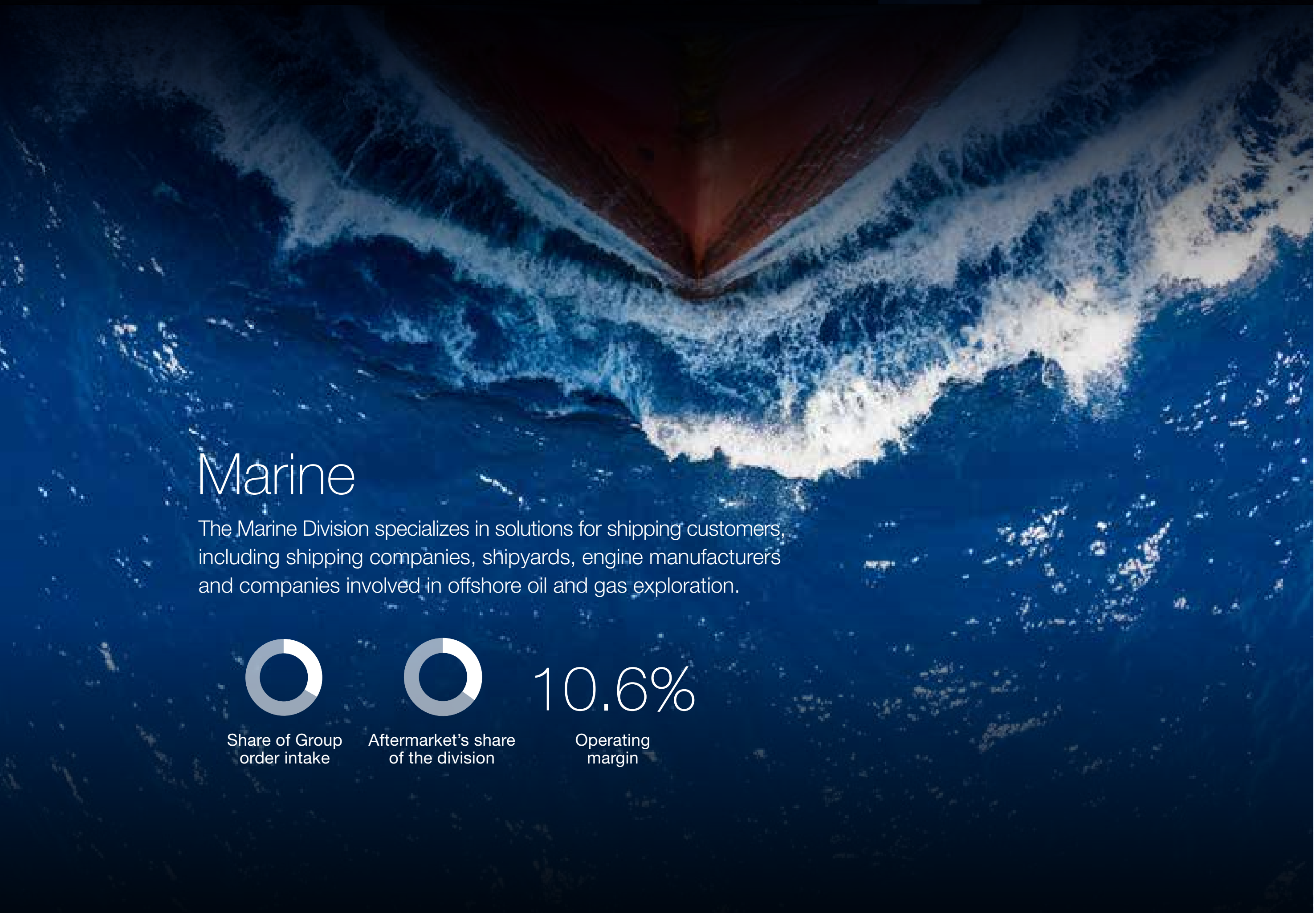
Operating margin

Energy

The Energy Division focuses on solutions to promote greater energy efficiency, in both financial and environmental terms. Customers include companies operating in data centres, renewable energy, heating, ventilation and refrigeration, oil and gas extraction, refining, petrochemicals and power generation.

18.3%

Operating margin



Marine

The Marine Division specializes in solutions for shipping customers, including shipping companies, shipyards, engine manufacturers and companies involved in offshore oil and gas exploration.

10.6%

Operating margin

Strong growth in most major markets and industries

Growth continued in 2022, reflected in all end markets and most geographic markets. Demand was driven by an increased structural demand for more efficient equipment, a growing addressable market and a continued recovery in capacity investments in areas where demand weakened during the pandemic. Several years of high focus on innovation, market presence and building an even stronger channel partner network is coming even more into fruition, allowing the division to increase its market position in several technologies and end markets during the year.

Nish Patel
President, Food & Water Division

Orders increased by 36 percent in 2022, to a new record level of SEK 22 billion. Demand remained strong across most end markets. The changing consumer behaviour in the food market drove demand for new plant-based proteins, an area expected to play an increasingly important role as we strive to find more sustainable methods of food production to serve a growing population. Investments also continued in technical infrastructure within water treatment in many geographical markets. The increased need for more efficient water and wastewater treatment is driven both by new regulations and lower operational costs. Growth remained strong in Biotech & Pharma and Brewery driven by investments in new processing equipment.

The acquisition of Desmet, a world leader in engineering and supplying processing plants and technologies for the edible oils and biofuel sectors, was finalized in August. Global investments in biofuels and HVO (hydrogenated vegetable oil) have accelerated in recent years. The need for alternative fuels is expected to continue to grow in the years to come, and the acquisition was a strategically important step to significantly strengthen Alfa Laval's position in this growing market and support the transformation towards renewable fuels. Besides strengthening our offering, Desmet also added highly regarded development competences and facilities for the biofuel industry, and a strong global presence in sales and engineering.

The service business developed well during the year with 12.5 percent growth and today represents 25 percent of the division. The positive development for value-added services and field services continues as a result of increased presence and new ways of working.

Sustainable growth

The division continued to work on all aspects of sustainability, both in terms of offering and in terms of applications and industries served. The acquisition of Desmet broadens Alfa Laval's offering not least as a very strong player in the biofuel market and increases the sustainable offering of the division. The dedication and focus on investments in technological innovation and development of a sustainable and competitive product range continued beyond the Desmet acquisition. New technology is becoming even more energy efficient, in most cases also combined with enhanced performance. Significant reductions in energy consumption have been achieved for separation technology as a whole, both for high-speed separators and decanters, where newly launched products can typically reduce energy consumption by as much as 50 percent. Another priority area is water and waste treatment, where improved products are helping to reduce customers' water consumption or making water treatment processes more efficient. Zero liquid discharge is one such example, where water is recovered from wastewater for reuse in our customer's processes and residual waste streams are significantly reduced.

Driving the digital agenda

It is becoming evident that sales are increasingly subject to a significant digital transition. This includes customers and channel partners asking for more information to be available online for direct customer interaction with the possibility to configure and select products and features on their own, to obtain a rapid response. Supporting this trend involves a continued expansion of our e-commerce platform, enabling more business to be fully conducted in a digital, secure and efficient way. Digitalization is also having an impact on service and maintenance work. More and more products are connected and monitored via sensors and camera technology. This kind of remote support saves time, facilitates problem solving, simplifies preventive service and ultimately gives the customer more reliable uptime.

21,909

Order intake, SEK million

20,691

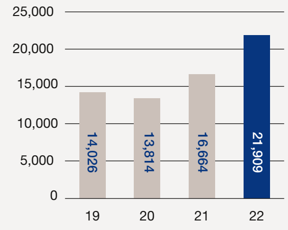
Sales, SEK million

3,339

Operating profit, SEK million

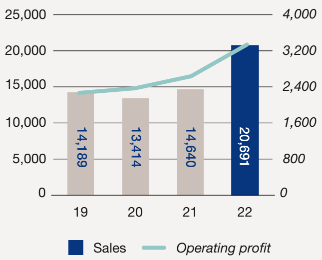
Order intake

SEK MILLION



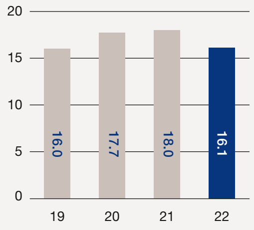
Sales and operating profit

SEK MILLION



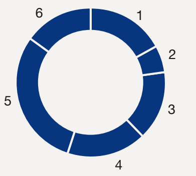
Operating margin

%



Order intake

BUSINESS UNITS



1. Decanters, 17%
2. Desmet, 6%
3. Food Heat Transfer, 15%
4. Food Systems, 17%
5. Hygienic Fluid Handling, 30%
6. High Speed Separators, 15%

Food & Water's business

Selected industries
Food & Water targets customers in industries such as food, biofuels, pharmaceuticals, biotech, vegetable oils, brewing, dairy and personal care products. The division also works with public and industrial water treatment, as well as water and waste treatment.

Offering
Our offering extends across all three key technologies. This includes various types of heat transfer and separation products, along with fluid handling products such as pumps and valves.

Routes to market
The division offers sales of components, configured products and projects. As a result, the division works directly with customers and reaches end customers via system builders, contractors, agents and distributors.

Phasing fossil

Around 45 million tonnes of vegetable oils and animal fats are used in the production of biodiesel and HVO every year, driven by legislation and increased consumer demand for transportation fuel, including jet fuel. Global demand for biofuels is expected to grow by 41 billion litres, or 28 percent, between 2021-2026 according to IEA.

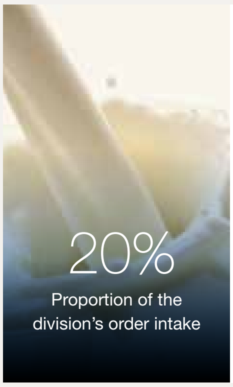
With more than a 100 years of experience of refining fats and oils from plants and animals, Alfa Laval offers the market's broadest portfolio of technologies for boosting the technical capabilities and commercial viability of biofuel processing operations. Our process lines are always optimized according to the demands of our customer's market and local conditions. This is how we ensure customers get the perfect solution for the most reliable – and profitable – performance in their processing.

Give the cow a break!

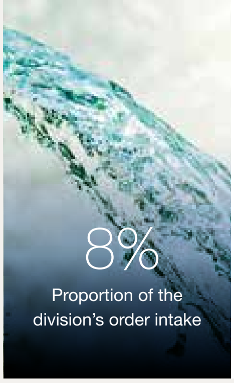
According to Markets and Markets, the plant-based drink, yoghurt, ice cream, cheese and creamer market was estimated to be valued at USD 22.6 billion in 2020 and is projected to reach USD 40.6 billion by 2026, recording a CAGR of 10.3 percent in terms of value. Consumers continue to show an increasing preference for plant-based and vegan food options over animal-based food. Other factors driving demand for plant-based options are the growing attention to the nutritional benefits offered by plant-based foods, in combination with a rise in lactose intolerance and other kinds of dairy allergies, which are also fuelling demand.

The growing equipment market gives Alfa Laval an opportunity to expand its presence and business in the field, while also developing its offering with respect to how customers can better upcycle leftovers and capitalize on waste streams.

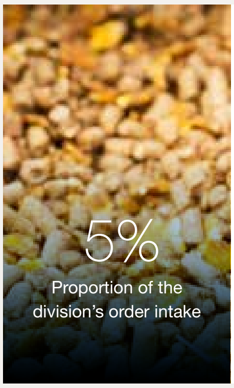
Significant end markets



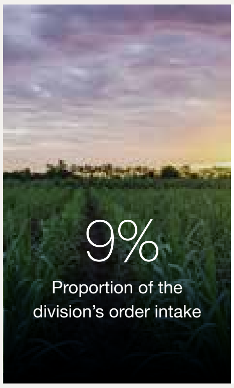
Dairy
Hygienic products for dairy processes – from whey, milk and cream processing to the production of ice cream, cheese, soured cream or yoghurt. Products include separators, heat exchangers, tank cleaning equipment, membranes, pumps and valves.



Water and waste treatment
Products and solutions for municipal wastewater treatment and for industrial water and waste treatment. The range includes everything from decanter centrifuges and belt presses, to spiral and tubular heat exchangers and membrane bioreactors.

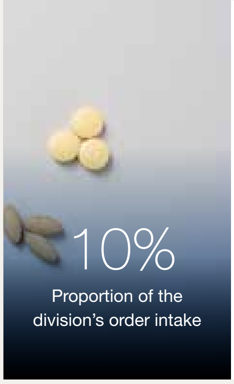


Protein
Products for the recovery of protein, fats and oils from vegetable and animal residues for the production of everything from gelatine, fish oil and fishmeal to bone meal, surimi and animal feed. The product portfolio includes separators, decanter centrifuges, evaporation systems, membranes, heat exchangers and steam boilers.

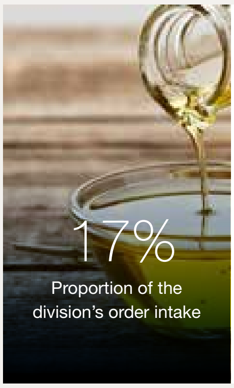


Ethanol, starch and sugar
Separators, decanter centrifuges, heat exchangers and evaporation systems are used in the production of starch and sugar, which in turn are raw materials in the production of ethanol.

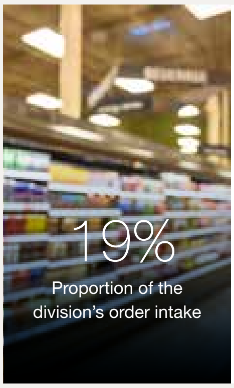
Brewery
Products for all aspects of the brewing process, from mash and wort production and fermentation, to filtration and pasteurization. The range includes, for example, separators, membranes, decanter centrifuges, mixing equipment, plate heat exchangers, pumps, valves, run-off water systems and pasteurization modules.



Pharma & Biotech
Pumps, valves, separators, membranes, decanter centrifuges, tank cleaning equipment and heat exchangers for processes with stringent cleanliness requirements, such as the production of liquid or solid pharmaceuticals, vaccines, creams and ointments.



Edible oil
Products such as separators, decanter centrifuges, heat exchangers and pumps are used to produce oils from rapeseed, olives, soybeans or fish, for example. These oils are processed to meet customers requirements in terms of colour, taste and nutritional value.



Prepared food & beverage
Changing lifestyles also brings new ways of how consumers are preparing and consuming food. Alfa Laval's technologies allow the hygienic and efficient preparation and manufacturing of prepared food.

Other: 3%

Producing more with less

By 2050, the world's population is expected to reach 9.7 billion people. This will put a heavy strain on food supply and critical infrastructure, including water and sanitation. It will be more important than ever to use natural resources efficiently and improve the environmental impact of our industrial processes.

According to the United Nations, currently 2 billion people lack access to clean drinking water and 3.6 billion are still living with poor quality toilets ruining their health and pollute their environment. In addition, one in nine people do not get enough food to lead active, healthy lives. By 2050, the need for high-quality protein will increase by 50 percent.

For the food industry, this will mean having to get more from natural resources through more efficient and sustainable processes. Alfa Laval is already a leading supplier of innovative products and solutions that can help food and beverage producers maximize yields from their ingredients while saving water and energy. For example, in its largest ever order, the company will work with one of the world's biggest brewing companies, Golden Brewery in the US, to install new state-of-the-art equipment that will reduce water and energy usage while maximizing the yield and meeting the highest standards of productivity and sustainability.

Another sustainable solution is the Alfa Laval Revos™ concentration system. It can remove water from beer, wine and cider, in order to greatly decrease its volume for transportation. Water is then added close to where the beverage will be consumed, without affecting its quality or taste. This can reduce shipping costs by up to 80 percent as well as reducing emissions from transportation.

Food scarcity, along with lifestyle changes such as increased vegetarianism and veganism, are leading to new plant-based protein sources being developed. In 2022, Alfa Laval signed an agreement to deliver a customised process system, consisting of separators, decanters and evaporators, that will extract protein from mung beans for a leading plant-based food producer. The solution, which will be installed in a new plant in Singapore, will also recover more than 90 percent of the water used in its process.

The recent acquisition of Desmet, meanwhile, will strengthen Alfa Laval's position in the renewable energy arena and complement its offering within edible oils and plant- and animal-based proteins for food and feed.

These steps position Alfa Laval to be a pioneer in finding new ways to meet the food and water needs of future generations.

An energy market in fast transition

Demands across all regions increased significantly compared with the previous year, both for products and solutions as well as for our service and maintenance offering. Orders grew by 27 percent and a strong driver behind this development is the continued desire for greater energy efficiency and circularity to reduce emissions and costs.

Thomas Møller
President,
Energy Division

The unexpected increase in the oil & gas sector due the Russian invasion of Ukraine also supported our growth during 2022. On a division level, the discontinuation of new orders in Russia as a consequence of sanctions have been more than compensated by other countries looking to boost energy efficiency and secure alternatives to Russia's energy supply.

Sales of products and solutions related to energy efficiency, which today account for about 80 percent of the division's business, are primarily fuelled by the new generation of heat exchangers. In 2022, strong demand was particularly evident in end-customer segments such as HVAC and Process industries.

Interest in energy efficiency is also driving increased demand for services, which helps ensure the smooth running of customers' existing equipment. At the same time, service remains an area with significant potential for growth, and the offering is continuously being expanded. This also involves developing new service models, for example where the sale of a product is linked to long-term maintenance agreements including energy audits that identify energy savings in the customer's processing equipment to ensure optimal usage.

During the year, the roll out of the new gasketed heat exchanger product platform continued. This technology, which features improved performance and uses less energy, means Alfa Laval is able to offer the most comprehensive range of heat exchangers in the company's history. Furthermore, 2022 was also a year where the increase in production capacity continued, which was important in a year of continued high demand. The growing demand for energy efficiency applications is expected to continue, and Alfa Laval will continue to invest in sufficient capacity to serve and support this transition in the years to come.

Energy transition and circularity

It is evident that there is an accelerating ambition to reduce the environmental footprint and seek alternative fuel and energy solutions, driven by both societies, companies and end-customers. Alfa Laval's know-how and technologies are crucial in an energy market exposed to constant shifts in trends. The growing adaptation of biodiesel and other non-fossil fuels creates demand for pre-treatment and new refining processes for the extraction and purification of raw materials. At the same time, significant investments are being made in new types of energy, such as solar and wind power and the development of hydrogen as an energy source. Heat transfer expertise is key in the new emerging energy landscape. This means Alfa Laval is well positioned to harness the many business opportunities that are now emerging.

Increased focus on circularity is also key to ensure better use of resources. Industrial processes generate waste and wastewater. Water management strategies such as zero liquid discharge can minimize freshwater intake, reduce costs and enhance the sustainability of overall plant operations. Alfa Laval's systems have greater energy efficiency than comparable systems with equivalent capacities and is at the same time are more compact, which means a lower overall installation cost for the customer.

A new digital playing field

Investments in digital infrastructure, in combination with a changing customer behaviour, means that e-commerce continues to grow faster than sales through the traditional channels. To support this development, further investments are being made to the e-commerce platforms to further enhance their capabilities and add more user benefits. Services are also becoming more digitalized through sensor technology, remote monitoring and, in the long term, innovative image recognition technology, which helps identify maintenance needs. Overall, it's about new, smart services that save time, reduce risk and improve overall cost efficiency for the customer.

17,294

Order intake, SEK million

15,074

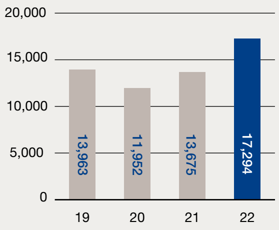
Sales, SEK million

2,761

Operating profit, SEK million

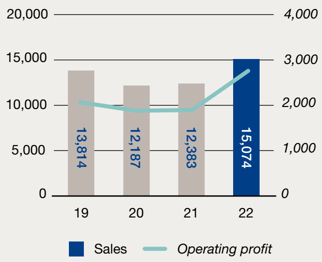
Order intake

SEK MILLION

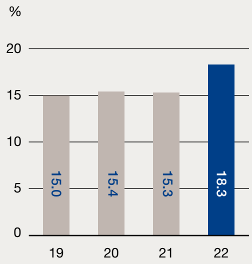


Sales and operating profit

SEK MILLION

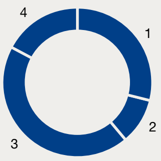


Operating margin



Order intake

BUSINESS UNITS



1. Brazed & Fusion Bonded Heat Exchangers, 29%
2. Energy Separation, 10%
3. Gasketed Plate Heat Exchangers, 44%
4. Welded Heat Exchangers, 17%

Energy’s business

Selected industries
The division serves the growing demand for efficient solutions in heating, ventilation, air conditioning and refrigeration markets. It also serves process industries such as renewable chemicals, plastics and petrochemical industries, power generation and the oil and gas industry, as well as customers operating in the mining and manufacturing industries. Focus is on increased energy efficiency, waste heat recovery and sustainable solutions.

Offering
Heat transfer is the division’s main technology, ranging from brazed and fusion bonded heat exchangers and gasketed plate heat exchangers for less demanding applications, and welded heat exchangers for use in more challenging processes. Separation, both thermal and mechanical, is the second technology, which includes high-speed separators, decanter centrifuges, freshwater generators, evaporation systems and filters in the offering.

Routes to market
Sales include components, configured products and projects. The division has its own, direct customer management and service organization, but also reaches customers via system builders, contractors, retailers, agents and distributors.

The heat pump is hot

Reducing energy consumption by supporting the transition to more energy efficient solutions is key to reducing emissions. Many of the solutions are present in the market today and heat pump technology is one of the solutions leading the way. According to Markets and Markets, the global heat pump market is expected to grow to USD 83.5 billion in 2026, from around USD 53 billion in 2021 at a CAGR of close to 10 percent per year, driven by government initiatives and other subsidies to reduce greenhouse gas emissions.

The heat exchanger is a key component to achieve the optimal energy efficiency and heating/cooling capacity. Alfa Laval offers a complete range of heat exchangers to serve our customers. For OEM customers, Alfa Laval can optimize the brazed heat exchangers according to specific applications and system requirements. Customers can be safe in the knowledge that Alfa Laval uses all its know-how to optimize their products.

Sustainable digitalization

Digitalization is said to be the key that can unlock net-zero for the industry. However, data centres are expected to be one of the world’s biggest energy consumers in a few years. Already today, the electricity utilized by data centres accounts for 2% of global carbon emissions. Their carbon footprint is greater than the airline industry. In most data centres today, cooling accounts for more than 40 percent of the electricity usage and they consume vast amounts of water. So, the data centre industry has a challenge – to become sustainable.

Fortunately, the technology to make these cooling systems more sustainable, energy efficient and reliable already exists. This will be done by using green electricity, efficient cooling technologies and reuse the heat that the servers produce. In order to achieve energy efficiency, the industry will need efficient heat transfer and thus, efficient heat exchangers. With 80+ years’ experience in thermal technology, we offer expertise to enable new opportunities for free cooling and energy savings in server rooms of all sizes, all around the globe.

Significant end markets


41%
Proportion of the division's order intake

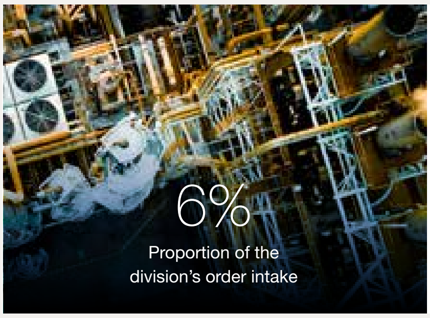
HVAC & Refrigeration
Alfa Laval heat exchangers help create a comfortable indoor climate in homes and public buildings around the world. One example of this is residential and industrial heat pump systems which is built around heat transfer technology. Heat exchangers also used for everything from deep freezing and cold storage in facilities such as industrial premises to ice rinks.


11%
Proportion of the division's order intake

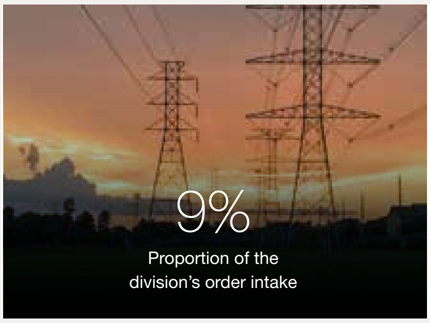
Oil & Gas
Includes oil and gas drilling, processing, production and transportation. In drilling, Alfa Laval offers heat exchangers and decanter centrifuges for mixing, cooling and purifying drilling mud. In oil and gas processing, production and transportation, the products are used in a wide range of applications as well as in waste management.


22%
Proportion of the division's order intake

Process industries
Heat exchangers and separators are used for the production of organic and inorganic base chemicals, polymers, fibres, pulp & paper and metals. These technologies are also used in emerging industrial processes like green chemicals and bioplastics production. Heat exchangers are used to make existing processes more energy efficient as well as securing energy efficiency of new processes from the beginning. An example of this is the production of low carbon hydrogen, where products like heat exchangers and fresh water generators are part of the offering to make the new systems as efficient as possible.


6%
Proportion of the division's order intake

Refinery
Heat Exchangers are used to handle high pressure and temperatures in various processes in a refinery. These processes break down crude oil to components that are refined into products such as fuel oil, aviation fuel and diesel.


9%
Proportion of the division's order intake

Power
Heat exchangers, separators, filters and steam boilers are used to generate and store energy in various processes in the power sector irrespective of energy source. The products are also used for carbon capture.

Other: 11%

Making the transition to cleaner energy

According to the International Energy Agency (IEA), there are two main factors that will enable the Paris agreement's targets to be met: increased energy efficiency and transitioning to renewable fuels. Alfa Laval has the technologies, the expertise, and the necessary collaborations to contribute to both.

Around 50 percent of the emissions that need to be cut by 2030 to reach the Paris agreement can come from technologies that are already available today. This can be achieved either by implementing innovative technology that reduces energy consumption compared to traditional solutions, or by adding technology to existing processes that captures and reuses waste heat for other purposes. Alfa Laval's solutions do both – and in many different industries and applications.

For example, in Hamburg, Germany, Alfa Laval's specially designed heat exchangers will be used to recover waste heat from a sulphuric acid plant, which will then be reused for district heating for more than 23,000 households. When the installation is complete, it will enable annual savings of 100,000 tonnes of CO_2 emissions.

Data centres are rapidly becoming a major source of carbon emissions. In five years, they will consume 20 percent of the world's power capacity. More than 35 percent of a data centre's energy consumption is used for cooling servers. However, Alfa Laval's compact heat exchangers can capture and reuse waste heat from servers and distribute it to district heating networks.

While increased energy efficiency in current processes will help make significant gains in the short-term, reaching the Paris agreement will require an increased use of renewable energy sources.

The challenge is that many renewable energy sources, such as wind and solar, do not always produce energy when demand is highest. However, developing efficient energy storage solutions can help overcome this challenge and facilitate the shift towards renewable energy sources. Alfa Laval initiated and is part of the Long Duration Energy Storage Council (LDES), a global body comprised of technology companies, users and investors, with the ambition of achieving a net-zero power grid by 2040.

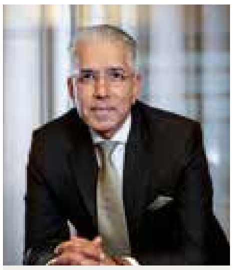
There are also other clean energy sources, such as ammonia and hydrogen. According to the IEA, hydrogen is one of the leading options for storing energy from renewable sources and enabling transportation over long distances. Within this field, Alfa Laval will supply compact heat exchangers to the world's largest green hydrogen plant, being built in the Middle East.

During the year, Alfa Laval joined the Hydrogen Council as one of about 140 companies from across the globe representing the entire hydrogen value chain. The long-term goal is to utilize hydrogen to foster the clean energy transition for a better, more sustainable future.

Alfa Laval is committed to being part of the solution and reduce its own footprint. In June, Alfa Laval announced a collaboration with SSAB, the global Swedish steel company, to develop and commercialize the world's first heat exchanger made using fossil-free steel, and in November the first units were produced. The collaboration is an important step in Alfa Laval's journey to become carbon neutral by 2030.

Gearing up the portfolio transformation

Despite a moderate ship contracting level in 2022, order intake grew 39 percent in 2022 driven by increased demand for environmental solutions, a strong offshore market and good development in services. As our portfolio broadens and with the increased complexity coming from new fuel solutions in recent years, Alfa Laval continues to increase content onboard the vessels.



Sameer Kalra
President,
Marine Division

As expected, the ballast water retrofit opportunity is now gradually coming to an end as the 2024 regulatory deadline draws closer. In combination with a lower share of tankers in the shipbuilding mix, which is resulting in low capacity utilization in the marine cargo pumping business, profitability came in at 10.6 percent for the year. As a consequence, a programme to adjust the operational imbalances was launched during the fall. The division was reorganized from five business units to four during the year and activities were taken in the relevant business units to ensure a cost structure and product portfolio that is aligned with the market opportunities going forward. Additionally, footprint related improvements were implemented at our manufacturing sites.

The journey to carbon neutrality

Like many other industries, shipping is aiming to become carbon neutral and lessen its environmental footprint. This development is linked to stricter requirements from the International Marine Organization, the EU and local regulatory authorities, but also increasingly from ship owners, end customers and those financing the industry. Efforts to increase the availability of carbon neutral and zero carbon fuels for shipping has gained momentum and a number of new projects to deliver green methanol and green ammonia have been announced during the year. There is a growing consensus in the industry that multi fuel-solutions will be the transitional solution on the journey to net zero emissions and that energy efficiency will be an even more important element than ever before.

The Marine division is helping to facilitate this transition for our customers through the products and technical solutions we offer. During the year, we launched the E-power pack which harnesses waste heat and other surplus energy on ships and converts it into electricity. The Air Lubrication system was also made commercially available, which reduces the hull friction related drag with a layer of micro bubbles below the vessel. Furthermore, we continue to progress in the development of wind propulsion and expect to have a full-scale land-based prototype in operation in 2023.

A growing digital offering

In 2022, two acquisitions were finalized to strengthen the portfolio. Scanjet in the field of sustainability and Bunkermetric in digitalized services. Scanjet offers a portfolio of solutions around tank management including efficient tank cleaning to improve vessel utilization, which will complement our existing cargo pumping systems portfolio. Bunkermetric is a digital product suite to optimize bunker procurement that broadens and strengthens our StormGeo offering of digital solutions, which utilize advanced data analytics to support decision making around weather sensitive operations.

In addition, StormGeo continues to organically develop its portfolio of digital solutions to improve the safety and asset performance of sailing ships. Our parametric rolling solution, which reduces risk to cargo and vessel in adverse weather conditions and the CII indicator, which enables a vessel to monitor and report its carbon intensity as per the IMO 2023 guidelines are two relevant examples of recently developed digital solutions from StormGeo.

A customer portal was launched last year to monitor Alfa Laval's pumping equipment in real time has been very well received and now has in excess of 1,000 ships using this platform within two years of launch. As with other digital services, the portal helps optimize use, simplify maintenance and in the longer term, improve overall operating efficiency for the customer.

19,442

Order intake, SEK million

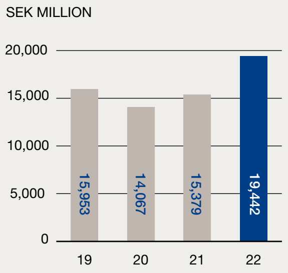
16,370

Sales, SEK million

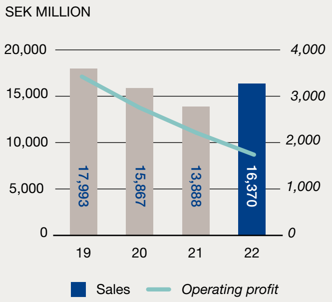
1,741

Operating profit, SEK million

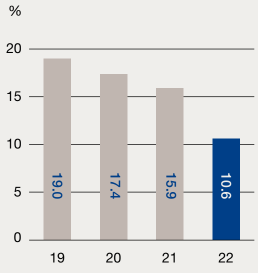
Order intake



Sales and operating profit

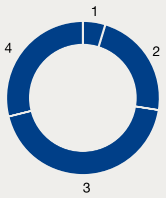


Operating margin



Order intake

BUSINESS UNITS



1. Digital Solutions, 5%
2. Heat & Gas Systems, 23%
3. Marine Separation & Heat Transfer Equipment, 44%
4. Pumping Systems, 29%

Marine's business

Selected industries
The division's customers are mainly shipowners, shipyards, diesel and gas engine manufacturers and companies involved in offshore oil and gas exploration.

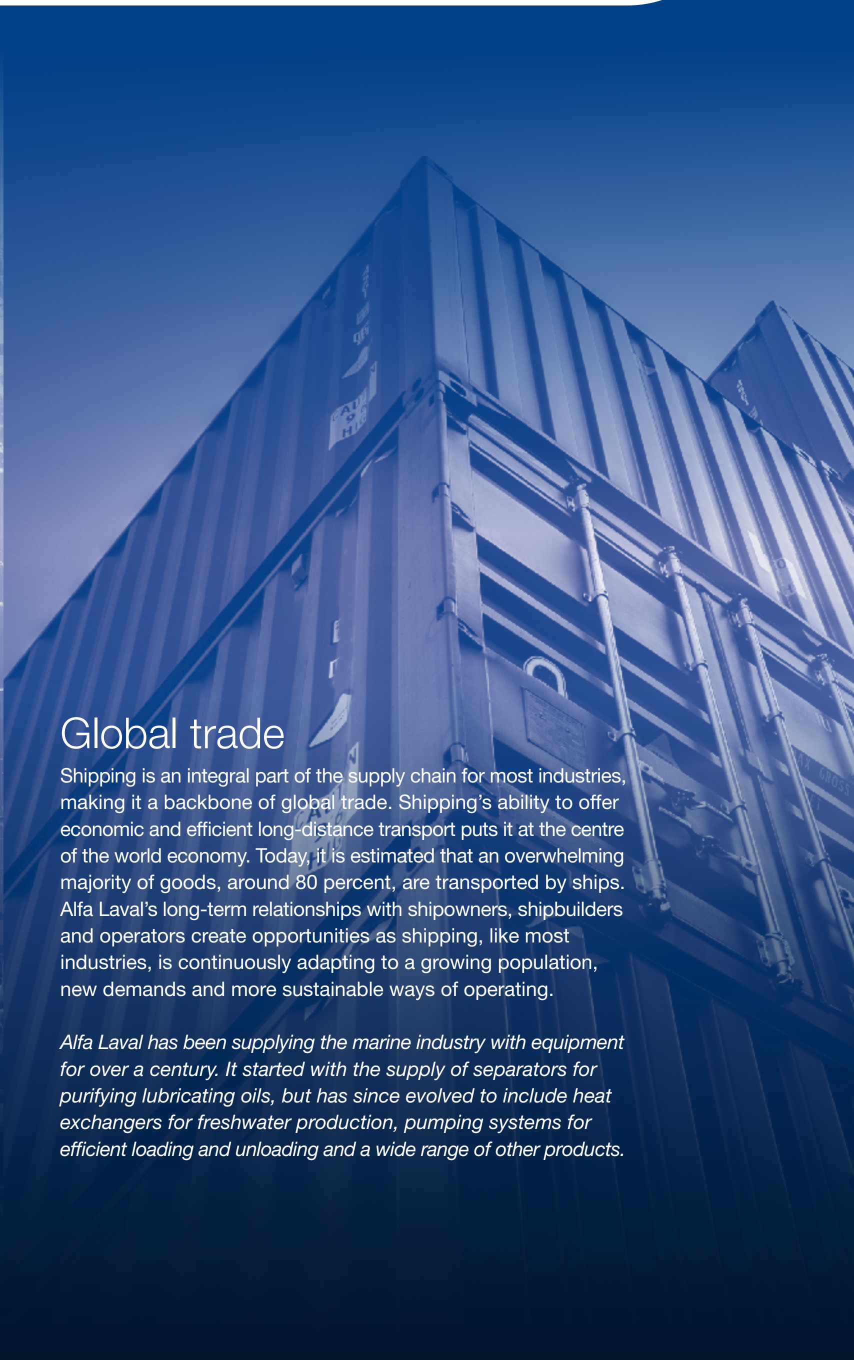
Offering
The offering includes heat transfer equipment, high-speed separators and pumping systems, as well as various environmental products and systems for cleaning ballast water and exhaust gases.

Routes to market
The division sells its products and solutions directly to end customers. These are clearly defined and limited in number, which allows the division to canvass customers using a small sales force.

Carbon-free shipping

Shipping currently accounts for around three percent of total global greenhouse gas emissions. The industry's goal is to achieve carbon neutrality by 2050. This will be achieved in a number of ways, including by ensuring the energy efficiency of the technology used on board, through the development of new and less polluting ship fuels, and by investing in wind energy and other new sources of power in global shipping.

The division has a range of solutions that can help reduce the environmental impact of shipping, including products to boost energy efficiency, ballast water treatment systems, technology to reduce sulphur levels in ship exhaust gases or to clean onboard bilge water.



Global trade

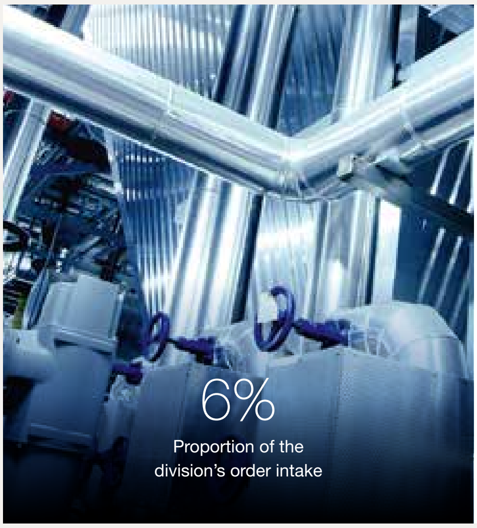
Shipping is an integral part of the supply chain for most industries, making it a backbone of global trade. Shipping's ability to offer economic and efficient long-distance transport puts it at the centre of the world economy. Today, it is estimated that an overwhelming majority of goods, around 80 percent, are transported by ships. Alfa Laval's long-term relationships with shipowners, shipbuilders and operators create opportunities as shipping, like most industries, is continuously adapting to a growing population, new demands and more sustainable ways of operating.

Alfa Laval has been supplying the marine industry with equipment for over a century. It started with the supply of separators for purifying lubricating oils, but has since evolved to include heat exchangers for freshwater production, pumping systems for efficient loading and unloading and a wide range of other products.

Significant end markets

Shipbuilding and shipping
There is a wide range of products and systems available for installation on board ships. These include fuel purification and treatment systems, liquid cargo pumping systems, steam boilers, freshwater generators, inert gas systems, lubricating oil treatment and tank cleaning systems.

Offshore
Technology and solutions for oil and gas platforms, including fired and waste heat Boilers systems and emergency power generators, as well as pumping systems used for firefighting or to pump seawater for onboard applications.



Engine power
Engine-generated power is used in off-grid locations, as back-up power during power outages, to handle peaks in demand when the grid is insufficient or as a complement to solar or wind power. Alfa Laval offers several products, including modules for fuel treatment, waste heat recovery boiler systems, separators for cleaning crankcase gases and heat exchangers for various cooling applications.

Other: 8%

A new era in shipping

The shipping industry is in its most important transition ever – towards decarbonization. The International Maritime Organization (IMO) has set the target to cut vessel-related greenhouse gas emissions by at least 50 percent by 2050. Since ships have a lifetime of 20 years or longer, zero-emission vessels must begin entering the global fleet by 2030.

Alfa Laval is driving the change by investing in R&D and implementing new solutions. At its Test & Training Centre in Aalborg, Denmark, a unique research facility with 2,800 square metres of testing space, the company is developing, testing and validating new products for improved energy efficiency, as well as new types of fuels including LNG, biofuels, methanol and ammonia.

Through partnerships and by teaming up with other experts and technology providers, Alfa Laval will speed up the pace of decarbonization. For example, Alfa Laval and its partners will deepen the understanding of ammonia combustion and lead the development of needed onboard technologies. In 2022, the company received approval to begin testing with ammonia, which is expected to commence in early 2023.

During the year, Alfa Laval also joined the Methanol Institute, which works to protect existing markets for methanol while promoting the growth of emerging energy markets. Alfa Laval is supporting it with essential technologies and has received the industry's first approval in principle (AIP) for firing boilers with methanol. Because methanol changes the energy balance on board, Alfa Laval is also providing ways for vessels to become more energy efficient.

One option is the Alfa Laval E-PowerPack, a product that converts waste heat into electricity, which can remove many tonnes of CO_2 per year and significantly lowers fuel costs.

Partnerships are important to develop new innovative solutions. Last year Alfa Laval announced a joint venture with Wallenius to develop technology for fully wind-powered vessel propulsion based on wing sails. The aim is to launch the first Oceanbird vessel by 2026.

Alfa Laval will also be a technology partner in a project for the Global Centre for Maritime Decarbonisation (GCMD) and together with other partners investigate the on-board capture, storage and off-loading of carbon dioxide (CO_2). Alfa Laval will bring to the project technological and engineering expertise to help understand the challenges and opportunities of deploying carbon capture technology on ships. The project will be another big step towards Alfa Laval's decarbonization roadmap.

Last year, Alfa Laval acquired StormGeo and its digital services. By utilizing metrological data to help with route planning, it is possible to optimize energy usage – and thereby reduce emissions. The service also improves safety by enabling ships to avoid storms and bad conditions. In the coming years, digitalisation and connectivity will play an important role in helping the shipping industry in its transition towards decarbonization.

Operations 2022

Prepared for growth

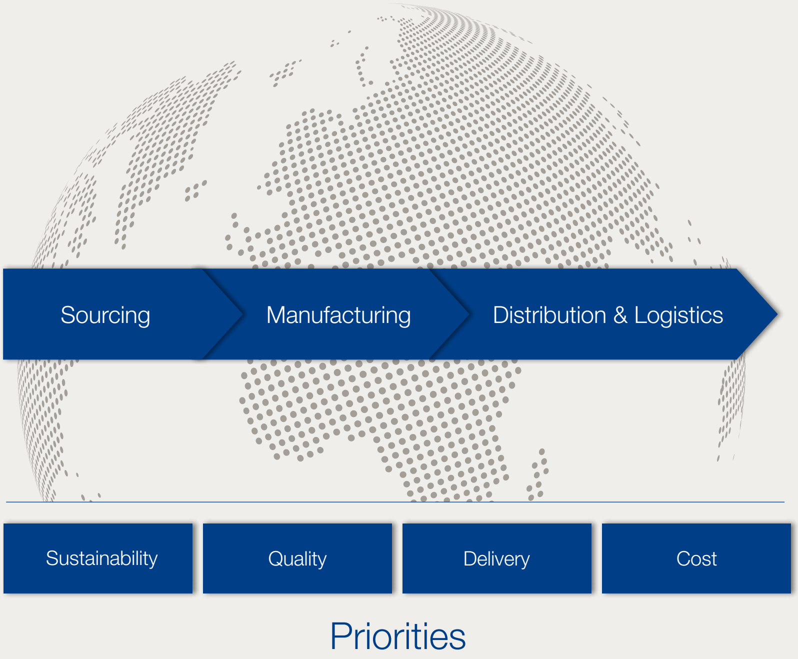
Operations is a Group-wide supply organization, overseeing purchasing, manufacturing, distribution and logistics in collaboration with the industrial divisions. This structure ensures optimal manufacturing capacity, relevant geographic coverage and strong sourcing and logistics chains.

Mikael Tydén
President, Operations

Alfa Laval offers a highly diversified product range with a broad geographical presence. This brings complexity in terms of securing on-time deliveries, quality and efficient sourcing, and increases the need for strong coordination between the three industrial divisions. Operations is the focal point of this work and secures structure and professional management in the following areas:

- Coordinated manufacturing and assembly of components and products developed from the Group's three main technologies. Manufacturing is today linked to 37 sizeable units, designed to provide optimal geographical coverage, but also to ensure that capacity is allocated as evenly as possible across the units. The products manufactured are sold in all divisions.
- Purchasing, which is managed in an organization with responsibility for both direct and indirect materials for manufacturing facilities and distribution centres. It also handles all in-direct procurement, including services.
- Distribution and logistics focus on components and spare parts. Alfa Laval has a global coverage with eight distribution centres, spread across Europe, Asia and North America. Distribution and Logistics is also responsible for Alfa Laval's overall transportation needs.

A global supply chain with strong regional presence



Preparing for further growth

With the growing demand for a number of Alfa Laval's key technology areas in recent years, investments in new and existing sites are required to increase production capacity. During the year, Operations has stepped into planning and preparation mode to make sure that the capacity investments will be executed according to plan in the coming years.

Over the past year, great emphasis has directed to optimize the manufacturing structure, refining production systems, and streamlining purchasing and logistics in a way that delivers both quality and productivity. This has equipped the organization with an efficient structure and strong competence to execute on the expansion plans in the years to come in response to an anticipated increase in demand.

Smarter and more sustainable production

Securing an organization ready to serve future demand is not only about capacity, but equally about ways of working. A key element in building a stronger and more sustainable organization is new, innovative production systems. Some of this work is conducted in the context of continuous improvement programmes, while the more comprehensive changes are linked to the transformation known as Industry 4.0. The emphasis is on increased automation and digital production development, developed in a way that makes these investments more cost effective and safer for our employees. Greater automation is important at Alfa Laval, given its diverse product range and where more efficient production systems are making a difference. Similarly, technologies such as additive manufacturing/3D printing are creating new opportunities among a group of customers that may have extended service commitments for components, and where volumes over time are relatively small. Additive manufacturing enables components to be designed in a way that would not have been possible using traditional methods. The technology is both cost-effective and more sustainable, as it requires fewer inputs in the manufacturing process. In addition, the development of manufacturing technologies and production systems is expected to play an increasingly significant role in new growth areas such as fuel cells, hydrogen production and energy storage. Alongside products and solutions, flexible, precise and cost-effective production processes will be part of the offering that makes Alfa Laval a competitive supplier in new and existing growth areas.

Competence is key to success

The Operations organization's strengthened manufacturing, sourcing and distribution platforms also help the company retain and recruit professionals with the required skills. The fact that strategically important issues are handled at Group-wide competence centres is a strength when needing to act fast, building culture, sharing competences and establishing new ways of working. Products and processes are increasingly digitalized at these centres, which also makes day-to-day work stimulating and more appealing.

Optimizing today
– innovating for tomorrow

Major global events in 2022 highlighted the importance of sustainability work in order to ensure long-term success in a world of constant change. With one foot in the traditional industrial economy and the other exploring the new digital and sustainable landscape, Alfa Laval is uniquely positioned to play an essential role in transforming the fossil-fuel world into one that is sustainable, decarbonized, open and inclusive. This journey is ongoing, and Alfa Laval is constantly optimizing and refining its existing ways of working, while pioneering and developing new technologies to meet tomorrow's demands.

Accelerating change
While Alfa Laval is working towards becoming a circular business and reduce carbon emissions across the value chain, one area where it could potentially have a major impact is the difference the company's products can make in its customers' operations. Each of its three divisions have exciting possibilities ahead, with opportunities to change the way their customers do business and support them in the upcoming transformation.

The Energy Division can meet the unprecedented demand for energy efficiency with its new generation of products, such as heat exchangers and services. Alfa Laval also helps drive the shift towards cleaner energy, thanks to its leading range of products for the production of biofuels, hydrogen power and for energy storage.

With marine transportation currently responsible for approximately 2.5 percent of global greenhouse gas emissions, the Marine Division is actively supporting the switch to carbon-neutral shipping by developing products for new and more sustainable fuel types. Together with Wallenius, Alfa Laval is developing a groundbreaking, wind-driven maritime vessel as part of the Oceanbird project. This vessel can potentially reduce maritime shipping-related carbon emissions by 90 percent.

The Food & Water Division is seeing great demand for more energy-efficient products. For example, E-motion separators are 70 percent more energy efficient compared to traditional technologies. Within water and waste treatment, new and improved products help reduce customers' water consumption and make water treatment processes more efficient.

Alfa Laval is far from alone in driving this change and seeks out strong partnerships with suppliers to optimize the supply chain from a sustainability perspective. Innovative collaborations such as the 'Re-Made to Matter' initiative with Stena Recycling, make it possible to upgrade to a more energy-efficient heat exchanger and get a refund on the old one, which is then recycled.

Equally important is the shift to a more sustainable and inclusive workplace, where everyone feels welcome and treated equally regardless of gender, age, origin, or role in the company. Alfa Laval needs to attract, develop, and retain the best people, and being a fair, open, and inclusive workplace is key to achieving that goal.

Sustainability notes

The report covers the 2022 calendar year and focuses on material topics and activities in line with stakeholder concerns. The sustainability notes for 2022 including our GRI disclosures can be found on alfalaval.com. Data and sustainability information for previous years are available at **www.alfalaval.com/about-us/sustainability/**

Alfa Laval's Sustainability Report according to the GRI Standards 2021, including the Statutory Sustainability Report according to the Swedish Annual Accounts Act, is found on page 54–86 in this Annual Report. The Statutory Sustainability Report includes the EU Taxonomy. Supplementary sustainability information to ensure a reporting in fully accordance with the GRI Standards are found in the separate document "Sustainability notes, GRI and Taxonomy" published on alfalaval.com. Alfa Laval's sustainability reporting covers the 2022 calendar year and focuses on material topics and activities in line with stakeholder concerns. It covers the whole group and all wholly owned subsidiaries. Data and sustainability information for previous years are available at **www.alfalaval.com/about-us/sustainability/**

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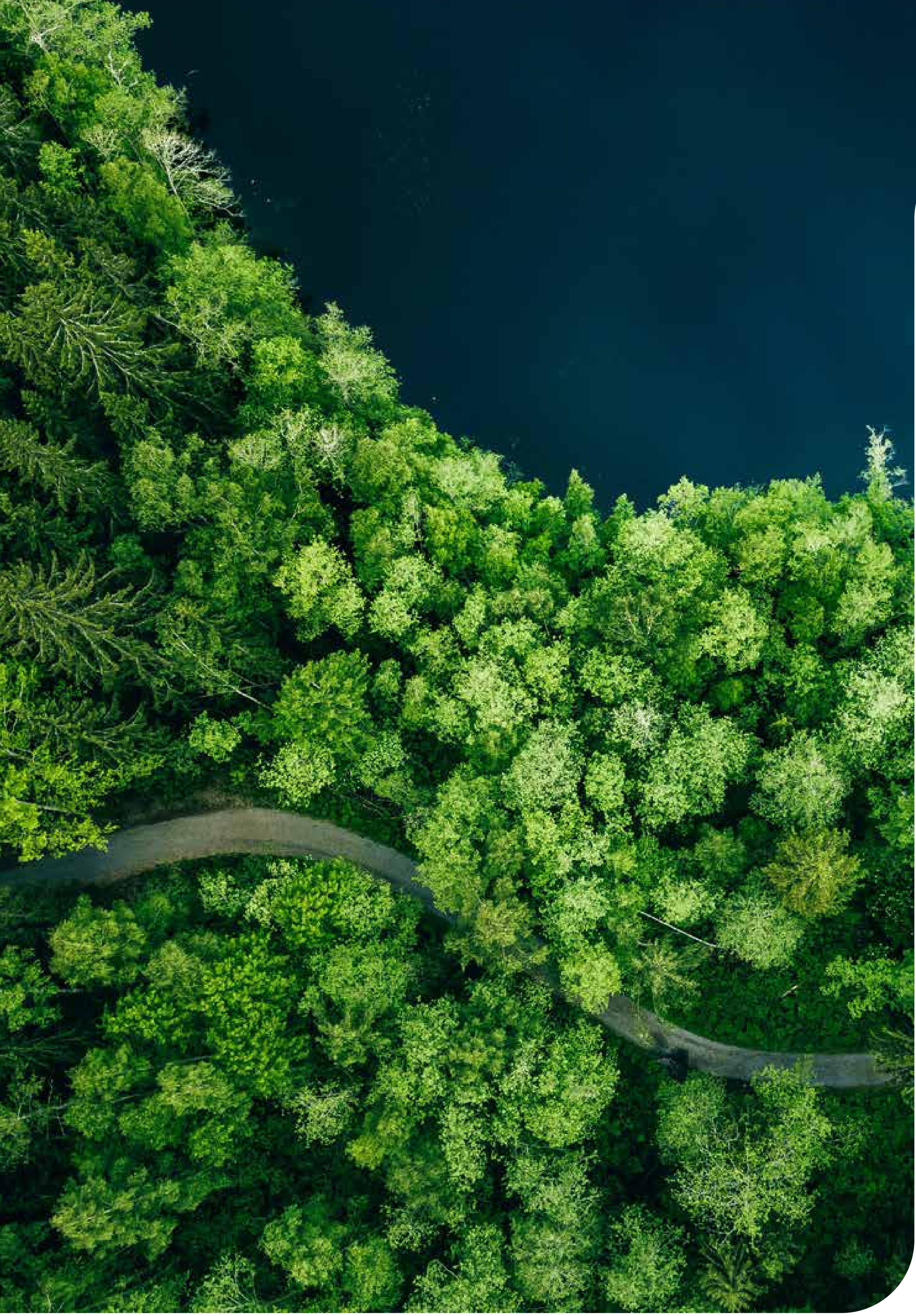


A strategic approach to the journey ahead

A new sustainability strategy was launched and approved by top management and the board in 2021. The strategy includes the most salient areas Alfa Laval is to focus on before 2030. These have been identified through stakeholder assessments and dialogue, through internal prioritization and analysis of which areas are going to be important to the continued competitiveness of the company.

The purpose of the sustainability strategy is to focus on those areas where Alfa Laval has the largest impact and wants to show leadership as a company. The strategy is divided into four main areas – caring, committed, circularity and climate. These areas reflect the environment, social and governance (ESG) issues that are most salient and where Alfa Laval can contribute most.

Each area includes a vision that sets out the ambition.

For the different areas, Alfa Laval has also set long- and short-term targets which will be followed up through KPIs to ensure continuous progress and to meet potential challenges through action. Where applicable, Alfa Laval will encompass the whole value chain in its ambitions including how the products and technologies the company puts on the market contribute to progress. The sustainability section of the annual report for 2022 is divided into the four topics. Each section describes focus areas, targets, processes, governance and how we follow-up on progress.

Climate

Carbon neutral

Alfa Laval has the target to become carbon neutral in Scope 1 & 2 emissions and achieve an absolute reduction in Scope 3 emission by 50 percent by 2030.

In focus
- Scope 1 emissions
- Scope 2 emissions
- Scope 3 emissions

Circularity

Circular business

Alfa Laval is dedicated to safeguarding the value of natural resources throughout its value chain.

In focus
- Efficient manufacturing
- Extending product life span
- Reuse/recycle

Caring

Safe inclusive culture

Alfa Laval promotes a safe, inclusive culture both within the company and in its relationships with external partners.

In focus
- Health & Safety
- Inclusion & Diversity
- Human rights

Committed

Ethical business

Alfa Laval is committed to honest, respectful and ethical conduct within its organization, as well as in all external business relationships.

In focus
- Business principles
- Anti-Bribery, anti-corruption
- Whistleblowing

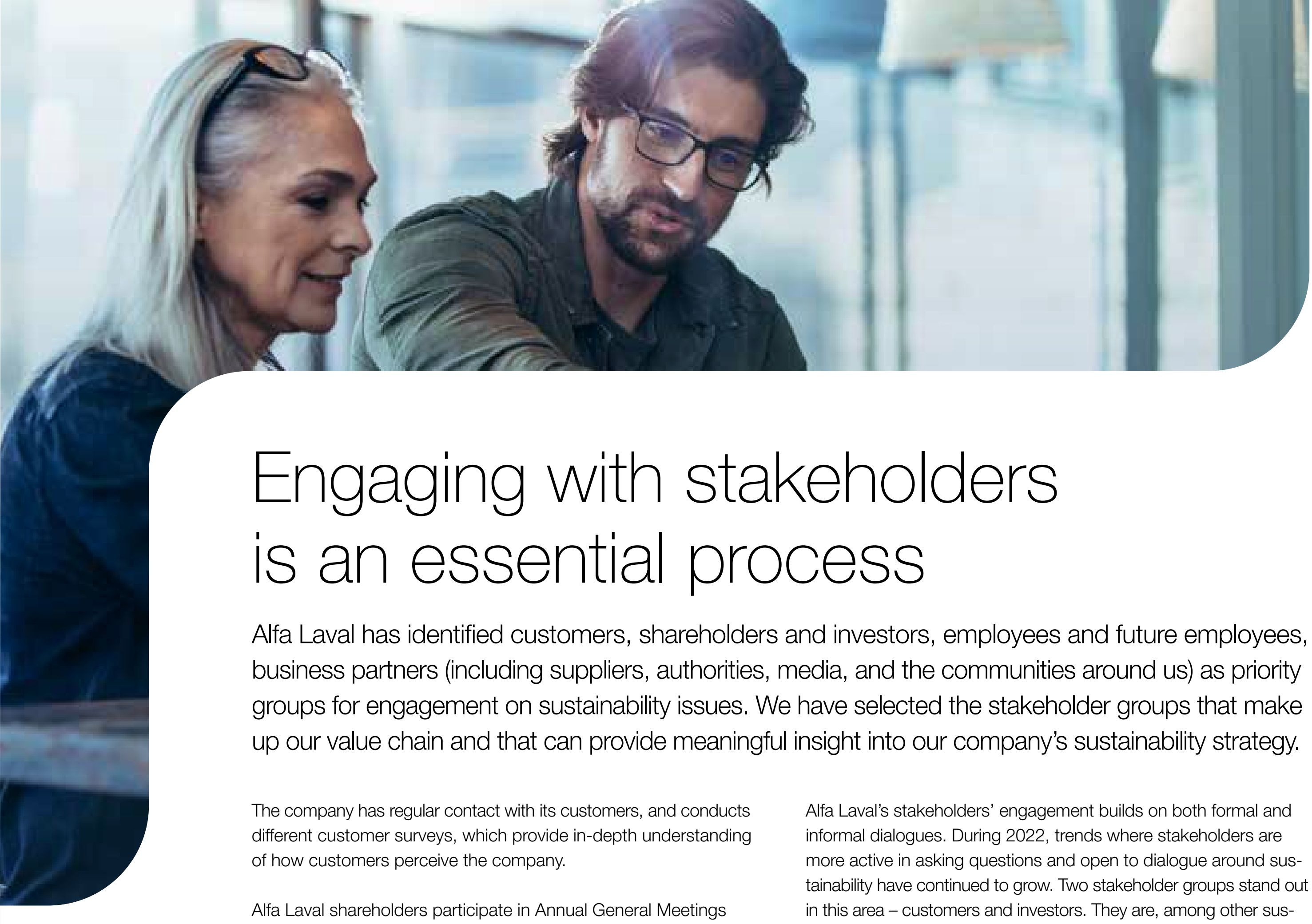
Targets and target achievements

Alfa Laval's sustainability targets aim to drive efficiency and behavioural change to achieve better results in the short- and long term. The table below shows the company's sustainability targets. Progress on the targets is presented in more detail within each section of the report as well as in the Sustainability Notes available on alfalaval.com.

› Climate ‹ **Circularity** ⌄ Caring ⌃ Committed

	Area	Targets	Target Year	Trend to achieving target based on results 2022	Read more
›	Carbon emissions	50% reduction Scope 1 & 2 emissions	2023 (base year 2020)	🟢	p. 60–65
	Carbon emissions	Carbon neutral in Scope 1 & 2 emissions 50% absolute reduction in Scope 3 emission	2030 (base year 2020)	🟡	p. 60–65
‹	Energy	5% improvement in energy efficiency (MWh/k direct hours)	2023 (base year 2020)	🟢	p. 60–64
	Water	5% reduction of water consumption in sites located in water stressed areas	2023 (base year 2020)	🟢	p. 67–68
	Water	100% recirculation of water in sites located in water stressed areas	2030	🟡	p. 67–68
	Waste	85% recycling of waste	Recurring	🔴	p. 67–69
	Waste	Zero waste to landfill	2030	🟡	p. 67–69
	Materials	30% recycled material content in products	2030	🟢	p. 66–69
⌄	Diversity	35% female employees	2025	🟡	p. 74–75
	Diversity	25% female managers	2025	🔴	p. 74–75
	Diversity	<70% homogeneity (gender and nationality) in highest management groups	2025	🟢	p. 74–75
	Health & Safety	30% Lost Time Injury Rate (LTIR)	2023 (base year 2020)	🔴	p. 70–73
	Chemicals	No hazardous chemicals used	Recurring	🔴	p. 71
⌃	Ethics	100% of employees trained in Business Principles, Anti-Bribery, Anti-Corruption and whistleblowing	Recurring	🔴	p. 76–82

🟢 Well aligned with target 🟡 Progress made towards target 🔴 Not aligned with target



Engaging with stakeholders is an essential process

Alfa Laval has identified customers, shareholders and investors, employees and future employees, business partners (including suppliers, authorities, media, and the communities around us) as priority groups for engagement on sustainability issues. We have selected the stakeholder groups that make up our value chain and that can provide meaningful insight into our company's sustainability strategy.

The company has regular contact with its customers, and conducts different customer surveys, which provide in-depth understanding of how customers perceive the company.

Alfa Laval shareholders participate in Annual General Meetings and investors are invited to annual capital markets days. Alfa Laval's potential to effectively respond to future sustainability challenges is one of the topics discussed at these meetings.

Employees are encouraged to give feedback directly to their managers and through employee surveys. Suppliers are important partners for Alfa Laval's business success. Regular interaction with them results in mutual development. Alfa Laval has an open dialogue with the communities in which the company operates, including collaboration with universities and local governments.

Materiality assessment

Alfa Laval carries out a materiality assessment regularly to review the sustainability topics with greatest relevance. This assessment, together with the stakeholder interaction described above, helps the company to identify material aspects. These are analysed from a risk, opportunity and business impact perspective and are validated by company management.

The sustainability strategy encompasses the topics that are most material, both internally and externally. These are shown in the table on p. 58. Moreover, Alfa Laval's products and services play a key role in enabling our customers to achieve their energy efficiency, climate, circularity and water goals (p. 18–31, 54). This is ranked as important, both internally and externally – internally because of the business opportunities created for the company, and externally because our products and solutions can help customers reduce their environmental impacts. The assessment also shows whether stakeholder perceptions of Alfa Laval's performance in the prioritised areas are in line with their expectations. Group management is involved in these discussions.

Stakeholder engagement

To support the progression towards business and sustainability goals, it is important to listen and engage with different stakeholders. Alfa Laval's stakeholders' engagement builds on both formal and informal dialogues. During 2022, trends where stakeholders are more active in asking questions and open to dialogue around sustainability have continued to grow. Two stakeholder groups stand out in this area – customers and investors. They are, among other sustainability topics, interested in climate change and the responsibility the company takes to respond to this challenge, the company's role in reaching the UN Sustainable Development Goals and the company's work on diversity and inclusion, which guide our meetings and regular dialogue with them.

The main areas that have been addressed by investors and customers during 2022 are:

- Climate change and the responsibility the company takes to respond to this challenge
- The transition to a circular economy and resource efficiency
- The company's role in contributing to the UN Sustainable Development Goals
- The company's work with diversity and inclusion
- Human rights and supplier business ethics

There has also been greater interest in:
- how the company plans for sustainability risks
- how sustainability related products contribute to value generation

In 2021, we conducted an anonymous in-depth employee questionnaire on sustainability. The results show that our employees rank the following sustainability areas as most important:

- Health and Safety
- Human Rights
- Water
- Anti-discrimination

The next materiality assessment will be conducted in 2023.

Climate

Mapping the road to carbon neutrality by 2030

Alfa Laval has long had a clear focus on reducing its carbon footprint, and it is now a cornerstone of Alfa Laval's sustainability strategy. Alfa Laval works actively to reduce its carbon footprint across the value chain and at the same time introduce technologies that ensure customer processes become as energy efficient as possible and enable the transition to clean energy sources.

For scope 1 and 2, Alfa Laval has committed to be carbon neutral by 2030. For scope 3, Alfa Laval has, in alignment with the Paris agreement, committed to an absolute reduction of 50 percent by 2030. The long-term target is to reach net zero by 2050. In 2022, Alfa Laval worked on refining and improving its carbon footprint and taking the learnings to the next level. By thoroughly enhancing the calculation for the entire value chain, Alfa Laval has identified not only the company's emissions but also the roadmap on how to significantly make improvements.

The CO_2e emissions are calculated in accordance with the GHG Protocol, enabling Alfa Laval to apply for the Science Based Targets initiative (SBTi). With 2020 set as the baseline for the entire value chain, knowing very well that this is a challenging target as the pandemic put a strain on the 2020 result and there has been a rebound since.

Greenhouse Gas Protocol (GHG)

The GHG Protocol Corporate Accounting and Reporting Standard provides requirements and guidance for companies preparing a GHG emissions inventory. The Scope 3 standard is the only internationally accepted method for companies to account for external value chain emissions, both upstream and downstream, of their operations. In addition, if a company reports positive impacts, it should also report a complete inventory of scope 1, 2, and 3 emissions and set reduction targets for these emissions.

Scope 1 covers direct emissions from energy used in our premises or company vehicles.
Scope 2 covers indirect emissions from the generation of purchased electricity, steam, heating and cooling consumed by Alfa Laval.
Scope 3 includes all other indirect emissions in Alfa Laval's value chain, both upstream and downstream, including goods transportation.

All parts of the value chain are important. Alfa Laval works with scope 1, 2 and 3 to ensure that all decisions are driving the reduction of the total carbon footprint as fast as possible.

The mapping of our carbon footprint process shows that the external footprint (scope 3) accounts for about 98 percent of our total value chain impact. For both Alfa Laval as a whole and the individual business units, it is essential to distinguish between scope 3 upstream and downstream as the impact from the different products varies significantly. Heat exchangers have the largest footprint upstream due to metal heavy products, but a very low footprint downstream as the products do not consume any energy, but rather increase energy efficiency in our customers' processes and applications. For rotating equipment, the downstream footprint is high, because of the energy they consume. Even though the products themselves are very energy efficient, the long lifespan of Alfa Laval's products of up to 25 years, means that they use significant amounts of energy during their life cycle.

During 2022, there was an increase in the scope 3 footprint, which is caused by increasing sales volumes. However, many supplier-related actions have been initiated and carbon footprint reductions are expected in a couple of years, as a pay-off from those actions.

Scope 3 upstream

For scope 3 upstream, the largest category is purchased goods and services. In the mapping of the baseline for 2020, the largest supplier categories were addressed. More than 1,000 suppliers distributed over 158 supplier categories were mapped and contacted during the year. In total, the project addressed more than 80 percent of the total spend. The analysis has shown that the carbon footprint from purchasing (scope 3 upstream) is almost eight times larger than the internal footprint (scope 1 and 2). Other parts included in the scope 3 upstream calculations are upstream transportation and distribution, business travel, employee commuting etc.

Scope 1 and 2

Alfa Laval has for many years reported on the energy consumption, energy sources and energy mix from all production sites. The carbon footprint all production sites, i.e. the carbon footprint for production (scope 1 and 2).

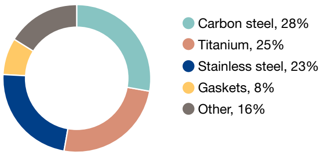
Scope 3 downstream

Emissions from goods transportation to customers are followed-up by the freight forwarders for outbound goods transportation. The baseline shows that transportation emissions are equal to the total of scope 1 and 2 emissions. There is a positive trend on development and a large number of initiatives are in the pipeline.

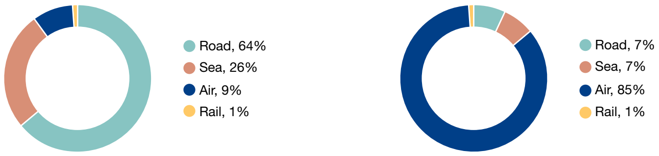
The use phase (downstream) has been more difficult to calculate due to the complexity of the immense product portfolio. This part of the value chain also clearly stands out as the largest, as Alfa Laval has a number of products that consume energy over a long period of time. To calculate the emissions in scope 3 downstream, analysis of the direct use phase emissions for the delivered products during their expected lifespan was carried out.

Scope 3, purchased goods and services

Purchasing stands for 509,000 tonnes CO_2 year 2022



Scope 3 transportation (inbound and outbound



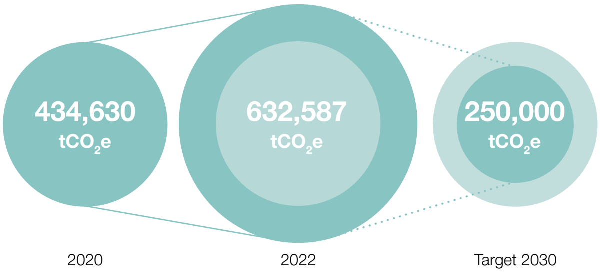
Percentage (by weight) of goods transported by road/sea/air/rail

Percentage (by emissions) of goods transported by road/sea/air/rail.

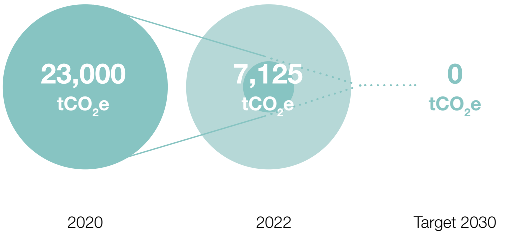
Carbon footprint in numbers

During 2022, a roadmap to reach the targets set for 2030 and onwards was established. There is a positive development for scopes 1 and 2, while the initiatives for scope 3 upstream and downstream (use phase) will take longer.

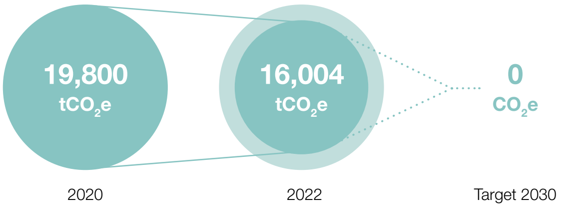
Scope 3 upstream



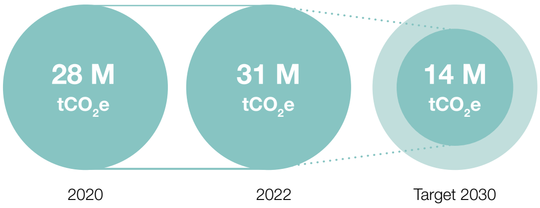
Scope 2



Scope 1



Scope 3 downstream



Making an impact

Food & Water Division:

Contributing towards emissions reductions

Plant-based foods have significantly lower carbon footprint than animal-based foods (according to a recent study, 62-92 percent less carbon emission) (FAO 2022). Alfa Laval is investing in the development of new sustainable foods with a lower environmental impact and is branching out to enter new partnerships and communities to drive the food transformation that will enable sufficient, healthy, and appealing food to feed a population of almost 11 billion people in 2050. In 2022, Alfa Laval signed a contract with a US-based pioneer in the field of plant-based protein for the delivery of a process line for a plant in Singapore. The equipment will enable the extraction of protein for nutritional supplements from mung beans. A zero-liquid discharge installation will ensure the reuse of 92 percent of the plant's process water.

Energy Division:

Energy Hunter

According to the IEA, energy efficiency should contribute with 40 percent of the CO_2 emission reduction required to meet the targets set in the Paris agreement. As much as 50 percent of today's potential for energy savings comes from the industrial sector, and 30 percent from buildings. The solutions to enable these energy efficiency improvements already exist. Alfa Laval's energy-efficient heat transfer solutions can enable energy and water savings, improve heat recovery, and reduce carbon dioxide emissions in almost every industry and building. Alfa Laval has the technology, expertise, and service needed and is ready to support with optimizing heat transfer energy efficiency. To improve energy efficiency continuously and further, we all need to hunt for waste energy.

Through the Energy Hunter programme, we are training our global salesforce and partners to become Energy Hunters. We have also launched a new tool that enables our customers to calculate how much they can save. We strive to change the mindset of ourselves, our partners, and our customers to shift their focus from only the products and their features to a bigger picture of value and realizing the impact of heat transfer losses and opportunities for waste heat recovery. All businesses looking at boosting their sustainability journey should contact our Energy Hunters today!

Marine Division:

E-PowerPack

Waste heat is a readily available but under-utilized energy source on board. Heat in the engine exhaust gas accounts for about 25 percent of the energy from combusted fuel, and there is additional heat to recover from engine jacket water and the scavenge air cooler. The E-PowerPack uses Organic Rankine Cycle (ORC) technology to turn waste heat into clean electrical power.

Alfa Laval's roadmap

Alfa Laval's mapping work in 2021 gave it the knowledge and focus needed to prioritize its work towards its climate goals. Below are the focus areas, in general terms, for reducing emissions in each scope.

Scope 1

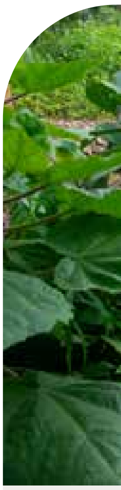
- Replacing natural gas as a heating source in applicable production facilities
- Improving energy efficiency in different sites including buildings and equipment
- Further reducing emissions from company cars by shifting to hybrid and electric cars

Scope 2

- Shifting to renewable sources of electricity in all facilities
- Investing in waste heat recovery, which is used for heating Alfa Laval facilities
- Installation of solar panels at production facilities and distribution centres

Scope 3

- Source from suppliers that offer materials and other inputs with a lower carbon footprint
- Improve material efficiency in manufacturing, including reduction of waste
- Continuous optimization of Alfa Laval products, which reduces energy consumption while products are in use
- Promote transition to renewable sources of energy upstream and downstream
- Reduce the proportion of freight transport by air
- Partnerships to ensure reuse and recycling of materials at the end of life of products



Putting the roadmap into action

The target for 2023 is to reduce scope 1 and 2 by 50 percent compared to 2020. In 2022, scope 1 and 2 emissions were reduced by 46 percent. Below is a description of the actions taken to reduce emissions across the value chain during the past year.

Scope 3

Upstream emissions

During 2022, the sourcing organization worked with climate initiatives to deliver greenhouse gas emission reductions, build capabilities, engage suppliers, and deliver results. After the 2020 climate baseline was established, pioneers within sourcing have driven several projects to reduce CO_2 emissions from material, supplier production and transport. While focusing efforts based on these learnings Alfa Laval is creating a solid foundation for climate action.

Scope 1:

For the past three years, Alfa Laval has been working on connecting manufacturing sites to a platform – the Alfa Laval Energy Management (ALEM). This allows analyses of energy data (for example electricity, and gas) in order to find savings opportunities and take actions. In 2022, Alfa Laval initiated an analysis based on the data in the ALEM platform for two sites in the group: Qingdao, China and Lund, Sweden. The analysis provided good savings opportunities. For example in Qingdao, opportunities to reduce gas consumption by 10 percent have been identified. Alfa Laval will continue to perform the analysis work and add more sites globally to the programme.

Scope 2:

Switching to renewable sources of electricity

During 2022, emissions from scope 2 were reduced by 69 percent (vs baseline 2020). The decrease can be attributed to changing electricity agreements, from fossil-based to renewable sources in our sites. Now more than 40 of our sites use energy from renewable sources and in 2022 93 percent of the electricity came from renewable sources compared with 80 percent in 2020. Three sites, located in Italy and China, use photovoltaic energy generated from solar panels on site.

In 2022, Alfa Laval's manufacturing facility in Krakow, Poland started to install solar panels on the roof, which will be able to generate approximately 300 MWh per year, equalling 10 percent of the site's annual consumption. Alfa Laval will continue the journey to produce its own electricity in the coming years.

Scope 3:

Downstream emissions

There is a clear correlation between the rate at which renewables and other clean energy sources are introduced to the market and Alfa Laval's ability to achieve scope 3 downstream targets, especially with regards to Alfa Laval's rotating equipment. Alfa Laval cannot fully influence the rate at which this transition happens but can control the rate at which more energy-efficient products are on the market. Energy efficiency will be paramount for Alfa Laval's customers to reach their carbon emission targets, and for the achievement of the Paris agreement. By way of example, every year Alfa Laval's heat exchangers reduce annual energy use in industrial processes by around 100 GW and, at the same time, reduced CO_2 emissions by 50 million tonnes.

Lowering the negative impact of goods transport

Alfa Laval is working on reducing its climate emissions from goods transportation by choosing transport modes with lower carbon emissions. In practice, Alfa Laval is shifting away from air transport to other modes of transport and changing its internal logistics to ensure minimum emissions from goods transport. For instance, Alfa Laval's distribution centres are actively working with suppliers and customers to go from air freight to land- or sea-based transport modes.

Partnerships enable better reuse of materials

Carbon emissions at product end of life are mainly a result of waste disposal or energy intensive recirculation processes. Read more about Alfa Laval's initiatives on taking responsibility for the end-of-life phase of its products on page 69 (circularity chapter).

Carbon emissions reduction critical to biological diversity

During 2021, a first analysis of the groups' impact on biodiversity was made using the ENCORE (Exploring Natural Capital Opportunities, Risks and Exposure) biodiversity database and the guidance provided by the SBTI (Science Based Targets initative for Nature). The biodiversity analysis showed that Alfa Laval's current environmental targets and focus areas – greenhouse gas emissions, water use, waste management and the reduction of hazardous chemicals – are essential for reducing the company's impact on nature and biodiversity. Meeting the targets set in the sustainability strategy for climate and circularity will, in other words, also reduce the negative effects the company has on biodiversity.

During 2022, a biodiversity park in Talawade, India was inaugurated. Alfa Laval has been supporting community development work through its corporate social responsibility programme. In continuation of Alfa Laval's commitment towards society and the environment, it has proposed to the Municipal Corporation of Pimpri Chinchwad (PCMC) (the area where Alfa Laval's Dapodi factory is located) the creating a biodiversity park. PCMC agreed and granted eight acres land in Talawade. Creating the park has involved cleaning the space from invasive species, and planting and allowing the regeneration of native varieties of plants. This creates habitats that attract native wildlife. During 2022, water bodies and streams were created, which are important for biodiversity to thrive. As time passes, the park is expected to become richer and richer in biodiversity.

In an ongoing site facility project on one of Alfa Laval's sites in Sweden, biodiversity is included as an important aspect. The project will be completed during 2023.

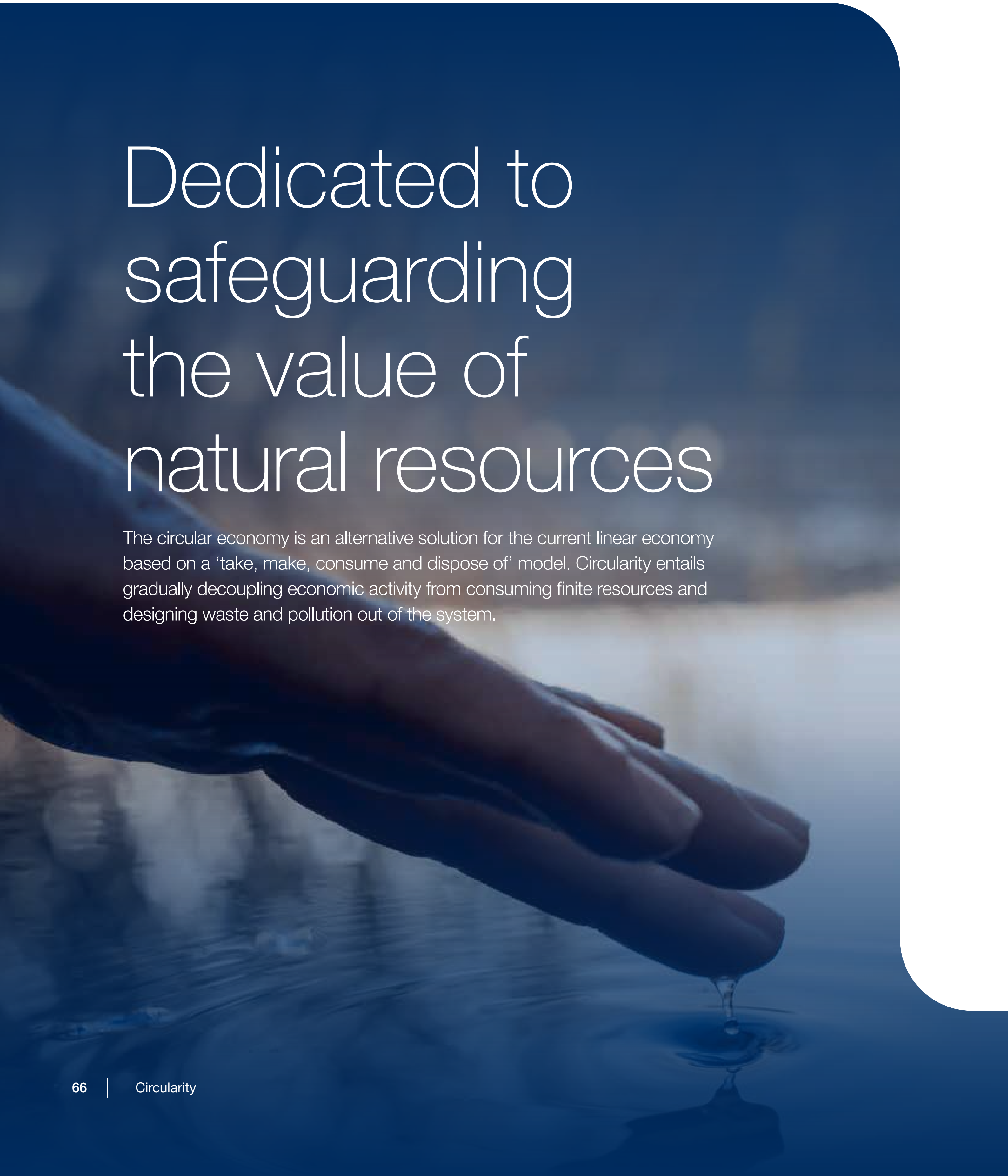
CDP

Alfa Laval has participated in the CDP's (formerly referred to as the Carbon Disclosure Project) voluntary reporting of greenhouse gas emissions since 2016 (except in 2017). The reporting involves relevant key figures and data, measures to prevent negative climate impacts, and products, solutions and initiatives that reduce emissions. In the Annual CDP Report for 2021 on climate issues, Alfa Laval received a score of B.

TCFD

The Task Force on Climate-related Financial Disclosures (TCFD) is a call for climate action from financial markets. It describes how companies should handle their climate-related information, including risks and opportunities. Alfa Laval aims to meet the recommendations from TCFD for how climate work is organised, how Alfa Laval's products and services help reduce carbon emissions, risks and opportunities, and goals and metrics. Information about these aspects can be found on p. 60–65 and 153–155.

Circularity



Dedicated to safeguarding the value of natural resources

The circular economy is an alternative solution for the current linear economy based on a ‘take, make, consume and dispose of’ model. Circularity entails gradually decoupling economic activity from consuming finite resources and designing waste and pollution out of the system.

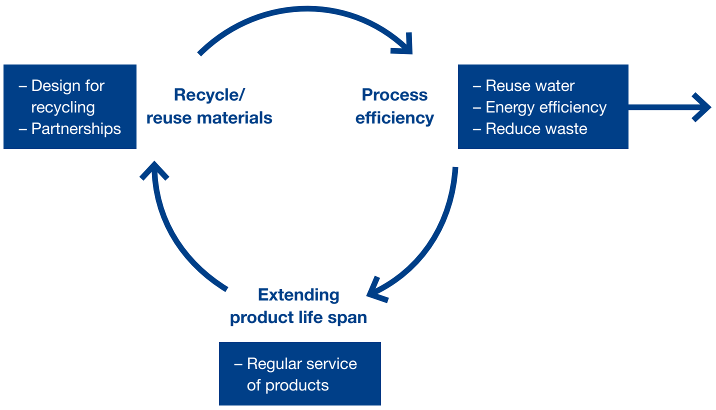
Alfa Laval is dedicated to safeguarding the value of natural resources throughout the value chain. Natural resources mean all materials and input purchased and used in production, transportation, and service. These materials are mainly metals, rubber, plastics, paper and water. Alfa Laval's value chain entails the whole chain from the materials and products bought from the suppliers to the production, use and end of life of the products and the transportation included in this chain.

Circularity plays an important role in Alfa Laval's current business model. For this reason, Alfa Laval works to improve understanding of the opportunities of a circular approach in the different parts of the value chain. This includes optimizing the use of resources, extending the life span of products, ensuring recycling and reuse of materials, and exploring new business models and new ways of working with the supply chain and in other partnerships. Alfa Laval has chosen to focus on three main areas to promote circularity: process efficiency, extending product life span and recycle/reuse of materials.

Efficiency in internal processes:
Specific targets are set regarding energy efficiency, water usage and waste management.

Extending product life span and ensuring high process efficiency
Alfa Laval develops high-quality, long-lasting products. Regular service of the installed products also ensures high efficiency over time.

Recycle/reuse of materials
The target for recycled materials is that at least 30 percent of the materials used in products should come from recycled sources. Based on increased transparency and data availability, we are confident to rate this target green (p. 58). Already now we have data indicating that more than 30 percent of the material used comes from recycled materials. This will allow us to re-assess the target and potentially raise our ambition.



Improving process efficiency

To improve the efficiency of our processes, we have prioritized water, energy and waste. Our targets are

Water:
- 2023: Reducing water consumption by 5% (baseline 2020) in those sites located in water-scarce locations, specifically in China, India, the US, the Middle East and Brazil.

Status 2022: 11 % decrease of water used in sites located in water stressed areas.

- 2030: 100% water recirculation in sites located in water-scarce areas.

Energy efficiency
- 2023: Improve energy efficiency (MWh/k direct hours) by 5%.

Status 2022: 7% decrease in energy consumed relative to direct hours worked.

- 2030: Continuously improve energy efficiency in production services and products.

Waste
- 2030: Maintain 85% recycling of waste.

Status 2022: 75% Recycling.

- 2030: Ensure no waste goes to landfill.
- 2026: reduce waste to landfill by > 50% (by weight) (from baseline year 2020)

Increasing efficiency in chemical recycling

Recycling of end-of-life tyres (ELT) through pyrolysis technology is one example of resource efficiency and the transition to a circular economy. Alfa Laval has sold a state-of-the-art CH300 HSS (high speed separator) module to a plant that cleans the pyrolisis oil and thus enables re-usage as new raw material in a variety of end-use areas, from the production of materials to chemicals and fuels.

Water

Alfa Laval operates worldwide, and 40 percent of the water it consumed in 2020 came from sites located in water-scarce areas. Alfa Laval has set a long-term target to recycle 100 percent of the water used on sites located in water-scarce areas by 2030. In the short term, the target is to reduce water consumption in water stressed areas by 5 percent by 2023 (baseline 2020). During 2022, water consumption in water stressed areas decreased by 11 percent. This was the result of both the implementation of water saving projects and lower activity in one of our largest sites in China.

Service Centre Frechen and Service Centre Taicang are zero-liquid discharge sites as all wastewater is collected and treated by evaporation using Alfa-Flash technology. This permits the sites to reuse about 97 percent of its wastewater with a minor concentrated waste residue that is disposed of. Both of these service centres are relocation projects so there is no previous data, but a conservative estimate when comparing with previous locations in Glinde and Kunshan suggest a saving of ~3,000 m^3 annually. The water produced by evaporation is of sufficient high quality that it can give minor improvements in the cleaning process compared to using tap water.

Rainwater harvesting is already used at the service centres in São Paulo, Brazil, Pontianak, Indonesia and in Bangkok, Thailand as a way of saving drinking water, but also out of necessity for Pontianak. There is an ambition to implement this technology at more service centres located in tropical areas and other regions with heavy rainfall for parts of the year. With minimal treatment, rainwater can be used for pre-cleaning and to replenish water lost by evaporation from cleaning tanks. Currently about 500 m^3 or ~1 percent of annual water useage within all Alfa Laval's service centres is rainwater.

At the service centre in Camberley, UK a plate rinsing step could be drastically reduced with a new cleaning line with a dedicated tank for rinsing liquid dye penetrant. This will save at least 1,000 m^3 per year.

The factory in Jiangyin, China assembles 15,000 plate heat exchangers every year, which are hydraulically tested using water. Since 2019, a recycling system for the water has been in place and with further development of this system, all testing water is now circulated saving another 25 percent or approximately 2,500m^3 of water per year.

Waste

Alfa Laval's waste management approach is based on the waste hierarchy, supporting circularity by favouring the prevention and reduction of waste and increasing reuse and recycling. The ambition is to divert as much waste as possible from landfill and by 2030, the target is to send zero waste to landfill (and reduce it by 50 percent by 2026). Aligned with the waste management approach and ambitions, the focus on waste reduction measures is increasing and waste management and several projects have been run during the year.

One example is from the Pune factory in India. Since the factory introduced a cardboard crusher machine, they have managed to reuse more than three tonnes of corrugated boxes in the past 18 months. The crushed cardboard is used as filling material instead of plastic bubble bags for primary packing of the outbound shipments. This also helps to reduce the CO_2 emissions related to the usage of plastic fillings.

Paper crushing machines are already installed in other factories and distribution centres and more are planned.

In the distribution centre in Tumba, Sweden, labels are now put into the plastic bags, instead of sticking them on to the surface. This small change means the warehouse has been able to reusing the plastic bags internally. The saving is estimated to be more than 110,000 plastic bags annually and the warehouse has noticed a significant reduction in plastic waste. So, this initiative saves resources (plastic), reduces waste, and at the same time lowers costs. Another example is from the distribution centre in Kolding, Denmark where reuse initiatives save 450,000 plastic bags per year.

Extending product life span

Many Alfa Laval products have a lifespan of over 20 years. Therefore, it's essential to ensure that they work optimally and are easy to maintain and repair. By designing products that are easy to repair, maintain, upgrade, refurbish and remanufacture, Alfa Laval extends the lifespan of the product to save materials and other resources.

Actions for increasing life span of products and materials

- Designing products that last longer and that are easy to refurbish.
- Ensure that products are serviced, repaired and remanufactured for a longer lifespan.

The recycling and reuse of materials

To ensure that Alfa Laval moves towards a circular economy, it is crucial to find effective ways to reuse and recycle the company's products at the end of their life span. To achieve this, work is needed both on improving the design of Alfa Laval's products, so that they are easier to dismantle and recycle, and ensure that the materials used are compliant with relevant legislation. In addition, increasing the use of recycled materials in the products, both to reduce the carbon footprint and the use of raw materials is part of Alfa Laval's targets. Furthermore, working with other organizations to enable reuse and recycling will be paramount to success.

Subscription service to improve product life span and efficiency

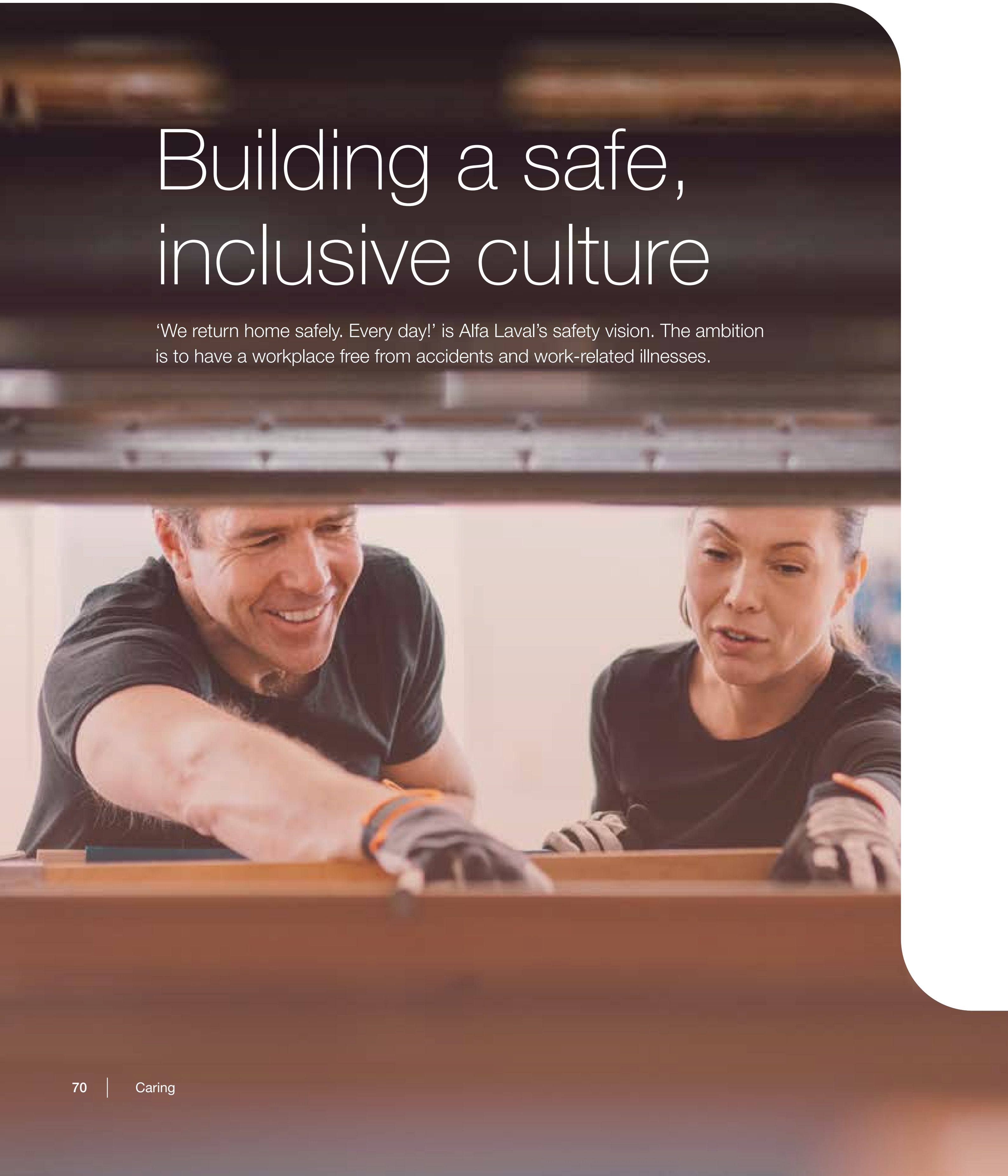
Business Unit High-Speed Separators has released a new subscription service to secure the ongoing optimization of water and power use in centrifugal separators.

The Alfa Laval Sustainability Agreement for brewery separators is offered in a first push globally to medium and large breweries for separator models Brew 450, Brew 750 and Brew 750e. Under the agreement, Alfa Laval will commit to delivering on agreed targets for power and water savings, based on a no-gain-no-pay principle. By signing up for an agreement, a customer pays an annual fee with no surcharge for the hardware or software required to reach the target.

Responsible approach to centrifuges and decanters at end of life

Alfa Laval is taking more responsibility for the full life cycle of its products. This is in line with the company's ambition to establish a circular mindset across all activities and parts of its offering. In October, an existing contract with Stena Recycling, a company specialising in recycling, was extended to include the take-back of centrifuges and decanters at their end of life from customers across Denmark, Sweden, Norway and Finland. Earlier, the agreement exclusively concerned the recycling of material from brazed heat exchangers. According to the agreement, Stena Recycling will recover materials, which are recycled to produce new machinery. Steel accounts for around 85 percent of the recovered materials, while a smaller part relates to recovered parts and metals from the engine and electrical components. The value of the recovered materials will be deducted from the price of a new decanter or centrifuge when the customer buys a replacement.

The initiative is a step in a process to keep better track of used equipment and drive more transparency into the product life cycle to minimise the environmental impact of products. The ambition is to build on the experience in the Nordic countries and replicate the process to regions across the globe as well as include more product groups.



Building a safe, inclusive culture

'We return home safely. Every day!' is Alfa Laval's safety vision. The ambition is to have a workplace free from accidents and work-related illnesses.

Alfa Laval strives to continuously improve the health and safety (H&S) performance according to the global H&S Policy. An extensive safety programme was launched during 2022 and has resulted in positive development, there was a positive trend, both when it comes to Lost Time injury Frequency Rate and Minor Injuries. However, we are still not in line with our vision and aspirations in this area.

Targets and progress

Alfa Laval's key target in the H&S area is to reduce the Lost Time injury Frequency Rate (LTIFR) by 30 percent by 2023 compared to 2022. In 2022, the total number of LTIs decreased to 87 (113). The total number of lost working days was 2,707 (2,800). The target on reduction of LTIFR was however not met even if significant progress towards the target was made. Continued focus and work is needed to fulfill our targets and long-term aspirations.

Reducing the use of hazardous chemicals is also important for health and safety for our employees, and this is continuously in high focus at all our sites. Removing and substituting hazardous substances is part of our continuous improvement work.

Health and Safety priorities

During the year, Alfa Laval has had an even sharper focus on the three main areas of safety: safe culture, safe technology, and safe systems. Based on findings from last year's review and analysis, a decision to prioritize the eight units with the most accidents was taken. Each of these units have completed a Problem Solving Sheet to find underlying causes of the negative trend and what can be done to improve in terms of health and safety. Extensive mitigation programmes for each site have been implemented with positive results during 2022. A similar approach will be used on other sites if poor performance or a negative trend becomes apparent.

Good health and well-being

The pandemic has put additional focus on health and well-being, and Alfa Laval has taken several actions to minimise the spread of Covid-19 among employees, ensure their well-being and safeguard the business. Alfa Laval believes that promoting good health is about concern for the individual as well as enabling Alfa Laval's continued business success. Employees in certain regions have continued to work from home but employees in most regions are now back in the office most of the time.

During the year, Alfa Laval conducted an employee survey to measure, among other things, health, and well-being in the organization. See more about VOICE on p. 75 (Listening).

Enhancing safety performance in BHE&FHE Product Group

During 2021 pandemic, footprint projects and huge volume development impacted negatively on safety performances of BHE&FHE Product Group. It was necessary to revitalize safety tools and processes already available in the organization. BHE&FHE focused on ALPS, safety training and 'I Care' programme to revive safety awareness. In a few months, all efforts put in place led to an impressive reduction of LTIs, enabling the organization to come back to the usual positive safety performances.

Alfa Laval continues to focus on enhancing safety performance in three main areas

Safe culture
Promoting behavioural change is necessary to create a culture focused on safety in the workplace, which concerns all employees. Managers have a particularly important role in leading the development towards a better safety culture and acting as safety role models. All employees must also take responsibility for their own health and safety.

During the year, work with behavioural aspects continued and focused on a few different areas. For example, a way of working called Fair and Just has been implemented. This is a method to better understand human errors and ensure effective actions. A new digital safety module was also implemented that facilitates data collection and analyses of reported incidents and hazards.

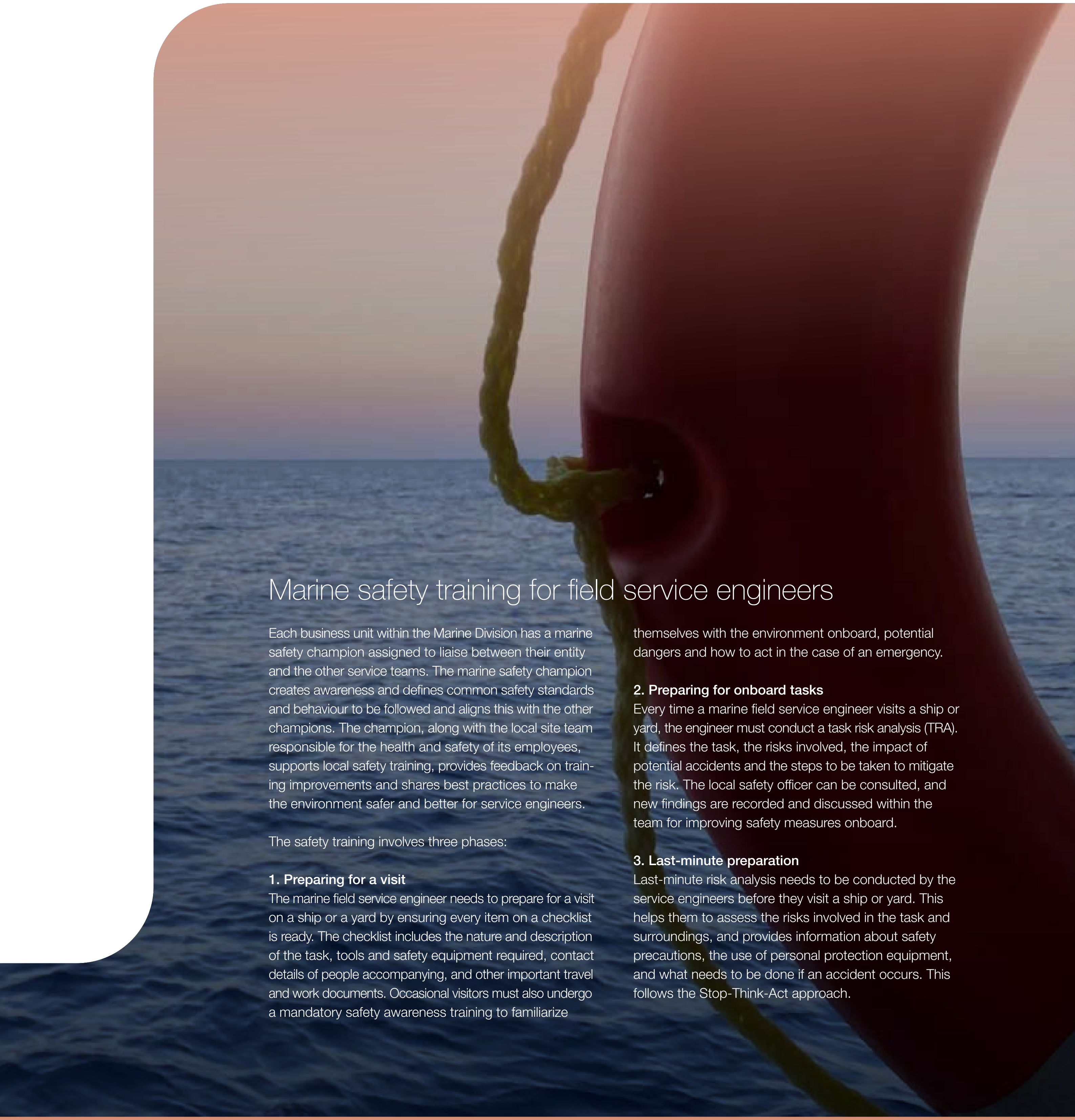
‘I care’ is an initiative to continuously and sustainably improve the health and safety culture. ‘I care’ originates from Alfa Laval’s purpose to accelerate success for customers, people and planet and builds on four crucial steps: awareness, interest, engagement, and sustain and improve. During the year, a programme called the Walk and Talk was run, which focused on leaders and other key stakeholders to demonstrate visible leadership on the shopfloor and talk with employees about safe and unsafe behaviours.

Safe technology and equipment
An important part of Alfa Laval’s safety work is to ensure safe machines and equipment. Risk assessments are therefore carried out regularly to identify hazards and measures to reduce risks.

Safety systems: Updated Health & Safety Policy and manual
During the year, Alfa Laval updated its Health & Safety Policy to ensure that it is relevant for the organization and its risks. Alfa Laval also implemented a new Health & Safety Manual that clearly states what is expected of all Alfa Laval units in terms of health and safety.

FY 2021	YTD		Dec 2022
0	0	Fatality	0
113	87	Lost Time Injury	9
1,294	920	Minor injuries	65
5,294	4,640	Near misses	314
13,568	18,888	Hazards / risk observations	1,533

Number of Days Lost due to accident YTD: 2,707*
*Including 124 days from LTI’s in 2021



Marine safety training for field service engineers

Each business unit within the Marine Division has a marine safety champion assigned to liaise between their entity and the other service teams. The marine safety champion creates awareness and defines common safety standards and behaviour to be followed and aligns this with the other champions. The champion, along with the local site team responsible for the health and safety of its employees, supports local safety training, provides feedback on training improvements and shares best practices to make the environment safer and better for service engineers.

The safety training involves three phases:

1. Preparing for a visit
The marine field service engineer needs to prepare for a visit on a ship or a yard by ensuring every item on a checklist is ready. The checklist includes the nature and description of the task, tools and safety equipment required, contact details of people accompanying, and other important travel and work documents. Occasional visitors must also undergo a mandatory safety awareness training to familiarize themselves with the environment onboard, potential dangers and how to act in the case of an emergency.

2. Preparing for onboard tasks
Every time a marine field service engineer visits a ship or yard, the engineer must conduct a task risk analysis (TRA). It defines the task, the risks involved, the impact of potential accidents and the steps to be taken to mitigate the risk. The local safety officer can be consulted, and new findings are recorded and discussed within the team for improving safety measures onboard.

3. Last-minute preparation
Last-minute risk analysis needs to be conducted by the service engineers before they visit a ship or yard. This helps them to assess the risks involved in the task and surroundings, and provides information about safety precautions, the use of personal protection equipment, and what needs to be done if an accident occurs. This follows the Stop-Think-Act approach.

Inclusion & diversity

During 2022, Alfa Laval continued its journey towards being an inclusive and diverse workplace, which enables both people and the company to reach their full potential.

Alfa Laval's vision is to be recognized as an inclusive workplace where diversity is essential to achieve the company's objectives. The composition of our people should reflect the diversity of the markets where we operate and society at large.

We promote a safe, inclusive culture both within our company and in our relationships with external partners. Alfa Laval's workplace shows a set of behaviours and unique values that make people feel valued, respected, and involved. They reach their full potential based on competence, experience and performance. All traits and attributes people bring to the workplace help to build strong and diverse teams.

Ambitions
Our ambitions towards 2025 are:

- 35 percent employees to be women
- 25 percent managers to be women
- <70 percent homogeneity in senior management teams

Progress

Inclusion & Diversity
Through the course of the unprecedented challenges faced due to the pandemic over the last couple of years, Alfa Laval continues to have women comprising 21 percent of our total employee base and 22 percent women representation in our managerial population. 34 percent of all new hires in Alfa Laval in the white collared talent pool were women in 2022, showing our commitment to increase the representation of women in the company. Being an international company, Alfa Laval aims to be diverse and inclusive organization. In 2022, homogeneity in senior management teams, from a gender and citizenship perspective, reached 70 percent in line with our targets. In the annual engagement survey 'VOICE', the dimension of inclusive leaders was scored at 69 percent by the employees. In December 2022, Alfa Laval has been ranked by Financial Times and Statista number 4 in Europe in the engineering category companies in our peer group.

Local I&D action plans
There is no single 'silver-bullet' in making the change to become a truly inclusive and diverse workplace, which is why Alfa Laval has built its I&D strategy on a long list of initiatives: awareness and change management, education and training, culture and leadership, people processes, local activities, targets and data, and communication.

Based on the feedback from sixty I&D workshops with senior management across the organization, including Group Management in 2021, and with more than 500 leaders participating, Alfa Laval included decentralized I&D planning in different parts of the organization in 2022. This is to better adapt to local needs and commitment levels.

We continue to build awareness in the organization with I&D workshops with management teams across Alfa Laval, leading to local I&D plans. The local plans contain regular management team discussions and follow-ups on targets, communication plans and initiatives, talent management, different reports to identify pay gaps, VOICE and I&D pulse (people surveys), inclusive leadership practices and training, as well as other initiatives and changes.

For example, in Latin America, the creation of the Top Woman support network is empowering and inspiring female employees. Another initiative – the Workshop Immersion programme – is helping to bridge gaps between different departments within the company, especially between the office areas and the shopfloor. Meanwhile, the Alfa Young network brings together employees under 35 in both Sweden and Denmark.

This is just a selection of examples that represent many more local initiatives that are driven by the business, HR, or employees themselves, while receiving full support from top management.

Policy
On 1 January 2022, a new Global Inclusion and Diversity Policy was launched. The purpose is to provide guidance and clarify our commitment to offer a workplace with a welcoming, inclusive environment based on diversity and a sense of belonging. The Global Inclusion and Diversity Policy covers the following topics: Creating a sense of belonging, equal opportunities, anti-discrimination, non-harassment and bullying in the workplace.

Learning
During 2022, Alfa Laval continued its education and training activities for leaders and employees globally in themes like global inclusion, acting inclusively and how to mitigate unconscious bias. Examples include: 'Becoming an inclusive leader' which is aimed at managers on all levels throughout the company, and the 'Global Inclusive Course' which all employees are encouraged to take. At TMC (Top Management Conference) in June 2022, the top 200 leaders participated in a session on self-reflection and deeper insights into inclusive leadership behaviours.

In 2022, more than 800 e-learnings on the global I&D program were taken. The training was supported by Alfa Laval's Learning Portal, eLearning tools, and a toolbox for recruiting and leading with I&D leadership in mind.

Networks
A group of 18 business and HR representatives, including senior managers, have been certified as I&D leaders in 2021. This network of facilitators inspires and supports ongoing and new local initiatives and contributes to ensuring that I&D stays on the agenda at all levels of the organization.

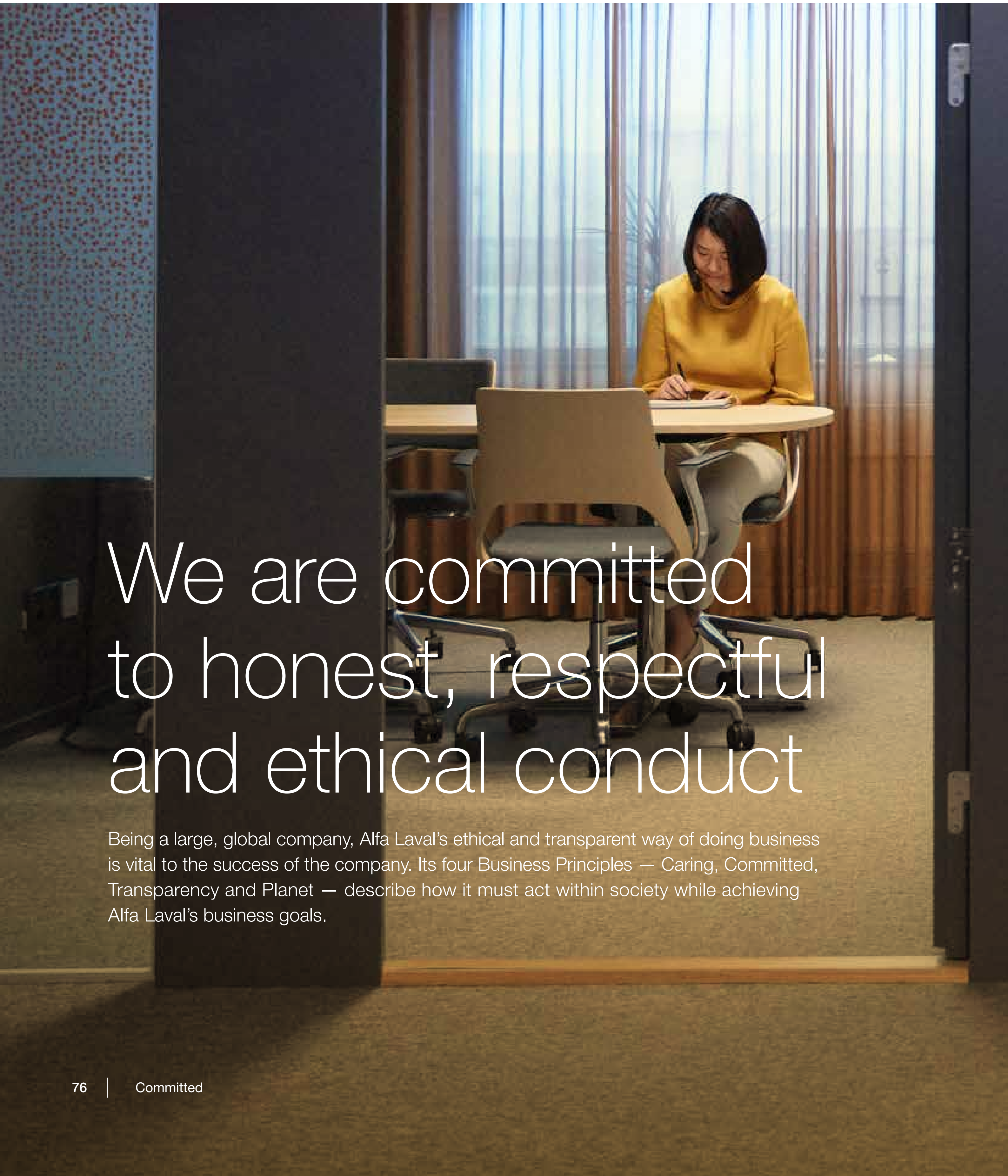
Diversity networks and employee resource groups have been initiated by employees and supported by the group throughout the organization. Examples include 'Women in Tumba', 'Young@ Alfa Laval Lund', 'Alfa Laval Women in India' (ALWIN), 'Alfa Laval Young Professionals in Aalborg' and 'Women in Southeast Asia'.

Communications
Communications play an important role in putting and keeping I&D high on the agenda. It is also important for promoting the benefits of an inclusive and diverse workplace among leaders and employees in the whole organization.

Communication activities in 2022 focused on endorsing the many initiatives via testimonials from participants in trainings, workshops and networks.

Listening
In 2022, Alfa Laval conducted the people engagement survey 'VOICE' to allow all employees to make themselves heard and contribute to making the workplace more inclusive and attractive. This year as many as 86 percent of Alfa Laval's employees completed the survey, a 5 percent increase in comparison to last year.

Committed



We are committed to honest, respectful and ethical conduct

Being a large, global company, Alfa Laval's ethical and transparent way of doing business is vital to the success of the company. Its four Business Principles — Caring, Committed, Transparency and Planet — describe how it must act within society while achieving Alfa Laval's business goals.

The Business Principles apply to all companies in the Alfa Laval Group and apply to all employees, including temporary employees and consultants. They also guide the relationships with business partners, such as suppliers and customers.

In 2021, the revised, and updated set of Business Principles was launched, including a new set of guidelines with concrete examples for how they should be implemented in everyday work life for everyone at Alfa Laval.

Alfa Laval's Business Principles incorporate the 'Protect, Respect and Remedy' concept of the United Nations Guiding Principles on Business and Human Rights, the OECD Guidelines for multi-national enterprises and the concepts in the UK Modern Slavery Act. The Business Principles are approved by the Alfa Laval Board.

Through a mandatory bi-yearly training in the Business Principles, awareness and knowledge on the Business Principles are secured.

The updated Business Principles

The Business Principles state that as an employee you should 'Apply the Business Principles in your daily work' and as a manager 'Lead by example' and 'Ensure that your team is trained regularly'.

Caring

We care about every individual's rights and opportunities including their safety and well-being. We are a global company, and we firmly believe that diversity maximizes the potential of every employee and we care about every individual's rights and opportunities.

The Business Principle covers:

- Human rights
- Inclusion and diversity
- Health and safety
- Freedom of association
- Child and forced labour
- Working conditions

Committed

We are committed to ethical conduct within our organization and in all external business relationships. High ethical standards guide our behaviour, and honesty, integrity and respect for others are values that we live and work by.

The Business Principle covers:

- Anti-bribery and anti-corruption
- Non-complicity
- Conflict of interest
- Fair competition
- Export control and trade sanctions
- Political contributions

Transparency

We engage in open dialogue with all our stakeholders to develop business relationships built on trust. Trust also requires that we are careful not to reveal or communicate confidential information.

The Business Principle covers:

- Protection of personal data
- Confidential information
- Accounting and verification
- Company assets

Planet

We are in a unique position because our products make a significant contribution to reducing the environmental impact of industrial processes. We also have a responsibility to continuously reduce our environmental impact in all areas of our value chain.

The Business Principle covers:

- Environmental impact
- Continuous improvement
- Precautionary principle

Compliance with laws, regulations and Alfa Laval Business Principles

It is important for Alfa Laval to conduct its business with honesty, integrity, and respect for others. This means that Alfa Laval not only follows its Business Principles and the applicable laws and regulations in the countries in which it operates, but is also determined to follow the highest ethical standards of business conduct. Alfa Laval carefully monitors the development of international legislation, social standards, and voluntary initiatives, including anti-bribery, anti-corruption, and conflict of interest.

During 2022, Alfa Laval reinforced and continued the development of a compliance and ethics programme, which includes the Alfa Laval Business Principles, governing documents, and compliance framework. The governing documents are policies, directives, and procedures. Adherence to the governing documents is mandatory for all employees in the Alfa Laval Group. The compliance framework is a set of standards that are to be implemented by local companies.

Governance

During 2022, the development of the three lines of defence concept continued. This is a model to secure compliance and a good working environment, identify gaps and secure that remedial actions are taken on discovered deficiencies. The concept is used to ensure good governance and secure compliance across the company. The first line is managers at a global level, and the second line is corporate functions, which represent oversight functions. The third line of defence are internal audits, external auditors, and external regulators.

The way the three lines of defence are set up is so that the second line creates compliance demands, checks and controls called Minimal Internal Control Requirements (MICR). These requirements are sent to the first line of defence. The first line of defence is responsible for answering the requirements by explaining how they act to comply. This information is collected by the second line of defence and analysed and used as a tool for risk assessment. Based on this risk assessment, internal audit programmes are compiled. Internal audits then challenge both the first and second line of defence by making sure that the first line of defence is compliant and that the second line of defence use controls that are effective. Securing compliance is thus made both by acting on deficiencies in the first line or by keeping governing documents created by the second line of defence updated.

The Risk and Compliance Board is the corporate oversight body. This board is appointed by Group Management to be responsible for reviewing the effectiveness of risk management and compliance processes within the company. The Board secures identification, assessment, mitigation, and monitoring of enterprise-wide risks. They also ensure implementation and administration of the company's policies, directives, and ethical programmes, including the Business Principles.

All managers are responsible for ensuring compliance with Alfa Laval's policies, including the ABAC Policy and the implementation of local guidelines. Line managers are continuously trained to keep up their awareness of the latest developments in Alfa Laval corporate policies and global compliance programmes.

Reporting breaches

Alfa Laval encourages its people to report any concern about actual or potential violation of the Business Principles or the law, and any unethical conduct. A company-wide whistleblowing system which is called Speak up!, enables both internal and external stakeholders to report suspected breaches anonymously. Alfa Laval's whistleblowing system is a secure and efficient tool that enables employees to combat fraud and uphold the good reputation of the company. The system complies with the EU data privacy regulation (GDPR) as well as EU Whistleblower Protection Directive.

During 2022, Alfa Laval focused on further developing the work with the EU whistleblower directive. Informing people about Alfa Laval's whistleblowing system and encouraging people to report has been an important part of the work. In some countries, Alfa Laval have established a hotline for Whistle-blower Support, along with a web-based supporting system.

Anti-bribery and anti-corruption

Alfa Laval has zero-tolerance for any form of bribery and corruption. The international scope of Alfa Laval's sales organization means that Alfa Laval is active in several countries where there is a high risk of corruption. One of many tools used by Alfa Laval in assessing risk is Transparency International.

Corruption Perception Index. Alfa Laval's Anti-Bribery and Anti-Corruption (ABAC) policy outlines the expectations the company has on all employees. Alfa Laval has built its work with anti-bribery and anti-corruption based on the six steps outlined in the UK Bribery Act, and is based on the 'prevent, detect and correct' methodology. Risk assessments are made on a global level. No public legal cases regarding corruption have been brought against the organization or its employees during the reporting period.

Training in focus

Proportion of employees trained in anti-corruption:

89%	Group Management
84%	White collars
56%	Blue collars

The anti-corruption training is an e-learning that can be taken by all employees. In addition to this training, class-room trainings are held based on risk assessments and on demand from the organization. In these trainings the participants get the chance to get deeper knowledge and involve in discussion on the subject.

For 2022, the percentage of white collars having taken the training went down two percentage points. This is not in accordance with the target on trainings (see p. 58). The reason for this are two larger acquisitions during the year, adding to the number of white collars in the organization. Work to get these new employees trained in the subject is ongoing.

Responsible Trading

In 2022, compliance with Responsible Trading requirement of Business Principles came up as the top priority. Alfa Laval put significant effort in securing full compliance in a complex and rapidly changing environment of trade restrictions and sanctions.

Anti-bribery and anti-corruption process

Top level commitment

- Group ABAC Policy
- Risk Compliance Board
- Corporate self-assessment

Risk assessment

- Enterprise Risk Management
- Risk assessment in supply chain

Proportionate procedures

- Risk management actions
- Supplier contracts include ABAC clause

Communication & training

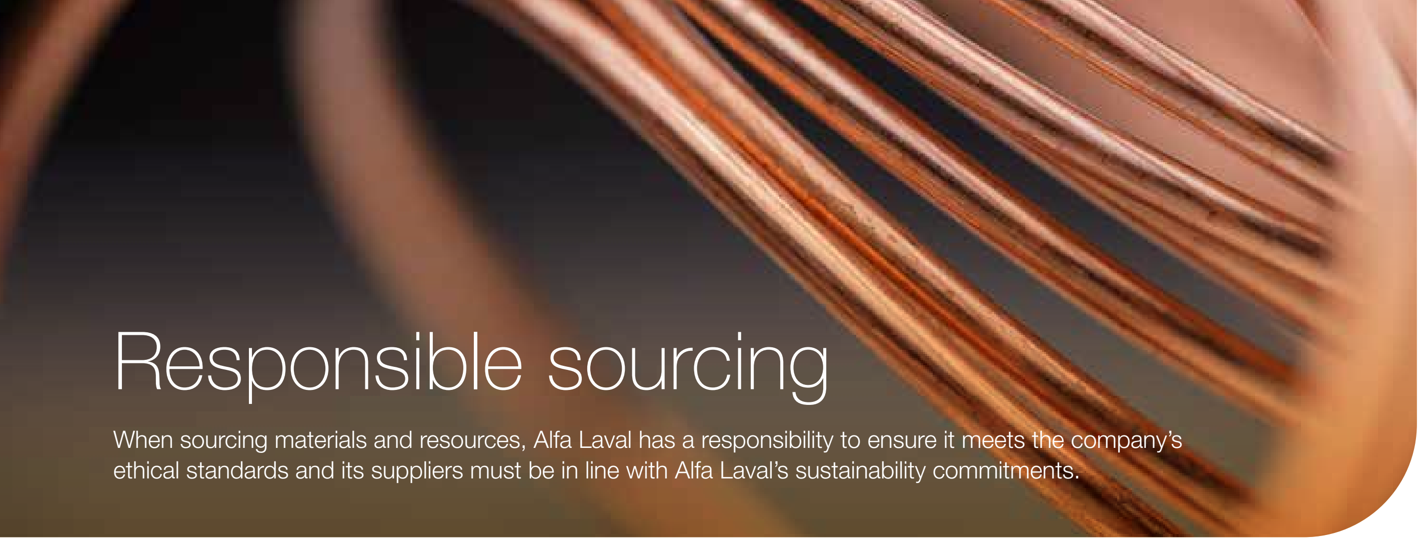
- ABAC information available on the intranet
- ABAC training for employees
- ABAC training for suppliers

Due diligence

- Third parties screening, compliance screening
- Due diligence on mergers and acquisitions

Monitoring & review

- Internal audit
- Whistleblowing function
- Annual Sustainability Reporting



Responsible sourcing

When sourcing materials and resources, Alfa Laval has a responsibility to ensure it meets the company's ethical standards and its suppliers must be in line with Alfa Laval's sustainability commitments.

A global supply chain with strong regional presence
Alfa Laval has more than 40 production sites and distribution centres in Europe, Asia and America. Its global sourcing organization defines the strategy for supply and supplier management, while the responsibility for the sourcing of products and services is executed locally. We are organized around eight commodities: raw material, casting & forging, machining & process, electric & components, proprietary parts, indirect production, machinery & equipment, and indirect & services. We define[1] a supplier as any business, company, corporation, person, or other entity that sells, or seeks to sell, any kind of goods or services to Alfa Laval, including the supplier's employees, agents, and other representatives.

Responsible sourcing
The foundation of the sourcing process is the Alfa Laval Business Principles. Implementation and follow up of *Alfa Laval's Business Principles for Suppliers Policy* is carried out throughout our sourcing organization, where the Alfa Laval Supplier Risk and Compliance Council plays an integral role in following up results and enabling continuous improvements. Our current sustainable sourcing programme steering committee sets sourcing focus areas for deliveries to Alfa Laval's sustainability agenda.

To have a responsible and sustainable value chain, collaboration with suppliers is needed. Through clear expectations, risk management and a structured way of working with mitigation and follow-up, risk exposure is reduced. Through increased knowledge about sustainability risks, it is possible to become more proactive and to work together with suppliers towards sustainable business growth and innovation.

Expectations
The *Alfa Laval Business Principles for Suppliers Policy* together with our supplier agreements, form the basis of our sustainability expectations on our supplier base. Suppliers are expected to acknowledge the policy and they are accountable for following and fully incorporating the Business Principles into their supply chain.

Sustainability is an objective for our strategic supplier programmes and in all our commodity strategies. During 2022, climate action was a sustainability focus area for the sourcing organization. Alfa Laval has a responsibility to not only help our customers reduce emissions, but also make the same effort ourselves and achieve the same targets we expect of our suppliers.

Evaluation
Alfa Laval's sourcing process outlines how we select and evaluate potential suppliers across our organization. It is important for Alfa Laval to not only onboard suppliers that can deliver to our expectations but also share our sustainability ambitions. In order to evaluate new suppliers and to ensure we know who we do business with, we use evaluation tools such as questionnaires, evaluations of sustainability programmes and if required, audits.

Risk analysis and mitigation
For us, risk management means understanding and mitigating supply chain risks. To identify risk focus areas, the sourcing organization uses macro risk trend reports, external insights for critical risk indicators, for example anti-corruption, environmental and working conditions indexes, and internal data and insights. Performed audits and supplier dialogues will give valuable input into the improvement of the risk screening process.

A supplier risk assessment (see figure page 81) includes an initial screening to ensure prioritization of the suppliers with the highest risk of breaches of the Business Principles.

Depending on the characteristics of an identified risk, the sourcing team will mitigate the risk in different ways. Mitigation activities are individually developed with a case-by-case approach supported by Alfa Laval Supplier Risk and Compliance Council and an action plan including a close follow-up programme.

Follow-up
Alfa Laval has a robust follow-up programme including business reviews of sub-commodity strategies, workshops for suppliers, a supplier award for best sustainability practices, to mention a few. We also have an audit programme where Alfa Laval's internally certified auditor performs different audits with our suppliers. Suppliers' overall capabilities to deliver products and material according to Alfa Laval requirements are assessed, specific manufacturing processes are audited and there are Business Principles audits for suppliers. The Business Principles audits are sustainability audits including areas like environment, health and safety, human and labour rights, and social practices at the supplier.

Alfa Laval's sourcing organization has two sustainability KPIs, Business Principles audits and climate projects. After two years of travel restrictions due to Covid, the number of on-site audits increased again in 2022 and our auditors conducted a total of 74 Business Principles audits to assess suppliers' social and environmental performance and compliance with our Business Principles, mainly in China, India and Mexico. For more information on climate projects, please see pages 60-64.

Corrective action
If non-compliance is found through a supplier evaluation activity, a reported incident, a risk analysis or a follow-up activity such as an audit, the agreed improvement action plan is handled by the supplier responsible. Suppliers with serious breaches get a limited time to implement the necessary improvements with the support of an effective supplier development programme, while the case is escalated and monitored. If an approved supplier does not fulfill Alfa Laval´s expectations on performance or compliance after assistance from Alfa Laval, an escalation to

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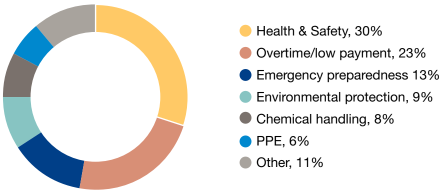
[1] Definition as per Alfa Laval Business Principles for Suppliers, the-alfa-laval-business-principles-for-suppliers_corporate-brochure_en.pdf (alfalaval.com)

the Supplier Risk Council is done. An escalation will, if not solved, lead to a decision to put business on hold or even phase out and terminate the agreement between Alfa Laval and the supplier.

Alfa Laval follows up all Business Principles audit cases of identified potential or actual negative impacts with an improvement action plan. The Business Principles audits highlight six critical areas: child labour, young labour, forced labour, freedom of association, health and safety, fire protection and environment. Deviations in any of these areas require immediate correction, both from new and established suppliers.

The most common deviations in recent years have been in the areas of health and safety, overtime/low payment, emergency preparedness and environmental protection.

Most common deviations in supplier audits 2022



Continuous improvement

Alfa Laval's work with its supply chain is continuously improved to ensure alignment with new sustainability requirements and legislation as well as developing good practices, and we recognize the need to work with our development areas. Several responsible sourcing development projects are ongoing and related to process and system development, data collection, report development, communication and more. For latest updates, please refer to AlfaLaval.com.

US Dodd-Frank Act

The US Dodd-Frank Act requires US companies to conduct due diligence to ensure that the minerals used in their products are not sourced from mines that finance armed groups guilty of human rights violations. Since 2013, Alfa Laval has been following the company-wide policy on conflict minerals available on www.alfalaval.com. A supplier assessment platform is used to increase transparency and visibility in order to identify suppliers that require an assessment. In 2022, Alfa Laval assessed and initiated dialogue with 432 suppliers to ensure compliance.

Modern Slavery Act

Forced labour and human trafficking are severe global issues. Alfa Laval has zero tolerance of these violations within its organization and supply chain. Modern slavery is included in learning programmes for employees and suppliers, as well as in the monitoring, auditing, and follow-up activities with suppliers. Read more in Alfa Laval's Modern Slavery Act Statement, available on our website.

Assessing supplier risk

The following three areas guide our risk assessment of suppliers

Country risk
Risk related to human rights breaches or bribery/corruption in the country where the supplier is based.

Product & production process risk
Risk related to occupational health and safety or environmental impacts associated with supplier production processes.

Governance & policies
Risk based on analyses and screenings of the supplier's available documentation of policies and governance.

Supplier sustainability awards

To acknowledge and reward suppliers who demonstrate a strong commitment to sustainability, Alfa Laval established the supplier sustainability award in 2021. It goes to suppliers who have made substantial and tangible improvements in one or several sustainability areas or created new ways of working. The purpose of the award is to encourage collaboration between Alfa Laval and its suppliers, and to incentivize them to work more with sustainability. It is a global initiative, with the previous winners coming from Sweden and India.

Safety workshops with suppliers

Throughout 2021 and 2022, the Supplier Risk & Compliance organization – at times in collaboration with external experts – arranged a series of safety workshops and events with suppliers. Alfa Laval has an internal 'I care' programme (see p. 72) which we use as a basis for a safety workshop with suppliers. The purpose of the workshop is to increase supplier competence and to help create a safety culture beyond Alfa Laval.

Remote audits

In 2022, Supplier Risk & Compliance initiated remote audits, to enable audits in areas under travel restrictions. Following the success of the pilot, the Supplier Risk & Compliance organization intends to use remote audits as a supplementary to on-site audits, or for follow-up audits.

Digital Audit, Different Way

In March 2022, the supplier risk and compliance lead in China received an audit request to verify the compliance of a potential supplier in a new project. However, the supplier was in a remote location, while the Covid situation in China meant that there were restrictions on travelling.

A digital audit was therefore conducted for the first time at Alfa Laval. This minimized the risks related to Covid during the audit. Following the pilot, digital audits can now supplement on-site audits, especially for the follow-ups, as this saves travelling times and costs.

‘I care’ in Mexico

Following a successful pilot in 2021, in October 2022, a live online ‘I care’ learning event was arranged for suppliers together with external learning providers in Mexico. The event builds on Alfa Laval’s ‘I care’ messages and shows suppliers that safety is important to the company. It was organized by Risk and Compliance Lead US/Mexico. The objective is to improve Mexican suppliers’ knowledge of Safety NOMs (Mexico Official Norms), minimise supplier deviations related to industrial safety, improve suppliers’ contingency plans and accident prevention at Mexican suppliers.

Contributing to the UN Global Goals

Alfa Laval contributes to progress towards the UN Sustainable Development Goals for 2030. We continuously improve our own sustainability performance and enable change by supporting customers to reach their environmental targets.

2 **Zero hunger**
Alfa Laval's products and solutions improve shelf life, reduce waste and make food production hygienic and safe.

3 **Good health and well-being**
Alfa Laval delivers hygienic equipment enabling efficient and safe production in the pharmaceutical industry.

4 **Quality education**
Alfa Laval is committed to ensuring competence development in our own business. We also support charities and volunteering projects related to school education around the globe.

5 **Gender equality**
Diversity and inclusion are key priorities for Alfa Laval and the aim is to increase the proportion of female employees and managers year-on-year.

6 **Clean water and sanitation**
Alfa Laval offers a wide range of technologies to treat wastewater and generate fresh water. These solutions contribute to improved access to clean water around the globe.

7 **Affordable and clean energy**
Alfa Laval's products are involved throughout the renewable energy production process, from heating and cooling to mixing and separation.

8 **Decent work and economic growth**
Decent work and economic growth Alfa Laval's Business Principles require decent working conditions. Working conditions and safety are highly prioritized areas both in our own operations and in the demands we place on our suppliers.

9 **Industry, innovation and infrastructure**
Alfa Laval invests heavily in research and development. The company launches between 30–40 new products per year and has over 3,700 patents.

11 **Sustainable cities and communities**
Alfa Laval provides solutions for energy efficient district heating and cooling — often using waste heat as well as thermal storage solutions.

12 **Responsible consumption and production**
Alfa Laval's ambition is to make every new product more efficient than its predecessor from a lifecycle perspective. Many of our products contribute to turning waste into value in different production processes.

13 **Climate action**
Alfa Laval works to minimize climate impact throughout the value chain. Our diverse products improve energy efficiency which, in turn, lowers the consumption of fossil fuels and thus reduces carbon emissions.

14 **Life below water**
Alfa Laval offers a whole range of products in the areas of energy and environment that contribute to reducing marine pollution and protecting marine biodiversity.

15 **Life on land**
Alfa Laval has provided a cooling solution that protects the world's largest seed collection stored to provide a backup if a natural catastrophe, environmental damage or war would deplete the Earth's crop diversity.

16 **Peace, justice and strong institutions**
Decent working conditions are a requirement in Alfa Laval's Business Principles. With our global reach, we can potentially make a positive impact on local societies' anti-corruption and anti-bribery activities.

17 **Partnership for the goals**
Alfa Laval has been a signatory of the UN Global Compact since 2011. We actively engage with stakeholders throughout our entire value chain to develop common solutions and create shared value.

● **Enabling change**
Alfa Laval's products and solutions enable our customers to improve the efficiency of their production processes by, for example, improving energy efficiency, reusing water or reducing waste. Moreover, Alfa Laval supports the transition to a more sustainable future in the energy, food and marine industries. Examples of how our products and solutions create value today and enable change for tomorrow, can be found on pages 18–31, 54.

■ **Contributing to progress**
By implementing our Business Principles, setting measurable goals and working to continuously improve, we contribute to several of the Global Goals. Examples are improving the health and safety of our employees, reducing our carbon footprint across the value chain, competence development, inclusion and diversity programme, responsible supply chain and reducing corruption risks, see more on pages 54–82.

EU taxonomy reporting

Taxonomy eligible economic activities to mitigate or adapt to climate change

Like for 2021 the taxonomy reporting only covers the following substantial contribution criteria:
- Climate change mitigation
- Climate change adaptation

Alfa Laval has concluded that the company only has activities related to climate change mitigation. This means that all the figures in the below table with key performance indicators are relating to climate change mitigation.

For the full tables on Key Performance Indicators, please see the Sustainability Notes, Taxonomy Reporting, p. 14–16.

The reporting for the other four substantial contribution criteria:
- Sustainable use and protection of water and marine resources
- Transition to a circular economy
- Pollution prevention and control
- Protection and restoration of biodiversity and ecosystems will first start for 2023.

Alfa Laval has after a thorough analysis arrived at the conclusion that the company does not have any environmentally sustainable activities that are covered by the economic activities specified in the taxonomy or meets the technical screening criteria or fulfils the Do Not Substantially Harm (DNSH) criteria. The reason for this is that the EU taxonomy does not really fit for a manufacturing company. As an example, the EU taxonomy works well for companies that produce biodiesel, but it does not at all work for a company that manufactures the equipment that the biodiesel producers need for their production. The same thing applies for the service that Alfa Laval sells to biodiesel producers. The first problem is that the economic activities listed in the taxonomy are not covering all business activities of Alfa Laval, which makes it impossible to report them as environmentally sustainable despite that our products are helping our customers to reduce their energy consumption and carbon emission. Many of the technical screening and DNSH criteria are also very difficult for a manufacturing company to fulfil, simply because they usually are designed for the producers and not the equipment manufacturers that sell to the producers.

In addition, Alfa Laval and not the least the Marine Division sells products and systems into the fossil energy area to reduce energy consumption and carbon emission, but these important contributions to environmental sustainability are outside the scope of the EU taxonomy.

In summary, the products and systems that Alfa Laval manufacture and sell have a very important role in reducing energy consumption and carbon emissions – but the taxonomy does not cover this.

The key performance indicators according to the EU taxonomy are presented in the following table. To allow a good overview all three KPI:s are presented next to each other:

Key Performance Indicators		**Net invoicing 1)**				**Operational expenditure 2)**				**Investments 3)**			
		2022		2021		2022		2021		2022		2021	
- Climate change mitigation													
Consolidated	Code	SEK millions	%	SEK millions	%	SEK millions	%	SEK millions	%	SEK millions	%	SEK millions	%
A. Taxonomy-eligible activities													
A.1 Environmentally sustainable activities (taxonomy-aligned)		0	0			0	0			0	0		
A.2 Taxonomy-eligible but not environmentally sustainable activities (not taxonomy-aligned activities)													
Manufacturing of renewable energy technologies	3.1	96	0.2			3	0.2			26	1.1		
Manufacturing of equipment for the production and use of hydrogen	3.2	63	0.1			23	1.5			8	0.3		
Manufacturing of energy efficiency equipment for buildings	3.5	4,046	7.8			66	4.2			77	3.3		
Manufacturing of other low carbon technologies	3.6	5,736	11.0			37	2.4			55	2.3		
Construction, extension and operation of water collection, treatment and supply systems	5.1	1,199	2.3			12	0.8			4	0.2		
Installation, maintenance and repair of energy efficiency equipment	7.3	409	0.8			11	0.7			20	0.8		
Total of A.2		11,549	22.2			152	9.7			190	8.0		
Total of A.1 and A.2		11,549	**22.2**	6,467	**15.8**	152	**9.7**	124	**9.3**	190	**8.0**	110	**6.4**
B. Taxonomy-non-eligible activities		40,586	77.8	34,444	84.2	1,409	90.3	1,218	90.7	2,176	92.0	1,602	93.6
Total A + B		52,135	100.0	40,911	100.0	1,561	100.0	1,342	100.0	2,366	100.0	1,712	100.0

In 2021 only a split on A and B was required and no split on A1 and A2 or of A2 into activities. For this reason, no comparison figures for 2021 are available other than for A and B in total.

1) The taxonomy eligible economic activities in Alfa Laval for mitigating climate change have been identified based on what applications (industries) each division sell into. The net invoicing figures relate to contracts with customers. The bulk of the taxonomy eligible economic activities are relating to the Energy Division.

2) Operational expenditure relates to direct costs for:
- training and other HR adaptation (conversion and transformation) needs,
- research and development,
- building renovation,
- short term lease,
- maintenance and repair and
- other direct expenditures for day-to-day servicing of assets or property, plant & equipment by Alfa Laval or third parties.

3) Investments are defined as the sum of purchased and leased capital investments.

Taxonomy eligible investments and operational expenditure relate to:
- assets or processes associated with taxonomy eligible economic activities and
- purchase of output from taxonomy eligible economic activities and individual measures to become low-carbon or reduce greenhouse gas provided that the measures are implemented and operational within 18 months.

The following table shows how the eligible operational expenditure has developed from 2021 to 2022.

Operational expenditure split on cost types

Consolidated

SEK millions	2022	2021
Training and other HR adaptation (conversion and transformation) needs	0	0
Research and development	107	93
Building renovation	5	5
Short term lease	5	6
Maintenance and repair	25	16
Other direct expenditures for day-to-day servicing of assets or property, plant & equipment by Alfa Laval or third parties	10	4
Total	**152**	**124**

The major part of the operational expenditure refer to research and development, which is a high priority area to support the company's future growth in the sustainability area.

The following table shows how the eligible investments have developed from 2021 to 2022:

Investments split on assets

Consolidated

SEK millions	2022	2021
Property, plant & equipment	173	95
Internally generated intangible assets	5	–
Licenses and other intellectual property rights	0	–
Capitalised right-of-use assets	12	15
Total	**190**	**110**

The increase in investments is a reflection of Alfa Laval's intention to grow in the environmental and sustainability area. Internally generated intangible assets are relating to capitalised development costs within research and development.

The investments are mainly focusing on increasing production capacity for existing and new products that reduce energy consumption and carbon emissions for our customers and to reduce Alfa Laval's own energy consumption and carbon emissions.

Auditor's Limited Assurance Report on Alfa Laval AB Sustainability Report and statement regarding the Statutory Sustainability Report

This is the translation of the auditor's report in Swedish.

To Alfa Laval AB, Corp.id. 556587-8054

Introduction

We have been engaged by the Board of Directors of Alfa Laval AB to undertake a limited assurance engagement of Alfa Laval ABs Sustainability Report for the year 2022. The sustainability report consists of information presented on pages 54–85 in the Annual and Sustainability Report and the separate document Sustainability notes and GRI Content Index. Alfa Laval AB has defined the scope of the Statutory Sustainability Report on page 55.

Responsibilities of the Board of Directors and the Executive Management

The Board of Directors and the Executive Management are responsible for the preparation of the Sustainability Report including the Statutory Sustainability Report in accordance with applicable criteria and the Annual Accounts Act respectively. The criteria are defined in the separate document Sustainability notes and GRI Content index, and are part of the Sustainability Reporting Guidelines published by GRI (The Global Reporting Initiative), that are applicable to the Sustainability Report, as well as the accounting and calculation principles that the Company has developed. This responsibility also includes the internal control relevant to the preparation of a Sustainability Report that is free from material misstatements, whether due to fraud or error.

Auditor's responsibility

Our responsibility is to express a conclusion on the Sustainability Report based on the limited assurance procedures we have performed and to express an opinion regarding the Statutory Sustainability Report. Our review is limited to the information in this document and to the historical information and does therefore not include future oriented information.

We conducted our limited assurance engagement in accordance with ISAE 3000 (revised) *Assurance engagements other than audits or reviews of financial information*. A limited assurance engagement consists of making inquiries, primarily of persons responsible for the preparation of the Sustainability Report, and applying analytical and other limited assurance procedures. Our examination regarding the Statutory Sustainability Report has been conducted in accordance with FAR's accounting standard RevR 12 *The auditor's opinion regarding the statutory sustainability report*. A limited assurance engagement and an examination according to RevR 12 is different and substantially less in scope than an audit conducted in accordance with International Standards on Auditing and generally accepted auditing standards in Sweden.

The firm applies ISQC 1 (International Standard on Quality Control) and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements. We are independent of Alfa Laval AB in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements.

The limited assurance procedures performed and the examination according to RevR 12 do not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. The conclusion based on a limited assurance engagement and an examination according to RevR 12 does not provide the same level of assurance as a conclusion based on an audit.

Our procedures are based on the criteria defined by the Board of Directors and Executive Management as described above. We consider these criteria suitable for the preparation of the Sustainability Report.

We believe that the evidence obtained is sufficient and appropriate to provide a basis for our conclusions below.

Conclusions

Based on the limited review performed, nothing has come to our attention that causes us to believe that the Sustainability Report is not prepared, in all material respects, in accordance with the criteria defined by the Board of Directors and Executive Management.

A Statutory Sustainability Report has been prepared.

Lund 27 March 2023

Ernst & Young AB

Staffan Landén
Authorized Public Accountant

Outi Alestalo
Specialist member in FAR

Alfa Laval's share in 2022

As the stock market in general, Alfa Laval's share value declined in 2022, although the recovery since the share's lowest closing price in June was strong. The share price was quoted at SEK 301.10 (364.40) at closing on the last trading day of the year – which is a decline of SEK 63.30. This corresponds to a decrease of 17.37 percent, compared to a decline of 19.90 percent for OMX Stockholm Industrials, which is the industry index that Alfa Laval is part of. For the Stockholm Stock Exchange as a whole, the decrease amounted to 24.61 percent. The year's highest closing price for Alfa Laval's share, SEK 382.70, was recorded on 4 January. The year's lowest closing price, SEK 234.80, was noted on June 25. Alfa Laval's market value at the end of the year was SEK 124.62 billion (152.85). The Alfa Laval share is listed on Nasdaq Stockholm and is part of the stock exchange's Large Cap segment in Stockholm and the Nordics, as well as OMXS30, which includes the 30 most traded shares in Stockholm.

Good long-term returns

Since Alfa Laval was relisted on the Stockholm Stock Exchange on 17 May 2002, the share, including reinvested dividend, has returned 2,029 percent. Over the listing period, this equates to an average annual effective return of 16.94 percent. This can be compared to a 10.99 percent annual return for the Stockholm Stock Exchange during the same period (SIX Return Index).

Share turnover

Alfa Laval's shares are not only traded on Nasdaq Stockholm, but also on the Chicago Board Options Exchange (CBOE) Global Markets, the London Stock Exchange and Aquis, to name a few of the larger alternative marketplaces. In 2022, the Stockholm Stock Exchange accounted for 23.9 percent (31.0) of all trading in the share. Trading on CBOE Global Markets was the largest with 56.35 percent (53.3). The turnover in Alfa Laval's share is good and increased during 2022 to 874 million shares (643) and the trade corresponded to a total value of SEK 252.42 billion (196.40), including all marketplaces. This trade meant that the stock's turnover rate increased during 2022 to 874 million shares (643) and the trade corresponded to a total value of SEK 252.42 billion (196.40), including all marketplaces. This trade meant that the stock's turnover rate increased 2022, to 2.1 times the number of shares outstanding (1.5). In 2022, the average number of closings in Alfa Laval's share ökade to 3,49 million shares per trading day (2.55), including all marketplaces.

Dividend policy

It is the Board's goal to regularly propose a dividend that reflects the Group's development, financial status, and current and expected capital needs. In consideration of the Group's ability to generate cash, the goal is that the dividend over a business cycle should correspond to 40–50 percent of the net profit. For 2022, the Board proposes a dividend of SEK 6.00 (6.00) to the AGM. The proposed dividend corresponds to 46.9 percent of earnings per share (46.2), adjusted for excess value.

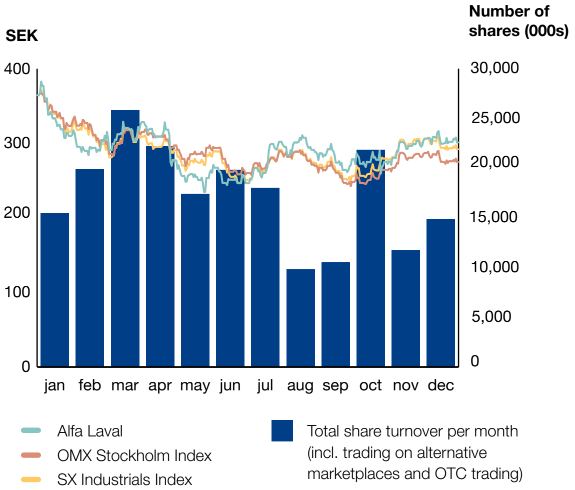
The share capital

At the end of the year, the quota value amounted to SEK 2.70 (2.66) per share. All shares have equal voting value and give equal rights to a share in the company's assets. There are no issued options or anything else that could mean dilution for the shareholders. The total number of shares at the end of the year was 413,876,823, which is a decrease of 5,579,492 since the beginning of the year.

Shareholders

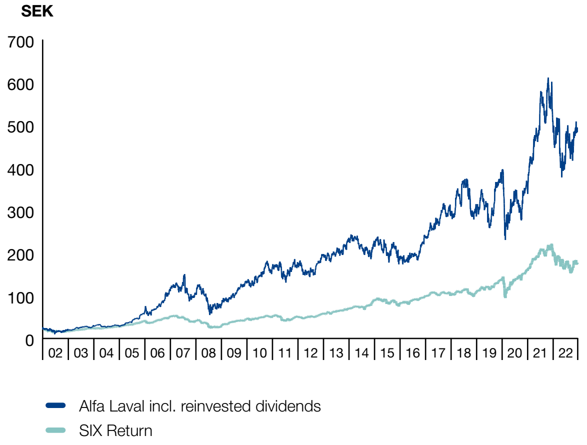
At the end of 2022, Alfa Laval had 54,245 shareholders (44,136), which equates to an increase of 10,109 shareholders (719). The ten largest owners controlled 63.0 percent of the shares (48.9), excluding trustee-registered shares. The largest shareholder is Tetra Laval B.V., whose holding increased to 29.5 percent (29.1) as of 31 December 2022. During the year, three new companies took their place among the ten largest owners – these are State Street Bank and Trust Company, Northern Trust Company and BNY Mellon.

Price trend, January 1 – December 31, 2022



Source: Bloomberg

Total return, May 17, 2002 – December 31, 2022



Source: Bloomberg

Ownership distribution by size at December 31, 2022

	No. of shareholders	No. of shareholders, %	No. of shares	Holding, %
1–500	44,554	82.1%	4,883,266	1.2%
501–1,000	4,455	8.2%	3,580,706	0.9%
1,001–5,000	4,086	7.5%	9,106,099	2.2%
5,001–1,0000	534	1.0%	3,932,535	1.0%
10,001–20,000	165	0.3%	2,053,101	0.5%
20,001–50,000	91	0.2%	1,668,519	0.4%
50,001–	359	0.7%	388,652,597	93.9%
Total	**54,245**	**100,00%**	**413,876,823**	**100,00%**

Source: Euroclear

Ownership categories at December 31, 2022

	No. of shares	Holding, %
Financial companies	99,684,094	24.1%
Other financial companies	782,367	0.2%
Social insurance funds	7,957,064	1.9%
Government	264,795	0.1%
Municipal sector	46,200	0.0%
Trade organizations	4,651,110	1.1%
Other Swedish legal entities	6,131,907	1.5%
Shareholders domiciled abroad (legal entities and individuals)	271,385,020	65.6%
Swedish individuals	22,077,113	5.3%
Uncategorized legal entities	897,153	0.2%

Source: Euroclear

Data per share

	2022	2021	2020	2019	2018
Share price at year-end, SEK	301.10	364.40	226.30	235.90	189.65
Highest paid, SEK	382.70	388.80	257.20	242.40	248.10
Lowest paid, SEK	234.80	219.60	149.60	165.05	188.50
Shareholders' equity, SEK	86.27	77.11	70.24	66.15	56.26
Earnings per share	10.89	11.38	8.47	13.08	10.77
Dividend, SEK [1]	6.00	6.00	5.50	–	5.00
Free cash flow, SEK [2]	-5.38	0.57	16.10	10.00	8.56
Price change during the year, %	-17.4	61.0	-4.1	24.4	-2.1
Dividend as % of EPS, %	55.1	52.7	64.9	–	46.4
Direct return, % [3]	2.0	1.7	2.4	–	2.6
Share price/shareholders' equity, multiple	3.5	4.7	3.2	3.6	3.4
P/E ratio [4]	27.7	32.0	26.7	18.0	18.0
No. of shareholders	54,245	44,136	43,334	41,147	34,180

Source: OMX Nasdaq, Euroclear, Alfa Laval

[1] Board motion to the Annual General Meeting.
[2] Free cash flow is the sum of cash flow from operating and investing activities.
[3] Measured as the proposed dividend in relation to closing price on the last trading day. The direct return for 2022 is calculated based on the board's proposal to the general meeting.
[4] Closing price on the last trading day in relation to earnings per share.

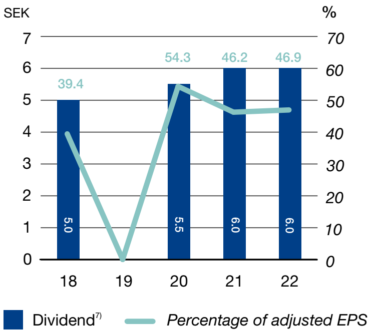
Ten largest shareholders at December 31, 2022[5]

	No. of shares	Capital/voting rights,%	Change in holding in 2022, percentage points
Tetra Laval International SA	122,037,736	29.5	0.4
State Street Bank and Trust Company	30,222,047	7.3	7.3
Alecta	27,721,464	6.7	0.9
Northern Trust Company	16,090,229	3.9	3.9
BNY Mellon	15,549,571	3.8	3.8
JP Morgan	14,906,393	3.6	-0.7
Swedbank Robur fonder	10,996,505	2.7	-0.2
AMF Försäkring och Fonder	9,503,475	2.3	-1.4
SEB Investment Management	7,217,482	1.7	-0.1
CBNY Norges Bank	6,449,086	1.6	-0.7
Total ten largest shareholders	**260,693,988**	**63.0**	**13.3**

Source: Euroclear

[5] The table is adjusted for nominee-registered shares.

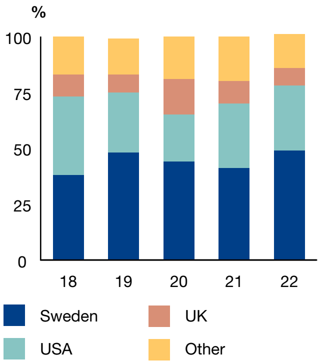
Dividend and percentage of adjusted EPS[6]



[6] Adjusted for step up amortization net of taxes.
[7] Board motion to the Annual General Meeting.

Source: Alfa Laval

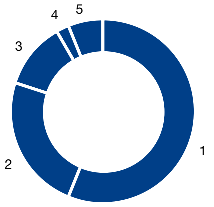
Geographic distribution of the free float, % of capital and voting rights[8]



[8] Excluding Tetra Laval (Switzerland) 29,5%.

Source: Euroclear

Share turnover on various marketplaces 2022



1 CBOE Global Markets	56%
2 Nasdaq OMX	24%
3 London Stock Exchange	12%
4 Aquis	2%
5 Other	6%

Source: Bloomberg

Contents
– Corporate Governance Report

Corporate Governance Report 2022

Responsible, sustainable and effective

Corporate governance identifies what the decision-making process at Alfa Laval looks like and the structures that regulate how the company is governed. Sound corporate governance is an essential basis for ensuring that, from a shareholder perspective, Alfa Laval is governed responsibly, sustainably and effectively. As a Swedish public limited liability company with shares listed on Nasdaq Stockholm, the framework for Alfa Laval's corporate governance is dictated by external rules as set out, inter alia, in the Swedish Companies Act, the Swedish Annual Accounts Act, the Nordic Main Market Rulebook for Issuers of shares ('Main Market Rulebook') and the Swedish Corporate Governance Code ('the Code'). These provisions are supplemented by internal principles and regulations, including governing documents with guidelines and instructions as well as procedures for control and risk management. At Alfa Laval, these internal governing documents include the Articles of Association, the Board and CEO instructions as well as Alfa Laval's business principles and governing policies. This Corporate Governance Report describes Alfa Laval's corporate governance for 2022. The report has been prepared in accordance with the Swedish Annual Accounts Act and the Code, and has been reviewed by the company's Auditors.

Acting in society and reaching business goals

In today's society, human impact on our planet is in constant focus. As new legislation becomes increasingly stringent, a sustainability paradigm is taking deeper root in society. This paradigm is leading many companies, including Alfa Laval, to voluntarily take initiatives aimed at improvements. At Alfa Laval, such initiatives are, inter alia, reflected in the Group's Business Principles. Alfa Laval's four Business Principles, *Planet, Transparency, Caring and Committed*, guide all of the Group's work and describe how Alfa Laval is to act in society and how the individual business goals are to be achieved – in other words, ethically and sustainably. Adhering to the Business Principles means that there are many occasions and situations where Alfa Laval can contribute to a more sustainable future and to the success of Alfa Laval's customers, people and the planet. All employees at Alfa Laval are to comply with the Business Principles and are encouraged to bring to light anything that conflicts with these principles, either to their immediate supervisor, the HR department or through the whistleblower tool 'Speak up!' Alfa Laval's Business Principles were recently revised and now contain a more distinct Code of Conduct.

As a part of its internal work, Alfa Laval regularly reviews its governing documents to ensure they are relevant and consistent with applicable laws and developments in terms of, for example, the Group's Business Principles. During the last years, Alfa Laval's *Business Resilience Management Policy, Intellectual Property Right Policy, Data Privacy Policy, Inclusion & Diversity Policy, Insider Policy, Bid Process for Contract Based Sales Policy, Information Security Policy and Export Control and Trade Sanctions Policy* have been reviewed and revised.

Alfa Laval as a company

Alfa Laval AB

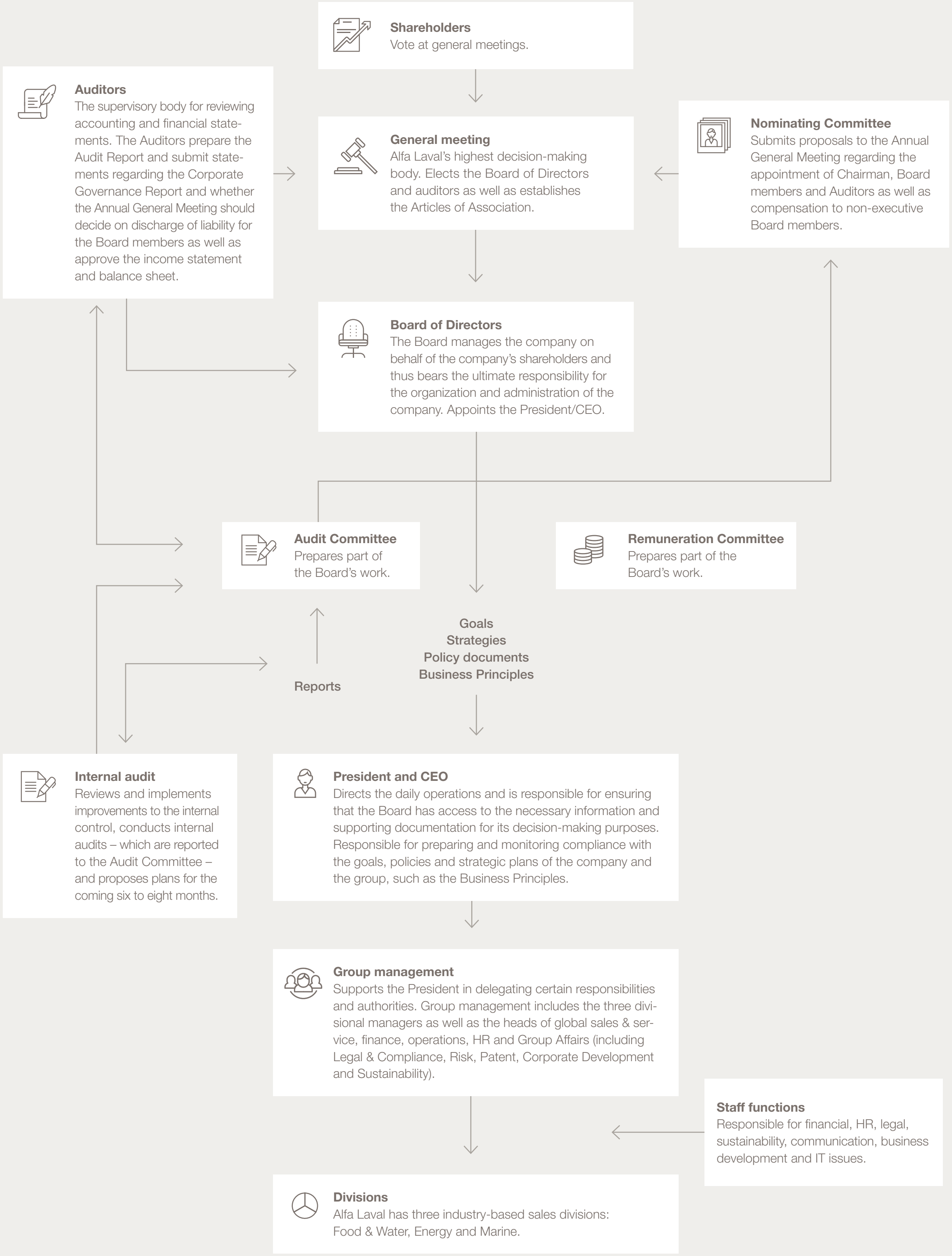
The company's business name is Alfa Laval AB (publ). The company is listed on Nasdaq Stockholm and the registered office of the Board of Directors is in Lund, Sweden. The object of the company's operations is to, directly or through subsidiaries and joint venture companies in and outside Sweden, develop, manufacture and sell equipment and installations, primarily in the areas of separation, heat transfer and fluid handling, and to administer fixed and movable property, and other related operations. Alfa Laval's fiscal year runs from January 1 to December 31.

The company's share capital shall amount to no less than SEK 745,000,000 and no more than SEK 2,980,000,000. The number of shares shall be no less than 298,000,000 and no more than 1,192,000,000. The Articles of Association do not include any limitations regarding the number of votes a shareholder can cast at a general meeting. Nor do they contain any specific rules regarding the appointment and dismissal of Board members or changes to the Articles of Association. The Articles of Association include a right for the Board of Directors to collect proxies in accordance with Chapter 7, Section 4 of the Swedish Companies Act and to decide that shareholders may vote in advance of a general meeting.

Alfa Laval's currently prevailing Articles of Association were adopted at the Annual General Meeting on April 27, 2021 and are available in their entirety on

www.alfalaval.com

Corporate governance



Shareholders
Vote at general meetings.

Auditors
The supervisory body for reviewing accounting and financial statements. The Auditors prepare the Audit Report and submit statements regarding the Corporate Governance Report and whether the Annual General Meeting should decide on discharge of liability for the Board members as well as approve the income statement and balance sheet.

General meeting
Alfa Laval's highest decision-making body. Elects the Board of Directors and auditors as well as establishes the Articles of Association.

Nominating Committee
Submits proposals to the Annual General Meeting regarding the appointment of Chairman, Board members and Auditors as well as compensation to non-executive Board members.

Board of Directors
The Board manages the company on behalf of the company's shareholders and thus bears the ultimate responsibility for the organization and administration of the company. Appoints the President/CEO.

Audit Committee
Prepares part of the Board's work.

Remuneration Committee
Prepares part of the Board's work.

Internal audit
Reviews and implements improvements to the internal control, conducts internal audits – which are reported to the Audit Committee – and proposes plans for the coming six to eight months.

President and CEO
Directs the daily operations and is responsible for ensuring that the Board has access to the necessary information and supporting documentation for its decision-making purposes. Responsible for preparing and monitoring compliance with the goals, policies and strategic plans of the company and the group, such as the Business Principles.

Group management
Supports the President in delegating certain responsibilities and authorities. Group management includes the three divisional managers as well as the heads of global sales & service, finance, operations, HR and Group Affairs (including Legal & Compliance, Risk, Patent, Corporate Development and Sustainability).

Staff functions
Responsible for financial, HR, legal, sustainability, communication, business development and IT issues.

Divisions
Alfa Laval has three industry-based sales divisions: Food & Water, Energy and Marine.

Share and ownership structure

At December 31, 2022, Alfa Laval had 413,876,823 shares allocated among 54,346 shareholders according to Euroclear Sweden's share register. Alfa Laval has only one class of shares and each share corresponds to one vote. Tetra Laval International SA was the largest owner, with 29.49 percent of the shares in Alfa Laval at year-end, and the only owner with a holding larger than 10 percent. The second largest owner was Alecta with 6.7 percent, followed by Swedbank Robur Funds with a holding of 2.7 percent. Legal entities accounted for around 95 percent of the holdings, while individuals accounted for the remainder. From a geographic perspective, the following five countries represented a total of 95 percent of the shareholdings: Sweden, Switzerland, the US, the UK and Luxembourg. For more information about Alfa Laval's share, share performance and ownership structure, please refer to the Share section on pages 88–89 of Alfa Laval AB's Annual Report.

General meetings

Shareholders exercise their voting rights at general meetings. The general meeting is Alfa Laval's highest decision-making body. At the general meeting, the Board of Directors and Auditors are elected, and the Chairman of the Board is appointed. Decisions are also made regarding compensation to the Board of Directors, discharge of the Board members and the president from liability as well as adoption of the income statement, balance sheet, Executive Remuneration Policy and distribution of the company's profit.

In case the Articles of Association or the applicable instructions for the Nominating Committee are to be changed, such resolutions are also decided by the general meeting.

Each shareholder who is listed in the register of shareholders and has notified the company of their participation is entitled to participate in a general meeting and vote according to their shares. Shareholders are entitled to be represented by a proxy at the meeting. Most proposals addressed at a general meeting are decided by a simple majority. However, certain resolutions require a qualified majority, such as changes to the Articles of Association or repurchase of shares. Every shareholder, regardless of the size of their holding, is entitled to have an item brought up at a general meeting.

Ownership categories at December 31, 2022

	No. of shares	Holding, %
Financial companies	99,684,094	24.1%
Other financial companies	782,367	0.2%
Social insurance funds	7,957,064	1.9%
Government	264,795	0.1%
Municipal sector	46,200	0.0%
Trade organizations	4,651,110	1.1%
Other Swedish legal entities	6,131,907	1.5%
Shareholders domiciled abroad (legal entities and individuals)	271,385,020	65.6%
Swedish individuals	22,077,113	5.3%
Uncategorized legal entities	897,153	0.2%

Source: Euroclear

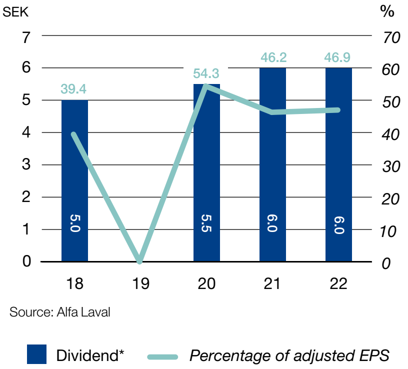
Ten largest shareholders at December 31, 2022*

	No. of shares	Capital/voting rights,%	Change in holding in 2022, percentage points
Tetra Laval International SA	122,037,736	29.5	0.4
State Street Bank and Trust Company	30,222,047	7.3	7.3
Alecta	27,721,464	6.7	0.9
Northern Trust Company	16,090,229	3.9	3.9
BNY Mellon	15,549,571	3.8	3.8
JP Morgan	14,906,393	3.6	-0.7
Swedbank Robur fonder	10,996,505	2.7	-0.2
AMF Försäkring och Fonder	9,503,475	2.3	-1.4
SEB Investment Management	7,217,482	1.7	-0.1
CBNY Norges Bank	6,449,086	1.6	-0.7
Total ten largest shareholders	**260,693,988**	**63.0**	**13.3**

Source: Euroclear

* The table is adjusted for nominee-registered shares.

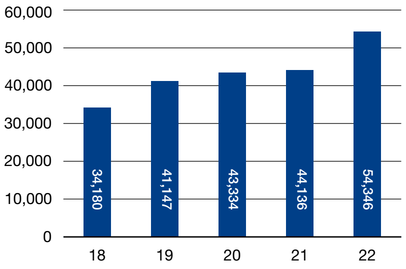
Dividend and percentage of adjusted EPS**



Source: Alfa Laval

* Board motion to the Annual General Meeting.
** Adjusted for step up amortization net of taxes.

Total number of shareholders



Source: Euroclear

2023 Annual General Meeting

The Annual General Meeting of Alfa Laval AB (publ) will be held on Tuesday, April 25, 2023, at 4:00 p.m. at Scandic Star Lund in Lund. The notice of the 2023 Annual General Meeting will be published not earlier than March 14 and not later than March 28, 2023. Notice of the Annual General Meeting will be inserted as an announcement in the Swedish Official Gazette and on the company's website. An announcement that the notification has been issued will thereafter be published in Dagens Nyheter. Supporting documentation will be published on Alfa Laval's website well in advance of the general meeting. Copies of the documents will also be sent to those shareholders who request them and state their address.

Alfa Laval's ordinary general meeting (the Annual General Meeting) is held annually within six months of the end of the fiscal year. Normally, the Annual General Meeting takes place in late April in Lund. The date and location of the Annual General Meeting are announced not later than in conjunction with the publication of the interim report for the third quarter. Notice of the Annual General Meeting is published as an announcement in the Swedish Official Gazette and on the company's website not more than six and not less than four weeks prior to the Annual General Meeting.

2022 Annual General Meeting

The 2022 Annual General Meeting of Alfa Laval AB was held on April 26, 2022 at Scandic Star Lund, Glimmervägen 5, Lund, Sweden.

The notice of the Meeting was issued on March 22, 2022. Shareholders who wished to participate in the Annual General Meeting could either participate by advance voting or at the venue in person or by a proxy.

The general meeting was held in accordance with the, at the given time, issued guidelines on the Covid-19 Pandemic, published by the Swedish Public Health Organization. Also, shareholders showing any symptoms were kindly requested to refrain from attending the general meeting in person.

A total of 278,530,584 votes and shares were registered at the Meeting. Dennis Jönsson, Chairman of the Board, was appointed as Chairman of the general meeting.

The Meeting adopted the agenda proposed in the convening notice and decided on the below resolutions in accordance with the proposals from the Nominating Committee and the Board of Directors. The CEO of the company held a presentation during the general meeting which was published on Alfa Laval's website after the Meeting.

The minutes from the 2022 Annual General Meeting, the notice and all other information related to the Meeting are available at www.alfalaval.com/investors/corporate-governance/.

Resolutions passed by the 2022 Annual General Meeting

- The Meeting determined the income statement and balance sheet as well as the consolidated income statement and consolidated balance sheet, as presented in the 2021 Annual Report.
- The Meeting resolved on a dividend of SEK 6 per share, with April 28, 2022, as record date.
- The general meeting resolved to discharge all individuals who held positions in Alfa Laval AB as Board members, deputy members or president during 2021 from liability in respect of their management of the company's business for the 2021 fiscal year.
- The Meeting approved the remuneration report prepared by the Board of Directors.
- The Meeting resolved that the number of Board members elected by the Meeting was to be eight, with no deputy members. This resolution led to a decrease in the number of Board members by one compared with the previous year. The Meeting also resolved that the number of Auditors was to be two with two deputy Auditors.
- The Meeting resolved on compensation to non-executive Board members in an amount of SEK 6,345,000 with an additional compensation to the Chairman and other members of the Audit Committee and the Remuneration Committee.
- The Meeting resolved, for the time up to the end of the 2023 Annual General Meeting, to re-elect Lilian Fossum Biner, Maria Moræus Hanssen, Dennis Jönsson, Henrik Lange, Ray Mauritsson, Finn Rausing, Jörn Rausing and Ulf Wiinberg as Board members, as well as to re-appoint Dennis Jönsson as Chairman of the Board.
- The Meeting resolved for the time up to the end of the Annual General Meeting 2023, to re-elect the Authorized Public Accountants Staffan Landén and Karoline Tedevall as the company's Auditors, as well as to re-elect the Authorized Public Accountants Henrik Jonzén and Andreas Mast as deputy Auditors.
- The Annual General Meeting resolved to reduce the share capital by cancellation of 5,579,492 shares, repurchased under Alfa Laval's share buy-back programme, and that the reduction amount was to be transferred to the company's non-restricted equity. This led to a reduction of the share capital by SEK 14,854,300. Simultaneously the general meeting resolved to restore the share capital with SEK 14,854,300 by way of a bonus issue without issuing new shares and that the amount was to be transferred from the company's non-restricted equity. The resolutions were supported by shareholders holding at least two-thirds of both votes cast and the shares represented at the Meeting.
- The Meeting resolved to authorize the Board of Directors to decide on purchase of shares in the company, during a period up until the Annual General Meeting 2023 and on as many occasions as the Board deems appropriate. However, only to the extent that Alfa Laval's holding at no time exceeds five percent of the shares in the company that are not repurchased. The resolution was supported by shareholders representing at least two-thirds of both the votes cast and the shares represented at the Meeting.

The 2023 Annual General Meeting pertains to the 2022 fiscal year. **The 2022 Annual General Meeting** pertains to the 2021 fiscal year.

Nominating Committee

Work of the Nominating Committee

The Nominating Committee prepares and submits proposals to the Annual General Meeting regarding candidates for Board members and Chairman of the Board as well as the company's Auditors. The Nominating Committee's task also includes preparing proposals to the Annual General Meeting regarding compensation to non-executive Board members, additional compensation to members of the committees and to propose a Chairman of the Annual General Meeting. Rules for the Nominating Committee´s work and composition are provided in the Code and in specific instructions adopted by the 2018 Annual General Meeting. The instructions apply until further notice and stipulates, inter alia, that the Nominating Committee is to consist of a minimum of five members appointed by the largest shareholders as of August 31, and that the Chairman of the Board should be part of the Nominating Committee.

Every year, the composition of the Nominating Committee is announced in a press release, in the third-quarter interim report and on Alfa Laval's website. In conjunction with this, information is also provided about how shareholders can propose candidates for the Board.

Assessing strengths and future needs

The Nominating Committee's proposal for candidates to the Board of Directors is, among other things, based on the annual evaluation of the Board's work. The evaluation is prepared by the Chairman of the Board and is intended to provide the Nominating Committee with a deeper understanding of the Board's work methods, its work climate and its need for particular Board competence considering the company's strategy. Moreover, as a member of the Nominating Committee, the Chairman of the Board can easily keep the Nominating Committee informed about the company's strategy and future challenges. In connection with the preparatory work to present a proposal for the Board, the Nominating Committee can also conduct interviews with individual Board members about the Board work and can, when deemed appropriate, call upon the assistance of external resources in its search for suitable candidates.

Work of the Nominating Committee ahead of the 2022 Annual General Meeting

In respect of the Annual General Meeting 2022, the Nomination Committee consisted of Dennis Jönsson and five members appointed by the largest shareholders in Alfa Laval as of August 31, 2021. Please see the below table Nominating Committee ahead of the 2022 Annual General Meeting for more information.

The work of the Nominating Committee began with a statutory meeting where Finn Rausing was elected Chairman and Emma Adlerton, General Counsel and Secretary to the Board of Alfa Laval AB, was appointed Secretary to the Nomination Committee. Due to Finn Rausing's position as a Board member of Alfa Laval AB, his role as Chairman is a deviation from the Code. The Nominating Committee considered this in its decision and deemed Finn Rausing to be particularly well suited to lead the work of the Committee and obtain the best possible results for the company's owners.

Ahead of the general meeting 2022, the Nominating Committee held three formal meetings, which were partly digital, and had also contact by telephone and e-mail. The following items were addressed at the meetings:

– Composition of the Board of Directors and the need for new members.

– The Code's requirement concerning that an even gender balance within the Board should be aimed for. Due to this, the Nominating Committee decided that the strive to reach an even gender balance in the Board of Directors will continue to be prioritized during the coming years.

– The Chairman of the Board presented the results of the latest digital Board evaluation.

– Interviews were carried out with all members of the Board, except for such members who also were members of the Nomination Committee.

– Report from the president and CEO Tom Erixon on Alfa Laval's operations and his view on the company's strategy and challenges.

– Compensation to the Board members, including additional compensation to members of the Audit Committee and the Remuneration Committee.

After an overall assessment, the Nominating Committee decided to propose to the Annual General Meeting, re-election of all the Board members that were available for re-election. The Nomination Committee´s proposal meant that the Board of Directors would comprise of eight members elected by the general meeting up until the end of the Annual General Meeting 2023. In considering the proposal, the Nominating Committee applied Rule 4.1 of the Code as diversity policy. In the recent years, the Nomination Committee has strived for an even gender balance within the Board of Directors in accordance with the ambitions communicated by the Swedish Corporate Governance Board. Following the Nominating Committee's proposal, the Board of Directors consists of two women and six men up until the Annual General Meeting 2023. This corresponds to a women proportion of 25 percent. The Nomination Committee noted in its reasoned statement that this is lower than previous year and evidently lower than desired, and that the strive to reach an even gender balance in the Board of Directors continuously will be prioritized during the coming years. Further information is available in the Nominating Committee's reasoned statement prepared ahead of the 2022 Annual General Meeting.

Re-election of auditors

Ahead of the 2022 Annual General Meeting, the Nominating Committee also held a meeting where Henrik Lange, Chairman of the Audit Committee, was invited. Henrik Lange presented the work of the Audit Committee during the year and the work with the Auditors elected by the Annual General Meeting. Based on the Audit Committee's recommendation, the Nominating Committee decided to propose to the Annual General Meeting 2022, re-election of Staffan Landén and Karoline Tedevall as the company's Auditors for the coming year.

Nominating Committee ahead of the 2022 Annual General Meeting

Name	Representing	Shareholding in Alfa Laval, %*
Finn Rausing	Tetra Laval International S.A.	29.1
Anna Magnusson	Alecta Pensionsförsäkring	5.9
Lennart Francke	Swedbank Robur Funds	2.6
Anders Oscarsson	AMF Insurance and Funds	2.4
Tommi Saukkoriipi	SEB Funds	1.7

*As of August 31, 2021.

Composition and work of the Nominating Committee ahead of the 2023 Annual General Meeting

Ahead of the 2023 Annual General Meeting, the Nominating Committee included Jörn Rausing (Tetra Laval), Anna Magnusson (Alecta Tjänstepension Ömsesidigt), Lennart Francke (Swedbank Robur Funds), Anders Oscarsson (AMF Insurance and Funds), Javiera Ragnartz (SEB Funds) and Dennis Jönsson (Chairman of the Board of Alfa Laval AB). Jörn Rausing was elected Chairman and Emma Adlerton, General Counsel and Secretary to the Board of Alfa Laval AB, was appointed secretary. Due to Jörn Rausing's position as Board member of Alfa Laval AB, his role as Chairman of the Nominating Committee is a deviation from the Code. The Nominating Committee considered this in its decision, and deemed Jörn Rausing to be particularly well suited to lead the work of the Committee and obtain the best possible results for the company's owners.

The composition of the Nominating Committee was published in a press release on September 14, 2022. The information was also included in Alfa Laval's third-quarter interim report, which was published on October 25, 2022. The total holding of the shareholders appointing the Nominating Committee represented 43,2 percent of the number of shares in the company on August 31, 2022. Information about how to submit proposals for Board candidates to the Nominating Committee was published along with the composition of the Nominating Committee.

Board of Directors

The Board of Alfa Laval manages the company on behalf of the shareholders and bears the ultimate responsibility for the organization and administration of the company. The work and responsibilities of the Board are governed by the Swedish Companies Act, the Swedish Board Representation (Private Sector Employees) Act, Alfa Laval's Articles of Association, the Main Market Rulebook and the Code. The Board is also responsible for establishing Board and CEO instructions in writing. These instructions describe the Board's work assignments, the committees to be established within the Board and the allocation of work between the Board, the committees, and the President. Further, the Board instructions define the role of the Chairman of the Board. To enable the ongoing assessment of the company's financial position, the Board instructions include separate instructions regarding the financial reporting to be submitted to the Board.

In accordance with Alfa Laval AB's Articles of Association, the Board of Directors is to comprise a minimum of four and maximum of ten members, with a maximum of four deputy members. The members are elected annually by the general meeting for a period until the next Annual General Meeting. In order to safeguard the best interests of the company and its owners, the Board members shall devote the required time and care to the assignment and have the necessary competence. Additionally, the trade-union organizations appoint three employee representatives to the Board as well as deputy employee representatives.

The Board's work includes establishing and evaluating Alfa Laval's overall long-term objectives and strategies. This is accomplished by establishing business and financial plans, reviewing and approving financial statements, adopting guidelines, making decisions on issues relating to acquisitions and divestments, deciding on major investments as well as significant changes to Alfa Laval's organization and operations. Moreover, the Board appoints, evaluates, and dismisses the company's President and establishes the instructions for the President with respect to the daily operations. The Board of Directors is also responsible for Alfa Laval's corporate governance and Business Principles.

Compensation of Board members and attendance at Board meetings during 2022

	Name	Present	Compensation*
Appointed by the AGM	Dennis Jönsson	● 9	1,900,000
	Lilian Fossum Biner (elected at the Annual General Meeting 2021)	9	635,000
	Henrik Lange	9	635,000
	Ray Mauritsson	9	635,000
	Maria Moræus Hanssen	8	635,000
	Finn Rausing	8	635,000
	Jörn Rausing	9	635,000
	Ulf Wiinberg	8	635,000
	Heléne Mellquist**	2	–
Employee representatives	Henrik Nielsen	9	–
	Bror García Lantz	9	–
	Johan Ranshög	9	–
	Stefan Sandell (deputy member)	9	–
	Total	**9**	**6,345,000**

● Chairman

*The compensation recognized pertains to the period between two AGMs.

** Declined re-election at the AGM 2022.

The Board conducts its work primarily within the framework of formal Board meetings. Approximately eight ordinary Board meetings are held every year and extraordinary meetings are held when needed. Recurring agenda items at these meetings include health and safety, earnings results, order trends, investments, sustainability and business development. The company's President prepares an agenda for each meeting in consultation with the Chairman of the Board. When relevant, the work of each committee is presented by its respective Chairman at the meetings. Employees in the company are also invited to Board meetings as presenters and experts. The company's Chief Financial Officer participates in all meetings, as does the General Counsel, who serves as Secretary to the Board. Within some areas, the Board of Directors conducts its work through the Audit Committee and the Remuneration Committee. More information about the work of each committee of the Board is presented below.

Responsibilities of the Chairman of the Board

The Chairman of the Board directs the work of the Board in a manner that ensures that it complies with prevailing laws and regulations as well as internal instructions. The Chairman must ensure that the Board work is well organized and conducted efficiently, and that the Board fulfills its tasks. In dialogue with the company's President, the Chairman monitors operational developments and is responsible for ensuring that the other Board members continuously receive all information necessary for the work of the Board to be performed in the most effective manner. The Chairman ensures that the Board's decisions are executed and represents the company in ownership issues.

Moreover, the Chairman is responsible for introductory education for new Board members and the annual evaluation of the Board's work. The Chairman participates in evaluation and development matters with respect to the Group's senior executives.

Compensation of the Board

Compensation to the Board is determined by the Annual General Meeting based on a proposal from the Nominating Committee. The Chairman as well as other members of the Audit Committee and the Remuneration Committee receive supplementary compensation. No Board or committee member is entitled to pension payments from the company.

Composition of the Board after the 2022 Annual General Meeting

The Board elected by the 2022 Annual General Meeting consists of eight members, with no deputy members. The Board's assignment lasts until the end of the 2023 Annual General Meeting. The Board also includes three employee representatives with three deputy employee representatives, appointed by the trade-union organizations.

Alfa Laval's Board of Directors demonstrates both diversity and breadth of competence, knowledge, and experience. The Chairman and the members have a broad operational experience within an industry that is relevant for Alfa Laval and within strategic development areas for the company. The members of the Board have gained experience in previous and current Board assignments in other companies as well as from senior positions previously held at other companies. In the last years, the collective skills of the Board have been expanded with experience from product development, network solutions, and retail and consumer goods companies. Furthermore, since the 2020 Annual General Meeting, the Board has a new Chairman, with thorough experience in successfully leading a large international company in a sector that is significant and relevant for Alfa Laval. More information about the Board members is available on page 100–101 and on Alfa Laval's website.

All members of the Alfa Laval Board elected by the Annual General Meeting 2022 are considered independent of the company and its management. All members are also considered independent of the company's major shareholders, except Finn Rausing and Jörn Rausing, who cannot be considered independent due to their relationship with the largest shareholder in Alfa Laval AB, Tetra Laval International S.A.

Work of the Board in 2022

The Board held nine Board meetings in 2022, including eight ordinary meetings and one extraordinary. Some Board meetings were held digitally. Recurring items addressed at the Board meetings throughout the year included health and safety, the impact on the company due to the Russian invasion of Ukraine, inflation, earnings results, order trends, investments, sustainability, business development and acquisitions.

Another important area was climate and sustainability issues, with a focus on the Group's sustainability goals, product development to meet customers' sustainability-related goals and on strategic partnerships and acquisitions to position Alfa Laval for a more sustainable future. As a part of this focus, Alfa Laval acquired Desmet. The acquisition will strengthen Alfa Laval´s position in the renewable energy area and complement its offering within edible oils. To further position Alfa Laval for a more sustainable future, Alfa Laval also acquired a patented technology to reform hydrogen from ammonia. The technology, in combination with Alfa Laval´s heat transfer expertise, will increase the business opportunities within the growing market for hydrogen processing, facilitating the use of renewable fuels in the future. The Board of Directors was also regularly updated and involved in Alfa Laval's internal sustainability efforts during 2022 (see pages 54–86). In addition, the Board also approved the Sustainability Report 2022.

Other acquisitions discussed and decided by the Board of Directors were the acquisitions of BunkerMetric and Scanjet, both within the marine sector. BunkerMetric was acquired in accordance with Alfa Laval´s strategy to expand its digital marine service offering. A Scandinavian software company develops advance decision support tools for marine bunker vessels and will be a part of StormGeo that Alfa Laval acquired in 2021. The acquisition of Scanjet, a leading supplier of marine tank cleaning equipment, will further extend Alfa Laval´s broad tanker offering and create a more comprehensive product portfolio for cargo tanks.

On April 27, 2021, the Board of Directors initiated a share buyback programme in order to secure optimized capital structure. The buyback programme was finalized in April 2022.

Moreover, the Board regularly monitored the Group's earnings and financial position, and risk management as well as discussed the Group's strategy and business plan. Investment and operational restructuring issues and follow-ups of previous investments were also addressed at the Board meetings in 2022.

Evaluation of the Board's work and Board education

Each year, an evaluation is made of the Board in order to lay the foundation for well-functioning and effective governance. The evaluation is carried out by the Chairman of the Board, some years in combination with external resources. Recurring areas of the evaluation include the Board's work methods, its work climate and its access to and need for particular Board competence. The evaluation is the foundation of the work of the Nominating Committee, both in terms of proposals for Board members and in terms of compensation. In 2022, the Chairman's annual evaluation was carried out through the customary interviews with Board members and through a digital platform. During the interviews, the Board members were asked to answer several questions related to various areas relevant to the Board's work.

New Board members are to go through a comprehensive introduction programme within six months of their election. The programme includes an introduction to the company and any other training agreed on by the Chairman and the individual member. In addition, an educational field trip takes place each year for the entire Board. Since no new Board members were elected in 2022 no introduction programme was initiated. However, the Board attended a field trip to Søborg, Denmark during the fall. The visit included a tour in the new Revos Innovation Centre, Decanter Innovation Centre, Food Systems workshop and the Service Centre Copenhagen, which is one of the largest advanced Service Centres for rotation equipment. The purpose of the visit was, among other things, to give the Board a deeper dive into some of the Food & Water applications and products.

Committees

The Board instructions stipulate that there must be a Remuneration Committee and an Audit Committee that report to the Board. Members of the committees are appointed annually from within the Board at the statutory meeting.

Audit Committee

The Audit Committee's work and responsibilities

Through the Audit Committee, the Board procures auditing services, maintains ongoing contact with the company's auditors and works to ensure that a sound internal control function and formalized procedures are in place to enable monitoring and assessment of the company's financial situation.

The Audit Committee ensures compliance with the principles for financial reporting and internal control. The Committee formulates guidelines for the company's financial reporting and follow-up, and has the right to determine the focus of the internal audit. The Committee examines the procedures for reporting and financial controls as well as the work, qualifications and independence of the external auditors. The Committee also follows up the effectiveness of the internal control systems and reviews the company's financial reports. For further information regarding the responsibilities of the Audit Committee, refer to 'The Board of Directors' report on internal control' on page 102–103.

The Audit Committee's composition and work in 2022

In 2022, the Audit Committee comprised Henrik Lange (Chairman), Dennis Jönsson and Lilian Fossum Biner with the Group Controller serving as secretary. The company's Chief Financial Officer, the Head of the Internal Audit Function and the company's auditors also participate in the Committee's meetings.

The Audit Committee held 6 digital meetings during 2022. Recurring items addressed at meetings included financial reports and a debriefing from the external auditors, planning external and internal audits, internal control processes, and Group provisions and allocations. In addition, the following were discussed:

- the questions from and the answer to the Board of Swedish Accounting Supervision,
- the finance policy and capital structure strategy, the update of the EMTN program, the company's "Enterprise Risk Management" plan and the company's Group Credit Policy,
- review of the outcome of the self-assessment in 2022 of managers regarding of internal control points,
- external review of the Sustainability Report,
- centralized transfer pricing documentation and OECD & Pillar 2,
- guidelines for the provision of services unrelated to auditing from the company's auditors and the independence of the auditors,
- ESEF reporting 2022,
- the reporting of environmentally sustainable activities in 2022 according to the EU taxonomy.

Remuneration Committee

The Remuneration Committee's work and responsibilities

Through the Remuneration Committee, the Board determines salaries and remuneration for the President and senior executives. The Remuneration Committee is involved in recruitment, appointments, and matters pertaining to other conditions of employment

Audit Committee: fees and attendance

Name	Present	Compensation
Henrik Lange	● 6	300,000
Lilian Fossum Biner (elected to the committee from April 2022)	5	150,000
Dennis Jönsson	6	150,000
Heléne Mellquist*	1	–
Total	**6**	**600,000**

● Chairman *Declined re-election at the AGM 2022.

Remuneration Committee: fees and attendance

Name	Present	Compensation
Dennis Jönsson	● 4	75,000
Jörn Rausing	4	75,000
Ulf Wiinberg	4	75,000
Total	4	**225,000**

● Chairman

relating to the President and Group management. The Committee is responsible for preparing the Executive Remuneration Policy to be resolved on by the Annual General Meeting and for submitting proposals to the Board regarding the remuneration report, which is to be prepared by the Board of Directors each fiscal year and be presented to the Annual General Meeting for approval. In addition, the Committee submits proposals to the Board on matters regarding salary and employment terms for the President and for senior executives reporting directly to the President.

The Remuneration Committee's composition and work in 2022

In 2022, the Remuneration Committee comprised Dennis Jönsson (Chairman), Jörn Rausing and Ulf Wiinberg. President Tom Erixon and Pascale Gimenez, Senior Vice President Human Resources, also participate in the Committee´s meetings. Minutes were taken separately or directly in the corresponding Board minutes.

The Remuneration Committee held four meetings in 2022. Recurring items addressed included the objectives of short-term (STI) and long-term (LTI) incentive plans as well as compensation to senior executives. In addition, the following items were also addressed:

- A proposal to the Board regarding the remuneration report for 2021 that was presented at the 2022 Annual General Meeting. The report describes how the Executive Remuneration Policy was applied in 2021.

The company's Auditors

The Auditors' work and responsibilities

The Auditors comprise a supervisory body appointed every year by the Annual General Meeting. In accordance with Alfa Laval AB's Articles of Association, the company must have at least one but not more than two Auditors and not more than two deputy Auditors. An authorized public accountant or a registered auditing firm must be appointed.

The assignment includes the following areas:

- auditing the accounting and financial statements of individual companies,
- evaluating the accounting policies applied,
- assessing the administration of company management,
- reviewing the interim report for the third quarter,
- evaluating the overall presentation in the Annual Report,
- review of sustainability report, and
- review of compliance with the principles for remuneration to senior executives.

The results of the auditors' work – the Audit Report – are communicated to shareholders in the Annual Report and at the Annual General Meeting. In addition, the Auditors present a statement regarding the proposed discharge from liability, which is included in the agenda of every Annual General Meeting, along with the adoption of the income statement and balance sheet. The Auditors also present a statement regarding the Corporate Governance Report.

Auditors elected at the 2022 Annual General Meeting

At the Annual General Meeting, 2022, the Authorized Public Accountants Staffan Landén and Karoline Tedevall were elected as the company's Auditors and Henrik Jonzén and Andreas Mast were elected as deputy auditors. The company has assessed that none of the elected Auditors or their deputies have any relationship to Alfa Laval or any company related to Alfa Laval, which could affect their independent status. In 2022, the entire Board of Directors received a report from the company's external auditors on one occasion, which took place without the President or anyone in Group management being present. The Audit Committee received separate reports on five occasions.

The company's auditors are remunerated according to approved invoices. Refer to Note 7 on page 161.

Board of Directors and auditors

Appointed by the Annual General Meeting

Dennis Jönsson
Chairman since 2020.

Born: 1956.

Formerly President and CEO of Tetra Pak.

Education: BSc. Econ from Stockholm University.

Independent of the company and major shareholders.

Number of shares in Alfa Laval: 210,000* (210,000**)

Ulf Wiinberg
Board member since 2013.

Born: 1958

President of X-Vax Inc. Formerly CEO of H. Lundbeck A/S, Director of Wyeth Pharmaceuticals, EMEA/ Canada & BioPharma, and a number of other senior positions in Wyeth.

Education: Courses at Colombia University (IBM) and University of Pennsylvania - Wharton

Chairman of the Board: Hansa Biopharma AB and Sigrid Therapeutics.

Board member: UCB Pharma and Agenus Inc.

Independent of the company and major shareholders.

Number of shares in Alfa Laval: 20,000* (20,000**)

Henrik Lange
Board member since 2018.

Born: 1961

Previously President and CEO of Gunnebo AB; held several senior positions within the SKF Group, including Industry Division Manager and CFO, and served as CEO of Johnson Pump AB.

Education: BSc. Econ. from the Gothenburg School of Business, Economics and Law

Board member: Velux A/S, IPCO AB, BDR Thermea Group B.V, Nilörn AB, Traction AB and The German-Swedish Chamber of Commerce.

Independent of the company and major shareholders.

Number of shares in Alfa Laval: 6,000* (4,000**)

Finn Rausing
Board member since 2000.

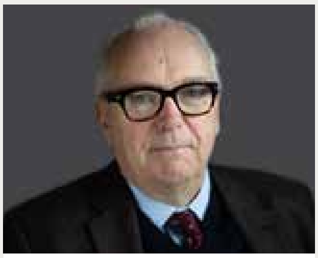
Born: 1955

Education: B.L., MBA from INSEAD.

Board member: Tetra Laval Group, DeLaval Holding AB and Excillum AB.

Independent of the company.

Number of shares in Alfa Laval: –



Jörn Rausing
Board member since 2000.

Born: 1960

Head of Mergers and Acquisitions (M&A) in the Tetra Laval Group.

Education: BSc. Econ.

Board member: Tetra Laval Group, Ocado PLC and DeLaval Holding AB.

Independent of the company.

Number of shares in Alfa Laval: –

Maria Moraeus Hanssen
Board member since 2019.

Born: 1965

Previously COO, Vice President/ CEO of Wintershall Dea Holding GmbH and President and CEO of DEA Deutsche Erdoel AG.

Held several executive positions in ENGIE SA, Aker ASA, Statoil ASA (now Equinor ASA) and Norsk Hydro ASA.

Education: Petroleum technology at the Norwegian University of Science and Technology (NTNU), and petroleum economics at IFP School in Paris.

Board member: Schlumberger limited, Scatec ASA, Oslobygg KF (chair) and Wastefront AS (chair)

Independent of the company and major shareholders.

Number of shares in Alfa Laval: 830* (830**)

Ray Mauritsson
Board member since 2020.

Born: 1962

President and CEO, Axis AB.

Former positions include several different leading positions in Axis Communications AB and Tac (today part of Schneider Electric).

Education: MSc. Engineering Physics, Lund University Faculty of Engineering. Executive MBA, Lund University School of Economics.

Independent of the company and of major shareholders.

Number of shares in Alfa Laval: 6 000* (–**)

Lilian Fossum Biner
Board member since 2021.

Born: 1962

Previously CFO at Axel Johnson AB and Senior Vice President and Head of HR and Organizational Development for Electrolux Group.

Education: BSc. Econ. Stockholm School of Economics.

Board member: LeDap AB, Röko AB, Scania AB, Carlsberg Group A/S, Givaudan SA and a-connect AG.

Independent of the company and major shareholders.

Number of shares in Alfa Laval: 800* (800**)

*Holdings on December 31, 2022. **Holdings on December 31, 2021.

Employee representatives

Henrik Nielsen
Employee representative since 2015.

Born: 1968

Employed by Alfa Laval since 1994.

Employee representative for the Swedish Metal Workers' Union (IF Metall).

Number of shares in Alfa Laval:
50* (50**)

Johan Ranhög
Employee representative since 2021.

Born: 1964

Employed by Alfa Laval since 2016.

Employee representative for the Swedish Confederation of Professional Associations (SACO).

Number of shares in Alfa Laval:
101* (101**)

Bror García Lantz
Employee representative since 2012.

Born: 1965

Employed by Alfa Laval since 1990.

Employee representative for the Swedish Union of Clerical and Technical Employees in Industry (Unionen).

Number of shares in Alfa Laval:
100* (100**)

*Holdings at December 31, 2022. **Holdings at December 31, 2021.

Deputy employee representatives

Leif Norkvist
Deputy member since 2009.

Born: 1961

Employed by Alfa Laval since 1993.

Deputy employee representative for the Swedish Metal Workers' Union (IF Metall).

Stefan Sandell
Deputy member since 2005.

Born: 1971

Employed by Alfa Laval since 1989.

Deputy employee representative for the Swedish Organization for Managers (Ledarna).

Johnny Hultén
Deputy member since 2017.

Born: 1961

Employed by Alfa Laval since 1977.

Deputy employee representative for the Swedish Metal Workers' Union (IF Metall).

Auditors

Staffan Landén
Authorized Public Accountant, EY.

Born: 1963

Company auditor since 2018.

Karoline Tedevall
Authorized Public Accountant, EY.

Born: 1978

Company auditor since 2018.

Deputy Auditors

Henrik Jonzén
Authorized Public Accountant, EY.

Born: 1977

Deputy auditor since 2018.

Andreas Mast
Authorized Public Accountant, EY.

Born: 1979

Deputy auditor since 2020.

*Holdings on December 31, 2022. **Holdings on December 31, 2021.

President and Group management

Tom Erixon
President and CEO.

Born: 1960

CEO since March 1, 2016.

Former positions include President and CEO of OVAKO AB and President of Sandvik Coromant.

Chairman of the Board: Afry AB.

Education: MA Law from the University of Lund in Sweden and MBA Business Administration from IESE in Spain.

Number of shares in Alfa Laval:
129,200* (101,200**)

Fredrik Ekström
Chief Financial Officer.

Born: 1975

Employed by Alfa Laval since 1998.

Chief Financial Officer since 2022.

Former positions include several international positions in Alfa Laval, most recently as President Business Unit Brazed & Fusion Bonded Heat Exchangers.

Education: MBA, University of Illinois at Urbana Champaign, USA.

Number of shares in Alfa Laval:
2,000* (–**)

Pascale Gimenez
Senior Vice President, Human Resources.

Born: 1966

Employed by Alfa Laval since August 1, 2018.

Former positions include Senior Vice President of Human Resources at various units within Sandvik and Electrolux.

Education: Master's degree in marketing from ESSEC Business School and a degree in engineering from the Institut Supérieur Agricole de Beauvais.

Number of shares in Alfa Laval:
200 * (–)

Emma Adlerton
General Counsel & Secretary to the Board of Directors.

Born: 1973

Employed by Alfa Laval since 2008.

General Counsel and Secretary to the Board of Directors since 2015; President of Group Affairs (Sustainability, Corporate Development, Legal & Compliance, Risk & Patent). Former positions include senior legal counsel in the Alfa Laval Group and attorney at law.

Education: Master Laws (LL.M), Lund University.

Number of shares in Alfa Laval:
2,500* (1,000**)

Mikael Tydén
President, Operations Division.

Born: 1967

Employed by Alfa Laval since 1995.

President of the Operations Division since January 2017. Former positions include head of global manufacturing and supply of separators, decanters, hygienic fluid handling equipment and air heat exchangers 2005–2016.

Education: Ms. Mech. Eng.

Number of shares in Alfa Laval:
3,000* (1,000**)

*Holdings on December 31, 2022. **Holdings on December 31, 2021.

Areas of responsibility

The President directs the daily operations and is responsible for ensuring that the Board of Directors has access to the necessary information and supporting documentation for its decision-making purposes. The President is also responsible for ensuring that the company's accounting complies with applicable laws and regulations, and shall prepare and monitor compliance with the goals, policies and strategic plans of the company and the Group, such as the Business Principles. The President has the support of Group management, to which responsibilities and authority are delegated. The members of Group management include a head of global sales and service, four divisional managers and the heads of HR, Group Affairs (Sustainability, Corporate Development, Legal & Compliance, Risk & Patent) and Finance.

Remuneration to senior executives, pensions and severance pay/termination of employment

The Executive Remuneration Policy for the President and other members of Group management was determined at the Annual General Meeting 2021. For additional information, refer to pages 159–161 and 189–191.

Joakim Vilson
Senior Vice President,
Global Sales & Service.

Born: 1965

Employed by Alfa Laval since 1990.

Former positions include Executive Vice President in charge of the Central and Eastern Europe, Latin America, Middle East and Africa Regions, Head of Mid Europe Region and Head of the Process Industry segment.

Education: BSc. Eng.

Number of shares in Alfa Laval:
7,520* (6,520**)

Thomas Møller
President, Energy Division.

Born: 1974

Employed by Alfa Laval since 2002.

President of the Energy Division since 2021. Former positions include President Business Unit Decanters, Water & Waste Segment Manager and Market Unit Power Manager.

Education: BSc. Eng.

Number of shares in Alfa Laval:
4,800* (1,106**)

Nish Patel
President, Food & Water Division.

Born: 1962

Employed by Alfa Laval since 1984.

Former positions include Executive Vice President in charge of the Western Europe and North America Regions, and Head of India and the UK.

Education: BSc. Eng.

Number of shares in Alfa Laval:
47,552* (47,552**)

Sameer Kalra
President, Marine Division.

Born: 1962

Employed by Alfa Laval since 2011.

Previously Managing Director FRAMO AS, Executive Vice President- Sales and Marketing – Aalborg Industries AS

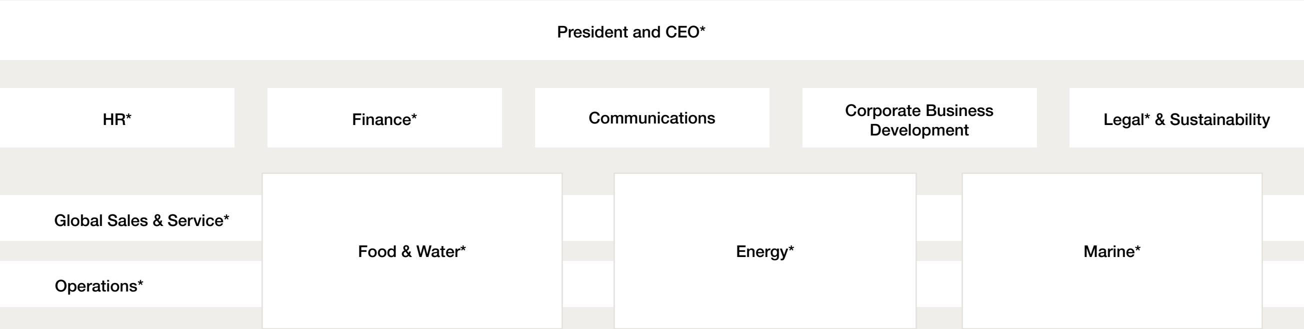
Education: Marine engineer and MBA.

Number of shares in Alfa Laval:
10,500* (2,000**)

*Holdings on December 31, 2022. **Holdings on December 31, 2021.

Operational control

Alfa Laval's operational control model comprises a matrix in which the Group's divisions are presented vertically, intersecting with the Group's geographic regions, which are presented horizontally. The Operations Division, which is responsible for production-related procurement, production, logistics and distribution, serves as a shared supply chain for the sales divisions.



*Members of Group management

Group management meetings in 2022

Group management held ten scheduled meetings in 2022 during which minutes were taken. In addition, quarterly reviews were performed to discuss the business developments in the divisions and regions. These reviews addressed the business climate, earnings, earnings projections for the next 12 months and specific issues affecting the respective business areas. Separate strategy meetings were also held to address, among other areas, management's proposals concerning the future direction with regard to organic growth and growth through acquisitions. In 2022, Group management addressed health and safety, business development in divisions and regions with deeper reviews in specific countries, research and development, sustainability, investment requirements, and acquisition opportunities.

Board of Directors' report on internal control

The Board is responsible for the internal control of the company, with the aim of safeguarding its assets and thus the interests of the shareholders. Through sound internal control, the Board ensures the reliability of Alfa Laval's reporting and its compliance with legislation, regulations, applicable accounting policies and the company's Business Principles. All communication and financial reporting are to be correct, relevant, objective and transparent.

Control environment

The control environment includes the internal governance instruments adopted by the Board for the company's daily operations. The control instruments comprise policy documents, which are continuously assessed, reviewed and updated. These documents include, for example, the Board's instructions, the President's instructions, reporting instructions, the company's finance policy, business principles, investment policy and communication policy.

The Board has overriding responsibility for financial reporting, among other things, and must therefore assess the performance and earnings of the operations through a package of reports including results, forecasts and analyses of key indicators. The Board also reviews the company's interim reports and year-end report and shall meet with the external auditors at least once a year without the presence of the President or other members of Group management.

The President is subject to instructions issued by the Board and is responsible for ensuring an effective control environment. The President is also responsible for the ongoing control work and for ensuring that the company's accounting complies with legislation and that the management of assets is adequately performed. The President is also responsible for ensuring that all Board members regularly receive sufficient information to be able to assess the company's financial position.

Group management is responsible for managing and maintaining the internal control systems required to manage significant risks in the company's operating activities. Management is also responsible for clearly ensuring that all employees understand the requirements for and the individual's role in maintaining sound internal control.

Alfa Laval follows the 3 lines of defence model to ensure a standardized and comprehensive approach to governance and risk management and establish adequate levels of ownership and accountability. The first line of defence is represented by the business operations which implement and maintain the control activities. The second line is represented by various group and oversight functions who also set directions, define policy and procedures, and have functional oversight. The third line is represented by the internal audit function that has the responsibility of providing independent and objective assurance over the internal control activities performed by the first and second line.

The Board's Audit Committee is tasked with ensuring compliance with the principles for financial reporting and internal control. The Committee follows up the effectiveness of the internal control system and reviews the financial procedures to ensure that the information can be traced back to underlying financial systems and that it is in line with legislation and relevant standards.

The Committee examines procedures for reporting and financial controls as well as addressing the company's financial reports. It also monitors, evaluates and discusses significant issues related to accounting and financial reporting. The Committee evaluates and manages information pertaining to disputes and potential improprieties, and assists management with identifying and evaluating mainly financial and similar risks that are relevant to the operations in order to ensure that the focus is on managing these risks. It also reviews the company's information security system and the contingency plans in place to ensure delivery of financial information.

The Audit Committee has the right to determine the focus of the internal audit and is responsible for ensuring the efficiency of the function by assessing its activities, resources and structure. The Committee is also responsible for reviewing the results and recommendations of the internal audit to ensure that they are handled in an appropriate manner. It is responsible for reviewing the internal audit plan every six months to ensure that it addresses the relevant risk areas and for ensuring that there is suitable coordination between the internal and external audit. The Audit Committee holds regular meetings with the external auditors and reviews their work, qualifications and independence, and the results of this review are reported to the company's Nominating Committee on an annual basis. The Audit Committee supports the Nominating Committee in its work to nominate auditors and conducts an annual review of the proposed scope of the audit. Reports are provided to the Board regarding internal meetings as well as meetings with the internal auditors, the external auditors and various specialists in Group management and its support functions. The Committee is responsible for reviewing significant results from the external audit and the recommendations issued by the external auditors as a result. It is also responsible for establishing guidelines that ensure the independence of the external auditors.

The internal auditors review and implement improvements to the internal control function, conduct internal audits – which are reported to the Audit Committee – and propose plans for the coming six to eight months. The internal auditors also issue reports from individual audits to the appropriate members of Group management. Procedures are in place for performing regular reviews of the agreed actions to guarantee that specific actions are taken following the internal audit. These are based on an agreed schedule set with the party responsible for the individual activities. The Internal Audit Function comprises of internal auditors, internal specialist resources and external auditors. Internal audits encompass a broad spectrum of functions and issues determined by the Board. The areas audited include: compliance with the systems, guidelines, policies and processes established for the Group's business operations; the existence of systems to ensure that financial transactions are carried out, archived and reported in an accurate and lawful manner; and opportunities to improve management control, the company's profitability and the organization, which may be identified during audits. In 2022, 22 internal audits were performed.

Risk assessment

Within the framework of the company's operating activities and review functions, procedures are in place for risk assessments pertaining to the financial reporting. These procedures aim to identify and evaluate the risks that may affect internal control. The procedures encompass risk assessments in conjunction with strategic planning and acquisition activities as well as processes for identifying amendments to the accounting policies to ensure that they are accurately reflected in the financial reporting.

Control structures

Control structures are in place in all areas of the organization in order to prevent, identify and adjust errors or deviations. They manage the risks that the Board and management consider to be significant to the business, internal control and financial reporting. These structures comprise both an organization with clearly defined roles that enables an effective and – from an internal control perspective – appropriate division of responsibility, and specific control activities that enable the identification and timely prevention of risks becoming a reality. Control activities also include clearly defined decision-making processes and a policy for decision-making with respect to, for example, investments, agreements, acquisitions and divestments, earnings analyses and other forms of analytical reviews, reconciliations, inventory-taking and automatic controls in the IT systems.

Information and communication

The company's regulations, guidelines and manuals are communicated through several internal channels and the efficiency of this communication is monitored on an ongoing basis. There are formal and informal information channels that enable employees to communicate important information to relevant recipients and ultimately, if necessary, to the Board of Directors. Clear guidelines have also been established for external communications, the aim of which is to provide the most accurate and relevant overview possible while at the same time ensuring that all obligations are met.

Follow-up

The internal control process is mainly followed up by two bodies: the Audit Committee and the Internal Audit Function. The Audit Committee establishes the principles that apply for the company with respect to accounting and financial reporting, and monitors compliance with these regulations.

The Committee meets with the external auditors to obtain information about the focus and scope of the audit and to discuss results and coordination of the external and internal audits. In addition, the Committee establishes the direction, scope and time schedules for the work of the internal audit team, whose audits are reported to the Audit Committee and continuously to Group management so that any necessary measures may be taken. The scope of the internal audit includes, among other factors, operational efficiency, compliance with regulations and guidelines, and the quality of financial reporting from the subsidiaries.

Alfa Laval has implemented a management testing process for key internal controls over business processes in the company. The managers and key employees evaluated their compliance through a control self-assessment test for important internal controls in these business processes and will perform this on an annual basis. Based on the results, the internal controls framework will be strengthened and assist in risk-based valuation of the business processes at Alfa Laval.

Lund, March 2023
Board of Directors

Auditor's report on the corporate governance statement

To the general meeting of the shareholders of Alfa Laval AB (publ), corporate identity number 556587-8054

Engagement and responsibility
It is the Board of Directors who is responsible for the corporate governance statement for the year 2022 on pages 90–105 and that it has been prepared in accordance with the Annual Accounts Act.

The scope of the audit
Our examination has been conducted in accordance with FAR's auditing standard RevR 16 The auditor's examination of the corporate governance statement. This means that our examination of the corporate governance statement is different and substantially less in scope than an audit conducted in accordance with International Standards on Auditing and generally accepted auditing standards in Sweden. We believe that the examination has provided us with sufficient basis for our opinions.

Opinions
A corporate governance statement has been prepared. Disclosures in accordance with chapter 6 section 6 the second paragraph points 2-6 the Annual Accounts Act and chapter 7 section 31 the second paragraph the same law are consistent with the annual accounts and the consolidated accounts and are in accordance with the Annual Accounts Act.

Lund 27 March 2023

Staffan Landén
Authorized Public Accountant
Ernst & Young AB

Karoline Tedevall
Authorized Public Accountant
Ernst & Young AB

Financial statements

Board of Directors’ Report

The Board of Directors and the President of Alfa Laval AB (publ) hereby submit their annual report for the year of operation January 1, 2022 to December 31, 2022.

The information in this annual report is such information that Alfa Laval AB (publ) must publish in accordance with the Securities Market Act. The information was made public by publishing the annual report on Alfa Laval’s website on March 31, 2023 at 10.00 CET.

Alfa Laval AB is a public limited liability company. The seat of the Board is in Lund and the company is registered in Sweden under corporate registration number 556587-8054. The visiting address of the head office is Rudeboksvägen 1 in Lund and the postal address is Box 73, 221 00 Lund, Sweden. Alfa Laval’s website is: www.alfalaval.com.

Financial statements

The following parts of the annual report are financial statements: the Board of Directors’ Report, the ten-year overview, the consolidated cash flows, the consolidated comprehensive income, the consolidated financial position, the changes in consolidated equity, the parent company cash flows, the parent company income, the parent company financial position, the changes in parent company equity and the notes. All of these have been audited by the auditors.

The Corporate Governance Report, which also has been reviewed by the auditors, is to be found on page 90.

The statutory sustainability report for the parent company and the consolidated Group, which also has been reviewed by the auditors, is to be found on pages 54–86. Supplementary sustainability notes are to be found on Alfa Laval’s website Alfa Laval – Publications. The supplementary sustainability notes were published on the website at the same time as the annual report.

Ownership and legal structure

Alfa Laval AB (publ) is the parent company of the Alfa Laval Group.

The company had 54,346 (44,217) shareholders on December 31, 2022. The largest owner is Tetra Laval International SA, Switzerland, who owns 29.5 (29.1) percent. The increase compared to last year is due to the cancellation of repurchased shares that was made on May 16, 2022. Next to the largest owner, there are nine institutional investors with ownership in the range of 7.3 to 1.6 percent. These ten largest shareholders owned 63.0 (62.2) percent of the shares.

Operations

Alfa Laval is a world leader in heat transfer, centrifugal separation and fluid handling, and is active in the areas of Energy, Marine, and Food & Water, offering its expertise, products, and service to a wide range of industries in some 100 countries. The company is committed to optimizing processes, creating responsible growth, and driving progress to support customers in achieving their business goals and sustainability targets. Alfa Laval is engaged in the development, production and sales of products and systems based on three main technologies: separation/filtration, heat transfer and fluid handling.

Alfa Laval’s business is divided into three Business Divisions “Energy”, “Food & Water” and “Marine” that sell to external customers and are responsible for the manufacturing of the products and one division “Operations & Other” covering procurement, logistics, distribution and production development as well as corporate overhead and non-core businesses. These four divisions constitute Alfa Laval’s four operating segments.

The customers to the Energy Division purchase products and systems for energy applications, whereas the customers to the Food & Water Division purchase products and systems for food and water applications. The customers to the Marine Division purchase products, systems and digital solutions for marine and offshore applications.

The three Business Divisions are in turn split into a number of Business Units. The Energy Division consists of four Business Units: Brazed & Fusion Bonded Heat Exchangers, Energy Separation, Gasketed Plate Heat Exchangers and Welded Heat Exchangers. The Food & Water Division consists of six Business Units: Decanters, Food Heat Transfer, Food Systems, Hygienic Fluid Handling, High Speed Separators and Desmet. The Marine Division consists of five Business Units: Boiler Systems, Digital Solutions, Environmental Products, Marine Separation & Heat Transfer Equipment and Pumping Systems.

Material factors of risk and uncertainty

The main factors of risk and uncertainty facing the Group concern the business cycle, the consequences of Russia’s war on Ukraine, the price development of metals, continued supply chain and logistical disruptions, volatile fluctuations in major currencies and the development of the COVID-19 pandemic. For additional information, see the sections on financial and operational risks and the section on critical accounting principles, the section on key sources of estimation uncertainty and the section on judgements under accounting principles.

Acquisition of businesses

On September 13, 2022 Alfa Laval announced that it has acquired BunkerMetric, a Scandinavian software company that develops advanced decision support tools for marine bunker vessels. The acquisition is part of Alfa Laval’s strategy to expand its digital marine service offering and will be part of the recently acquired StormGeo, a global leader in weather intelligence software and decision support services. BunkerMetric, headquartered in Denmark, supports ship operators in finding the best bunker procurement plan and improving voyage margins by using sophisticated algorithms. The optimization tools, together with StormGeo’s advanced route services, will enable ship owners to streamline operations to help them improve their bottom line. BunkerMetric’s procurement optimization tool will become a subscription service within StormGeo’s existing offering.

On August 31, 2022 Alfa Laval announced that it has closed the acquisition of Scanjet, a leading global supplier of tank cleaning equipment and solutions for marine, offshore and industrial applications. The acquisition will extend Alfa Laval’s broad tanker offering, creating a more comprehensive product portfolio for cargo tanks. Scanjet’s intelligent tank management solutions will be a valuable complement to Alfa Laval’s sustainable marine offering as they reduce the water usage and energy consumption connected with tank cleaning. Adding Scanjet to Alfa Laval’s portfolio will support customer efficiency at every stage of cargo handling. Scanjet has global presence with factories in Sweden, Poland and Indonesia.

On August 2, 2022 Alfa Laval announced that it has closed the acquisition of Desmet, part of the Desmet Ballestra Group, a world leader in engineering and supplying processing plants and technologies for edible oils and biofuel sectors. The acquisition will strengthen Alfa Laval’s position in the renewable energy arena and complement its offering within edible oils. Headquartered in Brussels, Belgium, Desmet employs around 1,000 people in Europe, India, Southeast Asia, North America and Latin America. The acquired business was a part of the Desmet Ballestra Group and had a turnover of approximately EUR 300 million in 2021. The operational units and brands of Rosedowns and Stolz are included in the transaction. The Desmet Ballestra Group was owned by Financière DSBG and ultimately controlled by Kartesia and Farallon. The acquisition will operate as a stand-alone entity within the Food & Water Division of Alfa Laval. It strengthens Alfa Laval’s position in the markets for edible oils, biofuels, and plant- and animal-based proteins for food and feed. The acquisition will have a positive impact on earnings per share and be marginally decretive to Alfa Laval’s EBITA margin. “The acquisition will be an excellent fit for our offering of specialized processing equipment designed to increase both yield and quality of customers’ end products,” says Tom Erixon, President and CEO of Alfa Laval. “It will add know-how and expertise to accelerate future innovations within food, feed and biofuels – and strengthen our ability to support the transformation towards renewable fuels.”

On June 1, 2021 Alfa Laval completed the acquisition of StormGeo, a global leader in weather intelligence and advanced data science solutions. The acquisition is part of Alfa Laval’s strategy to support the marine industry’s efforts to make operations more efficient and will also enhance Alfa Laval’s knowledge within digital services. The purchase price is fully financed via cash. The acquisition is neutral to Alfa Laval’s EBITA margin and earnings per share. StormGeo, headquartered in Bergen in Norway, provides solutions and services for weather-sensitive operations, primarily in the marine industry, off-shore and other weather-dependent industries. The company’s weather information services help customers mitigate risk, improve safety and make sustainable choices on routes and operations. StormGeo was founded in 1997 and has since 2014 been under the ownership of EQT, DNV GL and a group of employees. Total sales in 2020 amounted to NOK 714 million (SEK 699 million). StormGeo will become a part of the Alfa Laval Marine Division. “The acquisition of StormGeo will be a strong addition to our toolbox of solutions that help our customers address the decarbonization challenge in the industry. Furthermore, StormGeo fits excellently to our digital acceleration ambition, and we will use their digital and customer experience to level up our offerings and to get deeper experience in the digital space,” says Tom Erixon, President and CEO of Alfa Laval.

On October 1, 2021 Alfa Laval acquired the Norwegian system manufacturer LiftUP. LiftUP is a market leader in removing waste from fish farms to reduce their impact on the marine environment. The acquisition is part of Alfa Laval’s strategy of building up an attractive aquaculture product portfolio and creating an expanded and sustainable growth platform for the future. Founded in 1991, LiftUP is a world leading supplier of waste extraction systems for fish farms. Its technology can remove up to 70 percent of the sludge from open cages. The LiftUP system is a complement to the Alfa Laval Framo pumping system AquaStream, which brings up fresh low temperature water with high oxygen levels (from around 25 m depth) and creates a perfect sea current – thereby providing conditions similar to the deep fjords, creating an optimal environment for the fish. The acquired company had revenues of NOK 75 million (2020) with good profitability. It will now be part of the business unit Pumping Systems in the Marine Division.

Investments in joint ventures and other companies

During 2022 Alfa Laval has acquired shares for an additional SEK 13 million in the Swedish company Liquid Wind, which gave a 5.2 percent ownership in the company. The company develops electro-fuel facilities to produce renewable clean fuels.

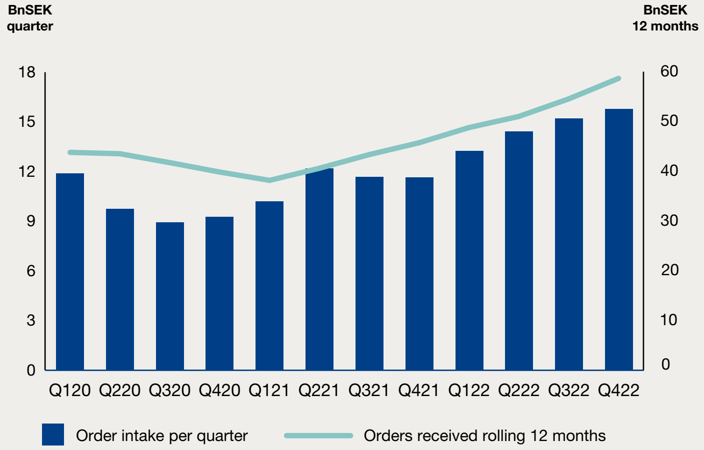
During 2022 Alfa Laval has made a capital contribution of SEK 40 million into AlfaWall Oceanbird, which is a 50/50 joint venture together with Wallenius to supply innovative wind propulsion solutions for cargo vessels and other ship types.

Sale of real estate

During 2022 a property in the U.S. has been sold for SEK 15 (17) million with a realised result of SEK -7 (9) million. The result for 2021 was reported as comparison distortion item as it is linked to the sale of the remaining air heat exchanger operation in India to LU-VE.

The property in Alonte in Italy, the properties in Eastbourne and Cwmbran in the UK, the property in Singapore, one property in Norway and four smaller properties in India are for sale and are expected to be sold within the next year. These have therefore been classified as current assets held for sale with SEK 100 (25) million. The fair value of the properties for sale exceeds the book value by approximately SEK 246 (128) million.

Orders received



Orders received amounted to SEK 58,645 (45,718) million during 2022. Order backlog of SEK 825 million relating to the sanctions against Russia has been cancelled in 2022.

Order bridge

Consolidated

SEK millions/%	2022	2021
Order intake last year	45,718	39,833
Organic [1]	14.4%	18.4%
Structural [1]	3.8%	1.1%
Currency	10.1%	-4.7%
Total	28.3%	14.8%
Order intake current year	58,645	45,718

[1] Change excluding currency effects.

Orders received from the aftermarket Service constituted 28.4 (28.1) percent of the Group’s total orders received for 2022.

Order bridge Service

Consolidated

SEK millions/%	2022	2021
Order intake last year	12,864	11,773
Organic [1]	15.4%	10.8%
Structural [1]	2.7%	3.6%
Currency	11.3%	-5.1%
Total	29.4%	9.3%
Order intake current year	16,640	12,864

[1] Change excluding currency effects.

- Organic: change excluding acquisition/divestment of businesses.
- Structural: acquisition/divestment of businesses.
- Service: Parts and service.

Large orders

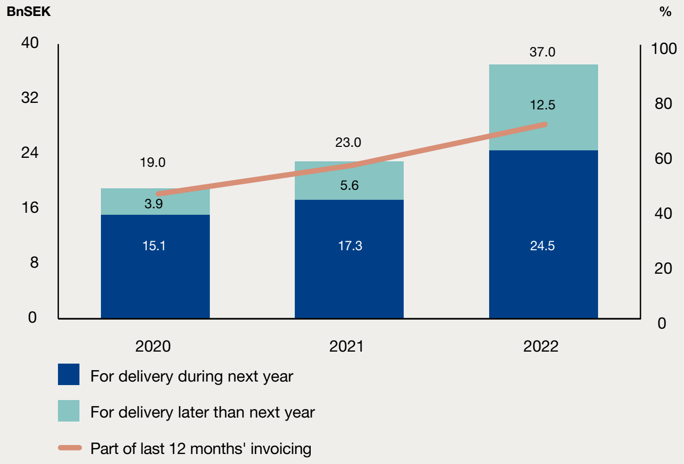
Large orders are orders with a value over EUR 5 million. The volume of large orders is an important indicator of the demand situation and is therefore monitored separately within Alfa Laval. A large volume of large orders normally also means a good load in the factories. During 2022 Alfa Laval has received the following large orders:

Large orders (>EUR 5 million)

Division Business Unit Scope of supply	Order received in	Delivery date	Order amount	Total per Business Unit 2022	2021
			SEK millions		
Energy					
Welded Heat Exchangers					
Compabloc heat exchangers for an LNG plant in the Middle East*.	Q2	2025	61		
Ziepack phenol condenser for a petrochemical plant in South Korea.	Q2	2023	64		
Air coolers for increased refinery capacity for sustainable aviation fuel in the Netherlands.	Q4	2023	99	224	525
Energy Separation					
High speed separators for production of chemicals in China.	Q3	2023	93	93	33
Gasketed Plate Heat Exchangers					
Plate heat exchangers for an LNG plant in the Middle East*.	Q2	2025	113		
Heat exchangers to a hydrogen plant in the Middle East.	Q3	2024	110		
Heat exchangers to a petrochemical plant in China.	Q3	2023	90	313	85
Food & Water					
Decanters					
Membrane system spiral for a dairy in the U.S.	Q3	2023	78	78	298
Food Systems					
Equipment to a plant based protein factory in Singapore.	Q1	2023	57		
Brewery systems to Golden Brewery in the U.S.	Q1	2022-2024	721		
Systems for pre-treatment plant in the U.S. for renewable diesel (HVO**).	Q2	2022	68		
Equipment for a pork-by-product processing plant in Italy.	Q3	2023	69		
Equipment for edible oil production lines in India.	Q3	2023	63		
Systems for pre-treatment of raw materials for production of bio fuels in the U.S.	Q4	2023	171		
Fermentations system for pharmaceutical plant in India.	Q4	2024	81		
Equipment for complete edible oils processing plant in South East Asia.	Q4	2023	54	1,284	547
Desmet					
Equipment for a vegetable oil production line in Indonesia.	Q4	2023	56		
Equipment for a biodiesel plant in Bolivia.	Q4	2023	66		
Equipment for an HVO** pre-treatment plant in France.	Q4	2024	93		
Equipment for an edible oil plant in Vietnam.	Q4	2024	58		
Systems for an edible oil plant in Canada.	Q4	2024	77	350	–
High Speed Separators				–	6
Marine					
Marine Separation & Heat Transfer Equipment				–	58
Boilers					
Boiler system with waste heat recovery for a FPSO*** vessel in Singapore.	Q2	2023	141		
Boiler system with waste heat recovery for a FPSO*** vessel in Singapore.	Q2	2023	78	219	–
Pumping Systems					
Cargo pumps for FPSO*** vessel in China.	Q1	2022	51		
Firewater pumps for FPSO*** vessel in Brazil.	Q1	2023	98		
Seawater lift pumps for FPSO*** vessel in Australia.	Q1	2023	53		
Seawater lift pumps for FPSO*** vessel in Brazil.	Q1	2023	65		
Framo pumping systems to an FPSO*** vessel for an oil field outside Brazil.	Q2	2023	77		
Framo pumping systems to an FPSO*** vessel for an oil field outside Norway.	Q2	2023	58		
Offshore seawater lift pumps for oil platform in France.	Q3	2023	83		
Offshore seawater lift pumps for oil platform in Norway.	Q3	2023	54		
Seawater lift pumps for FPSO* vessel in the Caribbean.	Q3	2023	59		
Sea water lift pumps for a HVDC**** platform for wind mills in the UK.	Q4	2023	59		
Fire water pumps for a FPSO*** vessel in Brazil.	Q4	2023	179		
Cargo pumps for a FPSO*** vessel in Brazil.	Q4	2023	110		
Cargo pumps for a FPSO*** vessel in Brazil.	Q4	2023	190		
Cargo pumps for a FPSO*** vessel in Brazil.	Q4	2024	190	1,326	807
Total				**3,887**	**2,359**

* One order split on two Business Units. LNG = Liquefied Natural Gas. ** Hydrotreated Vegetable Oil *** Floating Production, Storage and Offloading. **** High Voltage Direct Current.

Order backlog December 31



Excluding currency effects and adjusted for acquisition and divestment of businesses the order backlog was 29.8 percent higher than the order backlog at the end of 2021.

Net sales

Net sales amounted to SEK 52,135 (40,911) million during 2022.

Sales bridge

Consolidated

SEK millions/%	2022	2021
Net sales last year	40,911	41,468
Organic [1]	10.9%	1.6%
Structural [1]	6.7%	1.1%
Currency	9.8%	-4.0%
Total	27.4%	-1.3%
Net sales current year	52,135	40,911

[1] Change excluding currency effects.

Net invoicing relating to Service constituted 30.0 (29.6) percent of the Group's total net invoicing for 2022.

Sales bridge Service

Consolidated

SEK millions/%	2022	2021
Net sales last year	12,144	11,898
Organic [1]	15.0%	3.3%
Structural [1]	2.9%	3.5%
Currency	11.3%	-4.7%
Total	29.2%	2.1%
Net sales current year	15,688	12,144

[1] Change excluding currency effects.

Operating segments

Energy Division

The division targets customers in HVAC and refrigeration markets as well as process industries such as chemicals, petrochemical industry and the oil & gas industry. Focus is on increased energy efficiency, waste heat recovery and sustainable solutions.

The Energy Division consists of four Business Units: Brazed & Fusion Bonded Heat Exchangers, Energy Separation, Gasketed Plate Heat Exchangers and Welded Heat Exchangers.

Energy Division

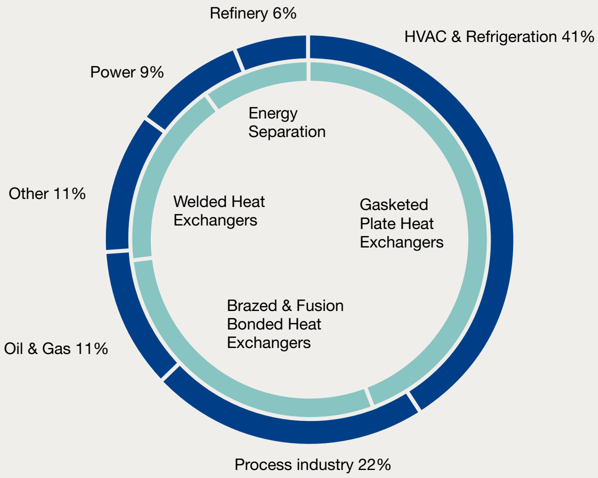
Consolidated

SEK millions	2022	2021
Orders received	17,294	13,675
Order backlog*	8,517	5,791
Net sales	15,074	12,383
Operating income**	2,761	1,897
Operating margin***	18.3%	15.3%
Depreciation and amortisation	518	433
Investments****	535	403
Assets*	17,330	13,262
Liabilities*	6,574	5,252
Number of employees*	5,457	5,126

* At the end of the period. ** In management accounts. *** Operating income in relation to net sales. **** Excluding new leases.

Quarterly development

Order intake 2022 split per end market*/business unit



* "Process industry" consists of inorganic chemicals, metals, petrochemicals and pulp & paper and "Other" mainly consists of manufacturing and mining.

Order intake

Order bridge

Consolidated		
SEK millions/%	2022	2021
Order intake last year	13,675	11,952
Organic [1]	17.0%	19.2%
Structural [1]	–	–
Currency	9.5%	-4.8%
Total	26.5%	14.4%
Order intake current year	17,294	13,675

[1] Change excluding currency effects.

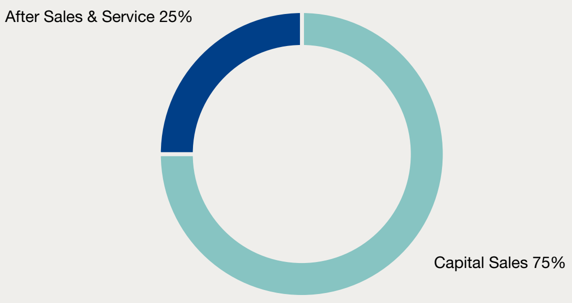
The Energy Division reported a very good growth in order intake during the year compared to last year, despite that orders no longer were taken in the Russian market. Demand was very strong for energy efficiency solutions and with a strong interest in Alfa Laval's solutions for clean energy and circularity, which has resulted in a growing number of orders. Order intake was strong across most geographical markets. The underlying business grew in all regions except in Eastern Europe where the total volumes decreased compared to last year due to the loss of the Russian market. The service business developed in a positive way.

The largest end market HVAC* & Refrigeration continued to grow as investments in energy efficiency surged. The biggest growth came from products for heat pumps, but the development was good across all applications. Demand from customers in the process industries grew mainly from sectors like chemicals, petrochemicals and pulp & paper. Underlaying factors included investments in production of green hydrogen and renewable chemicals. During the year prices for oil and gas has surged and consequently demand in oil & gas has been strong during the year. The refinery sector was the only one where volumes were lower than last year, mainly due to the loss of the Russian market.

Aftermarket grew well in the year. A positive development was seen across most industries and most geographical markets.

* Heating, Ventilation & Air Conditioning.

Order intake 2022 split on:



Net sales

Sales bridge

Consolidated		
SEK millions/%	2022	2021
Net sales last year	12,383	12,187
Organic [1]	12.4%	5.9%
Structural [1]	–	–
Currency	9.3%	-4.3%
Total	21.7%	1.6%
Net sales current year	15,074	12,383

[1] Change excluding currency effects.

Net sales grew in almost all end markets. Aftermarket sales grew faster than capital sales. There has been capacity constraints and supply chain challenges throughout the year, but the ability to invoice and work through the backlog has improved during the year.

Operating income

Income bridge

Consolidated		
SEK millions	2022	2021
Operating income last year	1,897	1,882
Volume [1]	514	243
Mix [1]	496	-127
Costs [1]	-264	-69
Currency	118	-32
Operating income current year	2,761	1,897

[1] Change excluding currency effects.

The operating income increased compared to last year. The increased net sales had a positive volume effect. Despite increased raw material costs, the mix effect was positive due to price increases and a higher service share. The overhead costs increased due to increased sales activities and inflationary pressure. Currency had a positive impact.

Food & Water Division

The division offers different types of products for heat transfer, separation and hygienic fluid handling and targets customers in food, pharmaceuticals, biotech, vegetable oils, brewery, dairy and body care products. In addition, the division focuses on public and industrial water treatment as well as wastewater and waste treatment.

The Food & Water Division consists of six Business Units: Decanters, Food Heat Transfer, Food Systems, Hygienic Fluid Handling, High Speed Separators and Desmet.

Food & Water Division

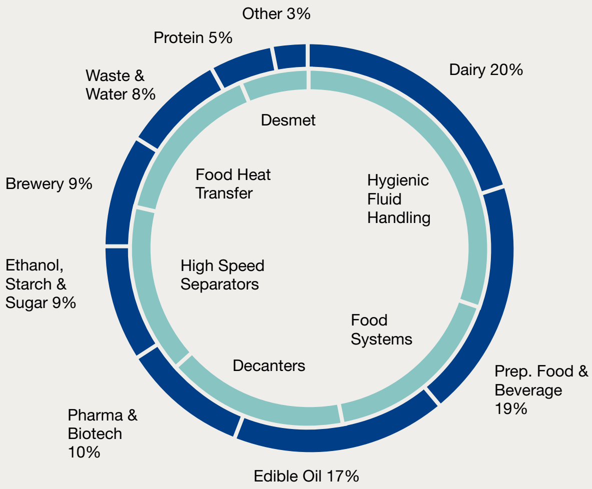
Consolidated

SEK millions	2022	2021
Orders received	21,909	16,664
Order backlog*	14,381	6,823
Net sales	20,691	14,640
Operating income**	3,339	2,637
Operating margin***	16.1%	18.0%
Depreciation and amortisation	568	360
Investments****	360	315
Assets*	21,196	11,714
Liabilities*	8,291	5,144
Number of employees*	8,052	6,670

* At the end of the period. ** In management accounts. *** Operating income in relation to net sales. **** Excluding new leases.

Quarterly development

Order intake 2022 split per end market/business unit



Order intake

Order bridge

Consolidated		
SEK millions/%	2022	2021
Order intake last year	16,664	13,814
Organic [1]	11.8%	26.2%
Structural [1]	7.5%	-0.2%
Currency	12.2%	-5.4%
Total	31.5%	20.6%
Order intake current year	21,909	16,664

[1] Change excluding currency effects.

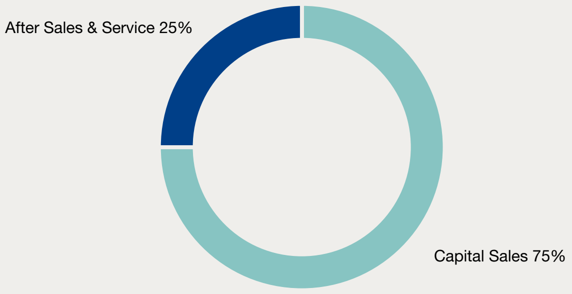
A strong macro-economic development supported growth in all key industries served by the division, with growing investments and especially larger capacity investments post the pandemic. The division continued to gain market shares, partly through technological leadership in many areas as a result of the last few years of increased R&D spending. Geographically most regions grew, exceptions being North East Asia where China decreased and Eastern Europe, the latter a result of discontinued business in Russia. Particular strong growth was noted in North America and South East Asia as well as India and Middle East.

The pharma and biotech market continued previous year's growth, albeit at a somewhat lower pace as China contracted. The latter likely due to a consolidation need after a strong investment activity over several years as well as postponements of investment decisions caused by partial lockdowns in China during 2022. The waste & water industry grew slightly, with many countries including the U.S. giving governmental support, encouraging investments in the sector. Both edible oil and ethanol, starch & sugar contributed with good growth, representing an important part of the sustainability related business. The ever more important HVO* technology for biodiesel grew, not least in North America. The growth in ethanol was driven by both environmental regulation, one example being higher blending requirement in petrol globally, but also higher oil prices driving demand for alternative fuels. The brewery sector was boosted by the largest order ever of SEK 721 million for a new brewery in North America.

The aftermarket was strong across almost all key industries served. Parts sales had good growth, but also service scopes grew. A higher post pandemic activity level in general across most industries is one explanation, another is the increased installed base of equipment following the last few years of strong new sales. New service offerings have also been added.

* Hydrotreated Vegetable Oil

Order intake 2022 split on:



Net sales

Sales bridge

Consolidated		
SEK millions/%	2022	2021
Net sales last year	14,640	13,414
Organic [1]	13.0%	14.1%
Structural [1]	15.4%	-0.2%
Currency	12.9%	-4.8%
Total	41.3%	9.1%
Net sales current year	20,691	14,640

[1] Change excluding currency effects.

Net sales increased considerably compared to last year. A large backlog at the beginning of 2022, combined with a very strong order intake throughout the year, which partly was invoiced during the second part of the year, contributed. Supply chain disruptions held back sales growth during the first half of the year, but during the second half and not least in the fourth quarter a clear easing was seen and resulted in an overall strong sales growth for the year. Even though aftermarket sales were strong, capital sales were even stronger during the year which somewhat changed the mix.

Operating income

Income bridge

Consolidated		
SEK millions	2022	2021
Operating income last year	2,637	2,371
Volume [1]	1,496	685
Mix [1]	-420	-132
Costs [1]	-658	-199
Currency	284	-88
Operating income current year	3,339	2,637

[1] Change excluding currency effects.

The operating income increased compared to last year, mainly driven by a positive volume effect. The negative mix effect is explained by the lower service share, the mix between product groups, higher raw material costs and the Desmet project business, partly mitigated by the mix between geographies. Costs increased as a result of general inflationary pressure and an overall high business activity, partly mitigated by a positive currency effect.

Marine Division

The division's customers include shipowners, shipyards, manufacturers of diesel and gas engines, as well as companies that work with offshore extraction of oil and gas. The offering includes pumping systems, boilers, heat transfer equipment, high speed separators, digital solutions and several different environmental products, including systems to clean ballast water and exhaust gases.

The Marine Division consists of five Business Units: Boiler Systems, Digital Solutions, Environmental Products, Marine Separation & Heat Transfer Equipment and Pumping Systems.

Marine Division

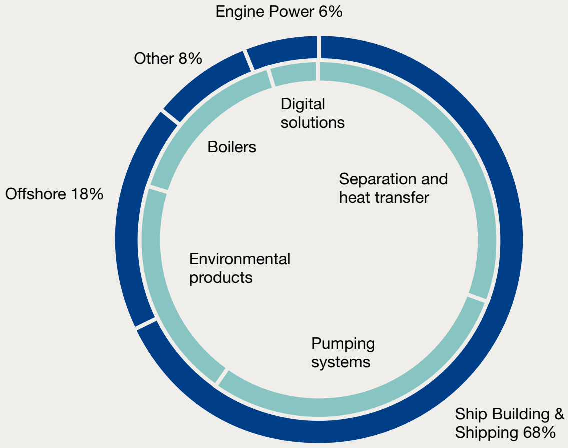
Consolidated

SEK millions	2022	2021
Orders received	19,442	15,379
Order backlog*	14,122	10,340
Net sales	16,370	13,888
Operating income**	1,741	2,211
Operating margin***	10.6%	15.9%
Depreciation and amortisation	970	840
Investments****	235	250
Assets*	30,932	28,718
Liabilities*	7,241	6,317
Number of employees*	5,465	4,932

* At the end of the period. ** In management accounts. *** Operating income in relation to net sales. **** Excluding new leases.

Quarterly development

Order intake 2022 split per end market/business unit



Order intake

Order bridge

Consolidated

SEK millions/%	2022	2021
Order intake last year	15,379	14,067
Organic [1]	14.8%	10.3%
Structural [1]	3.3%	3.2%
Currency	8.3%	-4.2%
Total	26.4%	9.3%
Order intake current year	19,442	15,379

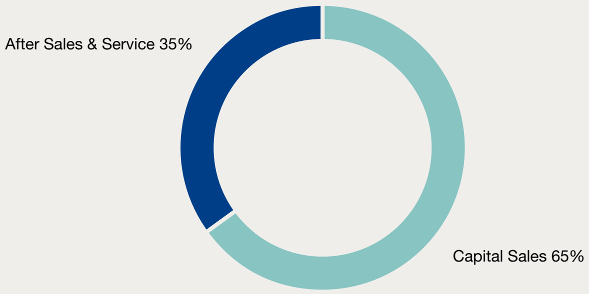
[1] Change excluding currency effects.

The order intake for the Marine Division increased compared to last year. Growth was driven by a stronger demand in most product areas and in the service business.

The underlying market sentiment related to the building of new vessels was on a lower level compared to the last year. New contracting has been driven primarily by container vessels, bulk carriers, large LNG carriers and vehicle carriers. The lower shipbuilding activity was compensated by a continued growing demand for sustainability related solutions which mitigate CO_2 emissions, including solutions around energy efficiency and low and zero carbon fuels. Demand for PureBallast has as expected eased further as fewer vessels remain to be retrofitted before the approaching 2024 regulatory deadline and the market gets more oriented to new vessels. Order intake for offshore increased significantly compared to last year and the underlying market sentiment in this area remained strong due to increased oil prices and new projects to safeguard long term energy supply.

Order intake for service improved compared to last year. Growth was driven by higher activity levels in both shipping and offshore and a growing environmental installed base. High freight rates in most vessel segments and the need to keep vessel assets in good operational readiness resulted in increased on-board maintenance and higher demand for spare parts and service.

Order intake 2022 split on:



Net sales

Sales bridge

Consolidated

SEK millions/%	2022	2021
Net sales last year	13,888	15,867
Organic [1]	7.4%	-12.2%
Structural [1]	3.4%	2.9%
Currency	7.1%	-3.2%
Total	17.9%	-12.5%
Net sales current year	16,370	13,888

[1] Change excluding currency effects.

Net sales were at a higher level than last year supported by the easing of supply chains. Sales growth for service and for most product groups in capital sales, particularly within oil & gas, offset the lower sales for marine cargo pumping systems and gas systems.

Operating income

Income bridge

Consolidated

SEK millions	2022	2021
Operating income last year	2,211	2,758
Volume [1]	527	-489
Mix [1]	-503	262
Costs [1]	-597	-292
Currency	103	-28
Operating income current year	1,741	2,211

[1] Change excluding currency effects.

The operating income decreased compared to last year. Net sales were higher, which gave a positive volume effect, but the mix was burdened by a lower profitability level in the capital sales product mix, material cost increases and a low factory load for Marine Pumping Systems. The overhead cost increased due to high business activity and inflationary pressure, partly mitigated by a positive currency effect.

Operations & Other

Operations & Other covers procurement, logistics, distribution and production development as well as corporate overhead and non-core businesses.

Operations & Other

Consolidated		
SEK millions	2022	2021
Orders received	0	0
Order backlog*	0	0
Net sales	0	0
Operating income**	-507	-441
Depreciation and amortisation	336	354
Investments***	723	261
Assets*	1,983	1,486
Liabilities*	1,097	801
Number of employees*	1,326	1,155

* At the end of the period. ** In management accounts. *** Excluding new leases.

The decreased operating income in 2022 is mainly due to a more normalized operating level after the pandemic.

Reconciliation between Divisions and Group total

Consolidated		
SEK millions	2022	2021
Operating income		
Total for divisions	7,334	6,304
Comparison distortion items	-767	-192
Consolidation adjustments *	-48	14
Total operating income	6,519	6,126
Financial net	-340	16
Result after financial items	6,179	6,142
Assets **		
Total for divisions	71,441	55,180
Corporate***	9,808	9,181
Group total	81,249	64,361
Liabilities **		
Total for divisions	23,203	17,514
Corporate***	22,342	14,503
Group total	45,545	32,017

* Difference between management accounts and IFRS. ** At the end of the period. *** Corporate refers to items in the statement on financial position that are interest bearing or are related to taxes.

Information about geographical areas

All comments are excluding currency effects.

Western Europe including Nordic

The order intake in the region showed a strong growth compared to last year. Energy showed growth in almost all markets, driven by a high demand from the HVAC and manufacturing industries. Food & Water grew well in Nordic, Adriatic and the United Kingdom, particularly in protein and prepared food & beverage. Marine grew in Nordic, France and Iberica supported by good development in shipbuilding and shipping. Service had a good development and grew.

Central and Eastern Europe

The region reported no order growth compared to last year due to the sanctions against Russia. Excluding Russia all the regions showed strong growth. In Energy the growth was primarily driven by continued demand for HVAC and refrigeration in most regions. Food & Water reported growth in most of the countries in the region primarily driven by prepared food & beverage and ethanol, starch & sugar. Marine reported good growth in Turkey, mainly driven by shipbuilding and offshore. Service order intake grew strongly excluding Russia.

North America

North America reported strong growth compared to last year. In Energy the growth was particularly strong for data centre cooling and power generation in the U.S. and Canada. Food & Water noted good demand for dairy and brewery, where we won a SEK 721 million order from Golden Brewery in U.S. Marine reported a good growth in engine power. Service order intake had a strong growth.

Latin America

The region showed strong growth in order intake compared to last year. Energy had a high demand in process industry and oil & gas in most countries in the region. Food & Water had a robust demand in edible oil and prepared food & beverage in most countries in the region. Marine showed modest development with lower pumping systems activity in Brazil. The demand for service was strong.

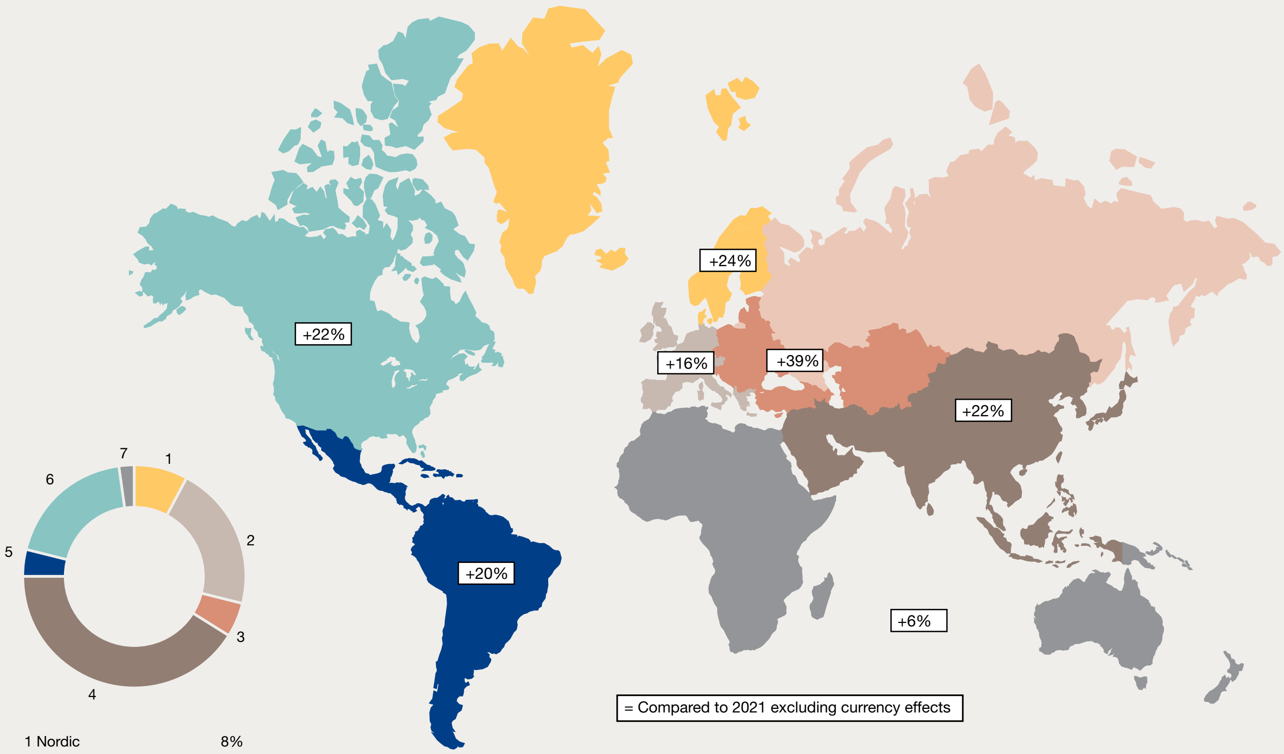
Asia

The region reported strong growth in order intake compared to last year. For Energy, demand remained high for HVAC in China, Korea, Japan and India. Growth in Food & Water was particularly high in the Middle East, Thailand and India driven by a continued demand in ethanol, starch & sugar and edible oil. Marine reported good growth in China, Japan and Singapore driven by increased order intake from both shipbuilding as well as shipping. Service developed well and grew.

Africa and Oceania

The region reported growth in order intake compared to last year. Energy had a high demand in oil & gas and power in Australia and Africa. Marine reported overall growth in the region, whilst Food & Water had a more modest development in all countries except Australia. Service order intake grew in all divisions.

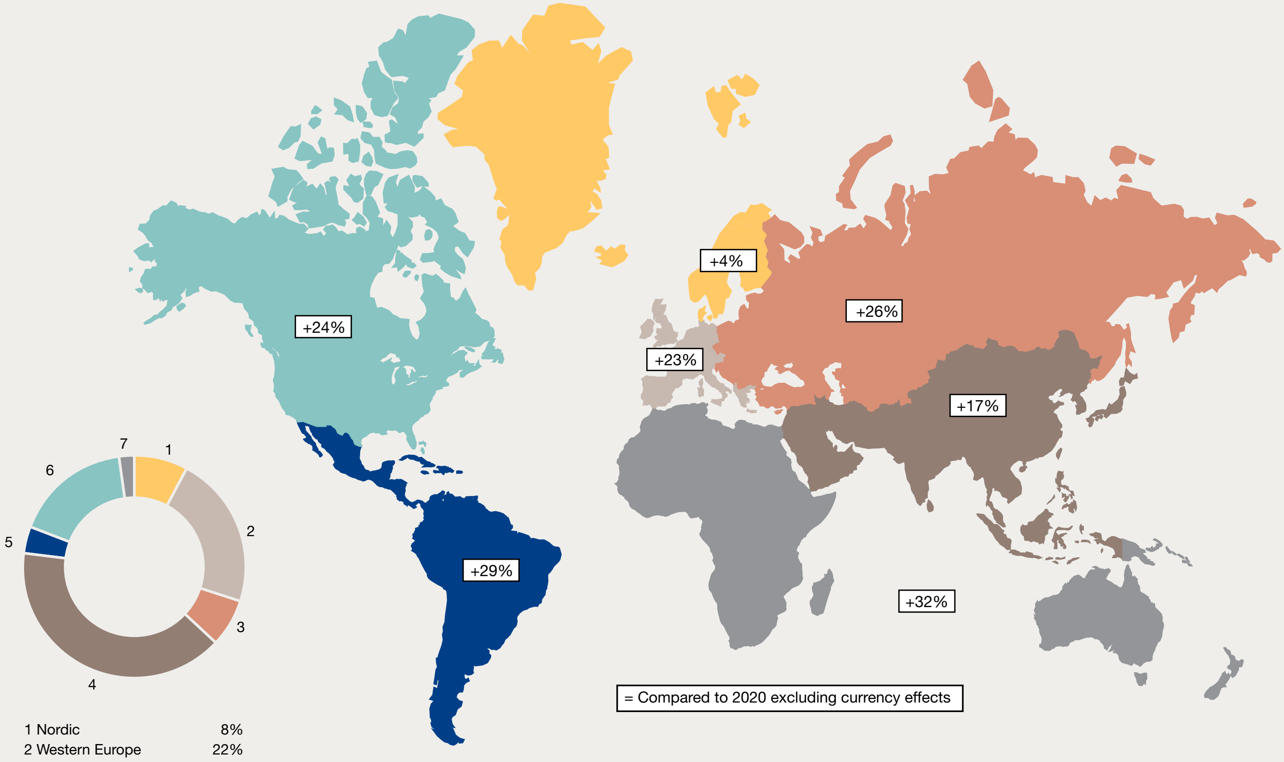
Orders received 2022



= Compared to 2021 excluding currency effects

1 Nordic	8%
2 Western Europe	21%
3 Central- & Eastern Europe, excluding Russia	5%
4 Asia	41%
5 Latin America	4%
6 North America	19%
7 Africa & Oceania	2%

Orders received 2021



= Compared to 2020 excluding currency effects

1 Nordic	8%
2 Western Europe	22%
3 Central- & Eastern Europe	7%
4 Asia	40%
5 Latin America	4%
6 North America	17%
7 Africa & Oceania	2%

Personnel

The number of employees is measured and reported as full time equivalents.

The parent company does not have any employees.

The Group has on average had 19,002 (17,419) employees. At the end of December 2022, the Group had 20,300 (17,883) employees. The employee turnover rate excluding temporary employees for 2022 is 6.9 (9.4) percent. The highest employee turnover rate in 2022 is found in management & administration, service and sales & marketing.

Alfa Laval has the ambition to develop the employees on all levels within the Group. The largest part of the competence development takes place in the daily work when our employees continuously get more demanding tasks as well as get the opportunity to participate in different projects together with more experienced colleagues. Local training and development efforts in the different factories and sales companies around the world are equally important, for instance ALPS (Alfa Laval Production System) that is based on the well-known concepts of Lean and Six Sigma and also on ALPAS (Alfa Laval Product & Application School). The ALPAS trainings are designed and developed by the product responsible Business Unit.

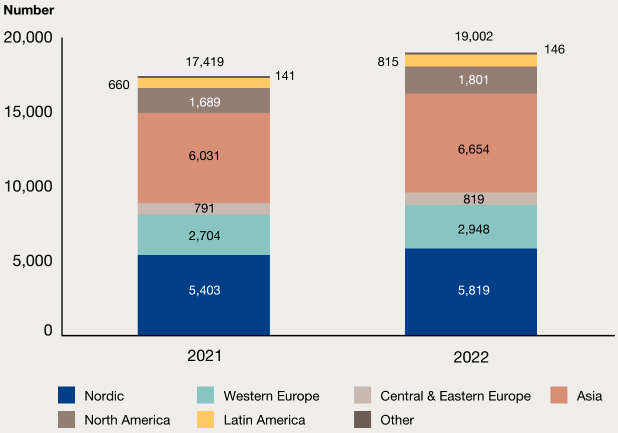
All training programmes and development projects are performed within the Alfa Laval Academy framework, to ensure they follow the Alfa Laval Learning Principles. Further examples of such training programmes are Challenger (for young talents with international leadership potential), Evolve (training and mentor programme for employees with high potential in leadership positions), Project Management, Information Security (mandatory training via E-learning), Inclusion & Diversity (for all employees), Pure Leadership (for middle management) and Drive (for senior management).

Alfa Laval has a global certification in "Learning Facilitation Capabilities" called "Licence to Train" to secure quality and consistency in the way we deliver our learning programmes internally as well as towards customers and partners.

Alfa Laval is promoting inclusion and diversity at all levels to give all employees fair and equal opportunities for development and career. While we consciously work towards increasing the share of female managers and the share of female employees in the total workforce, leadership programs like Challenger, Evolve and Drive are important to drive the shift in leadership and inclusion to reach the goal.

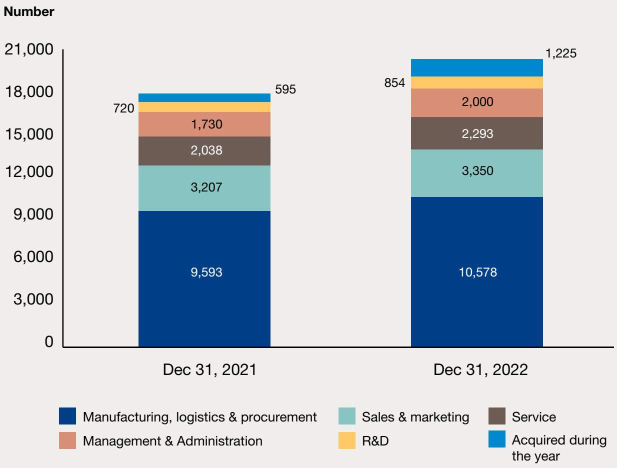
The distribution of the number of employees by region is:

Average number of employees – by region



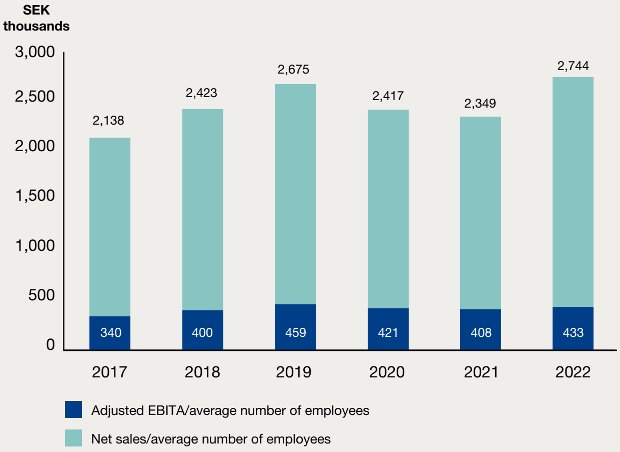
The distribution of the number of employees by personnel category at year end is:

Employees – by category



The productivity by employee has developed as follows:

Employees – Productivity development



The improvement for 2018 and 2019 was impacted by the change programme that was launched during the autumn 2016 but reinforced by the stronger demand within primarily environmental products and the weakening of the Swedish krona. The deterioration during 2020 and 2021 is explained by the consequences of the COVID-19 pandemic and the stronger Swedish krona. The improvement during 2022 is explained by the increased sales and the weakening of the Swedish krona. The weaker development of the profitability during 2022 is due partly to increased raw material prices in combination with invoiced backlog taken prior to 2022 and the Desmet project business and partly to capacity imbalances in the supply organization and the impact of the transition from fossil to sustainable energy solutions for parts of the Marine Division and the Business Unit for Welded Heat Exchangers in the Energy Division. The latter is now being addressed in the announced restructuring programme.

The distribution of employees per country and per municipality in Sweden and between males and females can be found in Note 5 in the notes to the financial statements. The specification of salaries, wages, remunerations, social costs and pension costs are provided in Note 6 in the notes to the financial statements.

Remuneration policy for executive officers

The remuneration policy for executive officers is established by the Annual General Meeting, see further description in Note 6 and the complete policy in Note 37.

The Board of Directors decided in 2022 to implement step five of the modified cash based long-term incentive programme for maximum 95 senior managers in the Group including the Chief Executive Officer and the persons defined as executive officers. The outcome of the modified programme depends on how the adjusted EBITA margin and the net sales growth have developed during a three-year period, with a 50/50 weight between the targets. This means that there will be no award during the first two years since it is first in year three that it can be determined to what extent the targets have been achieved. Maximum outcome is awarded when the targets are exceeded. The remuneration from the modified long-term incentive programme can constitute maximum 25, 40 or 50 percent of the fixed remuneration depending on position. Payment to the participants in the programme is made after year three and only provided that they are still employed at the date of payment.

Research and development

As the result of an intensive and consistent commitment over many years to research and development, Alfa Laval has achieved a world-leading position within the areas of separation and heat transfer. The product development within fluid handling has resulted in a strong market position for a number of products. In order to strengthen the Group's position and to support the organic growth, by identifying new applications for existing products as well as developing new products, research and development is always an activity of high priority. Research and development is conducted at approximately twenty facilities around the world.

The costs for research and development have amounted to SEK 1,356 (1,159) million, corresponding to 2.6 (2.8) percent of net sales. Excluding currency effects and acquisition/divestment of businesses, the costs for research and development have increased by 8.7 percent compared to last year.

Ethics and social responsibility

Two of Alfa Laval's four business principles are: "Respect for human rights is fundamental" and "High ethical standards guide our conduct". This means that Alfa Laval respects human rights and the very different social cultures in which the company works and supplies its products and services and that Alfa Laval conducts its business with honesty, integrity and respect for others.

Globalisation gives Alfa Laval new business opportunities for increased sales as well as lower costs for manufacturing the products. But when part of the supply chain is moved to countries with lower costs the company is often confronted with ethical questions in a more obvious manner. Health, security and working conditions for the employees at the company's suppliers are some of Alfa Laval's main topics. When Alfa Laval procures products from quickly growing economies like China and India it is important for the company to secure that the cost reduction opportunities are not at the expense of those performing the work in each country. Alfa Laval regards it as an obligation to make sure that its suppliers develop quickly if the work, health and security conditions are not acceptable.

Alfa Laval has developed an internal training programme to give salespeople and purchase departments knowledge on legal business practice.

Environment

One of Alfa Laval's four business principles is: "Optimizing the use of natural resources in the most efficient manner is our business." The company's products make a significant contribution to reducing the environmental impact of industrial processes and are used to produce renewable energy.

All sites have an environmental management system in place. More than 95 percent of the delivery value comes from production sites with ISO 14001 certification.

The subsidiary Alfa Laval Corporate AB is involved in operational activities that are subject to an obligation to report and compulsory licensing according to Swedish environmental legislation. The permits mainly relate to the manufacturing of heat exchangers in Lund and Ronneby and the manufacturing of separators in Tumba and Eskilstuna. The impact on the external environment is through limited discharges into the air and water, through waste and noise.

The foreign manufacturing sites within the Alfa Laval Group are engaged in operational activities with a similar effect on the external environment. To what extent this activity is subject to an obligation to report and/or compulsory licensing according to local environmental legislation varies from country to country. Alfa Laval has an overall intention to operate well within the limits that are set by local legislation.

Russia's war on Ukraine

Alfa Laval has a factory and a sales company in Russia and a sales company in Ukraine. Historically the order intake from the markets in Russia and Ukraine has been approximately SEK 1 billion per year, equivalent to 2 percent of the total order intake for the company. When the war started on February 24, the total order backlog in Russia and Ukraine amounted to approximately SEK 750 million. In addition, Alfa Laval companies in other countries had orders from Russian end customers of SEK 360 million. Since then, the order backlog has been re-assessed and as a result orders of SEK 825 million have been removed from the order backlog. This is mainly due to sanctions, but also when Alfa Laval has assessed that the company will not be able to deliver or get paid. Also orders where Alfa Laval supplies equipment to ship yards in other countries building ships for ship owners now under sanctions have been removed from the order backlog. Alfa Laval's possibilities to deliver are further affected if transportation into Russia can be arranged and if our sub-suppliers set restrictions on where we can deliver products with their components.

If revenue recognition over time has started for an order that now has been removed from the order backlog, then the net invoicing and cost of goods sold have been reversed, unless the amount is covered by a non-refundable advance payment.

If orders have been removed from the order backlog, then Alfa Laval has also made provisions for:

- The value of work in progress and finished goods for these orders, if the products cannot be sold to other customers within reasonable time and with reasonable margin.
- The value of material and components that are intended for these orders, if the material and the components cannot be used for products to other customers within reasonable time and with a reasonable final margin.
- Costs for cancellation fees that can hit Alfa Laval if we cancel order that we cannot deliver or get paid for.

If we still think that we can deliver and get paid, we have made provisions for accrued costs for late delivery fees.

Concerning receivables related to past deliveries, we have made provisions for:

- Accounts receivable related to orders concerning Russia and Ukraine that we do not believe we will get paid for.
- Expected foreign exchange losses if the customer cannot pay in the contractually stipulated currency (USD, EUR etc), but only in Russian roubles.

Concerning advance payments, we have made provisions for the value of advance payments made by Alfa Laval to suppliers in Russia and Ukraine and where we do not expect any delivery or the advance being repaid to us.

Before the war, Alfa Laval had a competent team of approximately 230 employees in Russia and 10 employees in Ukraine. A restructuring programme was communicated in Russia in July 2022, meaning that the number of personnel was reduced to 85 until the end of October 2022. At year end the number of employees was 73. Alfa Laval's assessment is now that the longer-term implications of the war on the Russian market are of such a magnitude that the company has chosen to provide for a closure of the operations.

The total cost for these provisions amounts to SEK 400 million and has been reported as a comparison distortion item.

Consequences of COVID-19

Alfa Laval has global and local crisis teams in place for close monitoring and swift response to changes in the situation to secure the health and safety of our employees. As a result of successful vaccination programmes Alfa Laval has been able to step by step open up the offices again after the pandemic depending on the situation in each country. Current and possible future extensive outbreaks of COVID-19 in China are a concern considering Alfa Laval's large manufacturing foot print in China.

Asbestos-related lawsuits

The Alfa Laval Group was as of December 31, 2022, named as a co-defendant in a total of 485 asbestos-related lawsuits with a total of approximately 485 plaintiffs. Alfa Laval strongly believes the claims against the Group are without merit and intends to vigorously contest each lawsuit.

Based on current information and Alfa Laval's understanding of these lawsuits, Alfa Laval continues to believe that these lawsuits will not have a material adverse effect on the Group's financial condition or results of operation.

Restructuring program

A restructuring program covering parts of the Marine Division and the Business Unit for Welded Heat Exchangers in the Energy Division has been initiated needed to adjust capacity imbalances in the supply organization and manage the impact as we transit from fossil to sustainable energy solutions. A total of approximately 430 employees will be affected.

The total cost for the restructuring program amounts to SEK 367 million and has been reported as a comparison distortion item.

Result for the parent company

The parent company's result after financial items for 2022 was SEK 95 (666) million, out of which dividends from subsidiaries SEK 62 (682) million, net interests SEK 44 (-) million, realised and unrealised exchange rate gains and losses SEK 2 (0) million, costs related to the listing SEK -4 (-4) million, fees to the Board SEK -9 (-10) million, cost for annual report and annual general meeting SEK -1 (-1) million and other operating income and operating costs the remaining SEK 1 (-1) million. Change of tax allocation reserve has been made with SEK 578 (-423) million. Group contributions amount to SEK 509 (1,896) million. Tax on this year's result amount to SEK -241 (-303) million. Net income for the year was SEK 941 (1,836) million.

Unrestricted equity for the parent company

The unrestricted equity of Alfa Laval AB (publ) was SEK 6,507 (8,707) million.

Disclosure on share related information

Paragraph 2a in chapter 6 of the Swedish Annual Accounts Act requires listed companies to disclose certain information relating to the company's shares in the Board of Directors' Report. This information is found in the following paragraphs, in the "Changes in consolidated equity" and in Note 6.

Proposed disposition of earnings

The Board of Directors propose a dividend of SEK 6.00 (6.00) per share corresponding to SEK 2,480 (2,480) million and that the remaining income available for distribution in Alfa Laval AB (publ) of SEK 4,027 (6,227) million be carried forward, see Note 40.

The Board of Directors are of the opinion that the proposed dividend is consistent with the requirements that the type and size of operations, the associated risks, the capital needs, liquidity and financial position put on the company.

Repurchase of shares

The Annual General Meeting 2021 mandated the Board to decide on repurchase of up to 5 percent of the issued shares with the purpose to cancel the repurchased shares and reduce the share capital.

Specification of repurchase of shares

	2021			2022		
	Second quarter	Third quarter	Fjärde quarter	First quarter	Second quarter	Total
Number of repurchased shares	1,153,000	1,500,320	1,407,680	1,726,992	342,008	6,130,000
Percentage of outstanding shares	0.27%	0.36%	0.34%	0.41%	0.08%	1.46%
Cash-out and decrease in parent company and consolidated equity (SEK millions)	330	510	499	539	122	2,000

Cancellation of repurchased shares and a corresponding bonus issue

On March 18, 2022 when the notice to the Annual General Meeting was sent the number of repurchased shares was 5,579,492. The Annual General Meeting 2022 decided to cancel these repurchased shares. Cancellation of the shares means that the share capital decreased with SEK 15 million. At the same time the Annual General Meeting decided to increase the share capital through a bonus issue of the same amount without issuing any new shares. In this way the size of the share capital was restored and the company did not have to obtain permission from Bolagsverket or if disputed the local court to cancel the repurchased shares. This means that the number of shares has developed as follows:

Specification of number of shares

	Number
Number of shares at January 1, 2022	419,456,315
Cancellation of re-purchased shares at May 16, 2022	-5,579,492
Number of shares at December 31, 2022	413,876,823

This means that 550,508 shares repurchased in the period March 21, 2022 to April 25, 2022 under the old mandate are left to be cancelled by the Annual General Meeting 2023.

Share buy-back program

The Annual General Meeting 2022 mandated the Board to decide on repurchase of up to 5 percent of the issued shares with the purpose to cancel the repurchased shares and reduce the share capital at the Annual General Meeting 2023. The reduction of the share capital will be met by a corresponding bonus issue without issuing any new shares so that the size of the share capital is restored.

No shares have been repurchased under this new mandate in 2022.

Proposal to cancel repurchased shares and make a bonus issue

The Board will propose to the Annual General Meeting 2023 to cancel the repurchased shares. At December 31, 2022, 550,508 shares are held by the company. Cancellation of these shares means that the share capital will decrease with SEK 1 million. At the same time the Board will propose that the Annual General Meeting decides to increase the share capital by a bonus issue with the same amount without issuing any new shares. In this way the size of the share capital is restored and the company avoids having to obtain permission from Bolagsverket or if disputed the local court to cancel the repurchased shares.

It is the number of repurchased shares when the notice to the Annual General Meeting is sent that is the basis for the decision on cancellation of shares at the Annual General Meeting.

Outlook for the first quarter

In the fourth quarter and full year 2022 report issued on February 2, 2023 the President and Chief Executive Officer Tom Erixon stated:

"We expect demand in the first quarter to be about the same as in the fourth quarter."

Earlier published outlook (October 25, 2022): "We expect demand in the fourth quarter to be about the same as in the third quarter."

Date for the next financial reports 2023

Alfa Laval will publish financial reports at the following dates:

Interim report for the first quarter	April 25
Interim report for the second quarter	July 20
Interim report for the third quarter	October 25

Consolidated cash flows

Consolidated cash flows			
SEK millions	*Note*	2022	2021
Operating activities			
Operating income		6,519	6,126
Adjustment for depreciation, amortisation and write down		2,392	1,987
Adjustment for other non-cash items		105	147
		9,016	8,260
Taxes paid		-1,834	-1,599
		7,182	6,661
Changes in working capital:			
Increase(-)/decrease(+) of receivables		-2,155	-591
Increase(-)/decrease(+) of inventories		-3,140	-797
Increase(+)/decrease(-) of liabilities		2,058	480
Increase(+)/decrease(-) of provisions		-654	-489
Increase(-)/decrease(+) in working capital		**-3,891**	**-1,397**
		3,291	**5,264**
Investing activities			
Investments in fixed assets (Capex)		-1,853	-1,229
Divestment of fixed assets		20	24
Acquisition of businesses	*17*	-3,685	-3,828
Divestment of businesses		–	8
		-5,518	**-5,025**
Financing activities			
Received interests and dividends		99	79
Paid interests		-290	-210
Realised financial exchange gains		68	258
Realised financial exchange losses		-147	-82
Repurchase of shares		-661	-1,339
Dividends to owners of the parent		-2,480	-2,307
Dividends to non-controlling interests		-12	-2
Increase(-) of financial assets		-457	-80
Decrease(+) of financial assets		1,002	3,033
Increase of loans		12,546	1,000
Amortisation of loans		-6,575	-2,431
		3,093	**-2,081**
Cash flow for the year		**866**	**-1,842**
Cash and cash equivalents at the beginning of the year		3,356	5,150
Translation difference in cash and cash equivalents		130	48
Cash and cash equivalents at the end of the year	*26*	**4,352**	**3,356**
Free cash flow per share (SEK) *		-5.38	0.57
Capex in relation to net sales		3.6%	3.0%
Average number of shares**		413,637,227	418,021,440

* Free cash flow is the sum of cash flows from operating and investing activities.

** Average number of shares has been impacted by repurchase of shares.

Comments to the consolidated cash flows

For further comments on certain individual lines in the cash flow statement, reference is made to Notes 17 and 26.

Cash flows from operating activities
The decrease in cash flows from operating activities in 2022 is explained by the increase in working capital.

Cash and cash equivalents
The item cash and cash equivalents is mainly relating to bank deposits and liquid deposits.

Cash flow
Cash flow from operating and investing activities amounted to SEK -2,227 (239) million during 2022. Out of this, acquisitions of businesses were SEK -3,685 (-3,828) million whereas divestments generated cash of SEK - (8) million.

Adjustment for other non-cash items
Other non-cash items are mainly referring to realised gains and losses in connection with sale of assets. These have to be eliminated since the cash impact of divestments of fixed assets and businesses are reported separately under cash flow from investing activities.

Working capital
Working capital increased by SEK 3,891 (1,397) million during 2022, mainly due to increased inventories to secure our ability to deliver.

Investments
Investments in property, plant and equipment amounted to SEK 1,853 (1,229) million during 2022.

A number of structural changes in the form of new or improved buildings including move of production and productivity increasing investments for improved cost and availability have been implemented or started during the year, among others in Kolding in Denmark and Jiang Yin, Kunshan and Qingdao in China. Examples of investments made for the individual product groups are as follows:

Heat exchangers
Investments have been made in machines for increased capacity and manufacturing of new products and in productivity enhancing equipment in Ronneby in Sweden, San Bonifacio in Italy and Jiang Yin in China for brazed heat exchangers. Additional investments have been made in Jiang Yin in China and in Lund in Sweden in equipment to widen the product range and increase the productivity for gasketed heat exchangers.

High speed separators
Continued capacity investments in machining equipment for separators have been made in Eskilstuna in Sweden, Krakow in Poland and Pune in India.

Decanters
Capacity and productivity enhancing investments have been made in Pune in India.

Pumps and valves
Capacity and productivity enhancing investments have been made in Kolding in Denmark and Kunshan in China. The announced complete transfer of manufacturing from Eastbourne in UK to Kolding in Denmark was initiated during the year.

Depreciations
Depreciation, excluding allocated step-up values, amounted to SEK 1,449 (1,191) million during the year.

Acquisitions and disposals
For a further analysis of the impact on the cash flow by acquisitions and disposals, see Note 17.

Free cash flow per share
The free cash flow per share is SEK -5.38 (0.57).

Consolidated comprehensive income

Consolidated comprehensive income			
SEK millions	*Note*	2022	2021
Net sales	*1, 2, 3, 4, 36*	52,135	40,911
Cost of goods sold	*9*	-34,489	-26,401
Gross profit		17,646	14,510
Sales costs	*5, 6, 9*	-5,634	-4,443
Administration costs	*5, 6, 7, 9*	-2,305	-1,940
Research and development costs	*9*	-1,356	-1,159
Other operating income	*8*	772	910
Other operating costs	*8, 9*	-2,652	-1,828
Share of result in joint ventures	*34*	48	76
Operating income		6,519	6,126
Dividends and other financial income and costs	*10*	5	35
Interest income and financial exchange rate gains	*11*	267	362
Interest expense and financial exchange rate losses	*11*	-612	-381
Result after financial items		6,179	6,142
Tax on this year's result	*16*	-1,574	-1,308
Other taxes	*16*	-36	-33
Net income for the year		**4,569**	**4,801**
Other comprehensive income:			
Items that will subsequently be reclassified to net income			
Cash flow hedges		-346	-434
Translation difference		1,872	1,681
Deferred tax on other comprehensive income	*16*	211	66
Sum		1,737	1,313
Items that will subsequently not be reclassified to net income			
Revaluations of defined benefit obligations		329	567
Market valuation of external shares	*16*	-13	357
Deferred tax on other comprehensive income		-109	-141
Sum		207	783
Comprehensive income for the year		**6,513**	**6,897**
Net income attributable to:			
Owners of the parent		4,503	4,759
Non-controlling interests		66	42
Earnings per share (SEK)		10.89	11.38
Average number of shares*		413,637,227	418,021,440
Comprehensive income attributable to:			
Owners of the parent		6,427	6,834
Non-controlling interests		86	63

* Average number of shares has been impacted by repurchase of shares.

Comments to the consolidated comprehensive income

For comments on the individual lines in the consolidated comprehensive income statement, reference is made to Notes 1 to 16 and Notes 34, 36 and 38. For comments on the operating segments, see Note 1.

As a basis for comments on the various main items of the consolidated comprehensive income statement, please find a comparison between the last two years:

Income analysis

Consolidated

SEK millions	2022	2021
Net sales	52,135	40,911
Adjusted gross profit *	18,589	15,306
- adjusted gross margin (%) *	***35.7***	***37.4***
Expenses **	-8,911	-7,001
- in % of net sales	*17.1*	*17.1*
Adjusted EBITDA *	**9,678**	**8,305**
*- adjusted EBITDA margin (%) **	*18.6*	*20.3*
Depreciation	-1,449	-1,191
Adjusted EBITA *	**8,229**	**7,114**
- adjusted EBITA margin (%) *	***15.8***	***17.4***
Amortisation of step-up values	-943	-796
Comparison distortion items	-767	-192
Operating income	6,519	6,126

* Alternative performance measures. ** Excluding comparison distortion items.

The gross profit has been affected positively by an increased sales volume and negatively by low factory loads in Business Unit Welded Heat Exchangers and in Marine Pumping Systems and invoiced backlog taken prior to 2022. The underlying negative contributions are being addressed through the restructuring programs to be implemented during 2023.

Sales and administration expenses amounted to SEK 7,939 (6,383) million, which corresponded to 15.2 (15.6) percent of net sales. Excluding currency effects and acquisition/divestment of businesses, sales and administration expenses were 10.9 percent higher than last year.

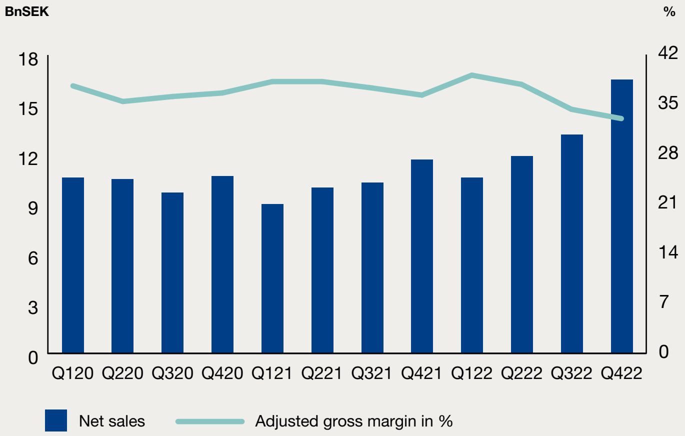
The costs for research and development have amounted to SEK 1,356 (1,159) million, corresponding to 2.6 (2.8) percent of net sales. Excluding currency effects and acquisition/divestment of businesses, the costs for research and development have increased by 8.7 percent compared to last year.

Earnings per share was SEK 10.89 (11.38) for 2022. The corresponding figure excluding amortisation of step-up values and the corresponding tax, was SEK 12.78 (12.98).

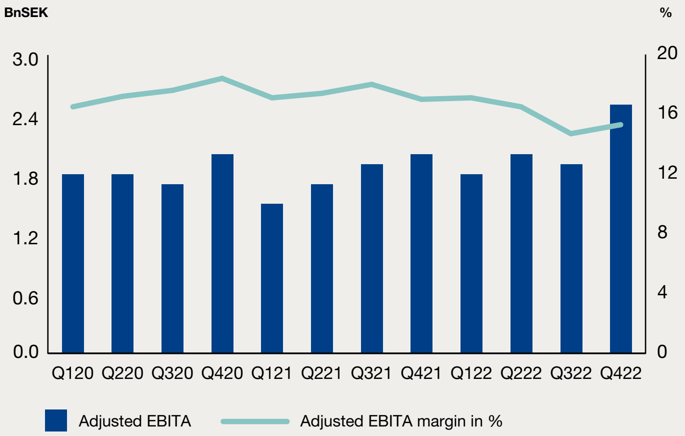
Compared with last year Alfa Laval has been affected during 2022 by exchange rate differences, both through translation differences and through the net exposure when trading in foreign currencies. The effect on adjusted EBITA has been calculated to totally about SEK 400 (-50) million for 2022 compared with last year. The effect of the exchange rate variations has been limited through exchange rate hedging.

In order to illustrate the quarterly development, the last 12 quarters are shown below for four of the parameters in the income analysis:

Net sales & Adjusted gross margin



Adjusted EBITA



Comparison distortion items

Consolidated

SEK millions	2022	2021
Other operating income		
Comparison distortion items:		
– Realised gain on sale of businesses	–	3
– Realised gain on sale of properties	–	9
Other operating costs		
Comparison distortion items:		
– Provision for financial consequences of Russia's war on Ukraine	-400	–
– Restructuring costs	-367	-204
Net comparison distortion items	**-767**	**-192**

The comparison distortion items during 2022 are relating to costs triggered by Russia's war on Ukraine and for a restructuring programme for parts of the Marine Division and the Business Unit for Welded Heat Exchangers in the Energy Division to adjust capacity imbalances in the supply organization and manage the impact as we transit from fossil to sustainable energy solutions. See description in the Board of Directors' report for more details.

The comparison distortion items during 2021 were relating to the final step in the restructuring program that was started during the fourth quarter 2020 and the realised gains on the sale of the remaining air heat exchanger operation in India to LU-VE and on the sale of a property in India. The total restructuring cost including write down of goodwill was SEK 945 million, out of which SEK 741 was charged in 2020 and the remaining SEK 204 was charged in 2021.

Consolidated financial net and taxes

The financial net for 2022 was SEK -219 (-137) million, excluding realised and unrealised exchange rate losses and gains. The main elements of costs were interest on the debt to the banking syndicate of SEK -18 (-10) million, interest on the bilateral term loans of SEK -20 (-2) million, interest on the corporate bonds of SEK -127 (-83) million, interest on the commercial paper programme of SEK -10 (-0) and a net of dividends, changes in fair value and other interest income and interest costs of SEK -44 (-42) million.

The net of realised and unrealised exchange rate differences was SEK -121 (153) million.

The tax on the result after financial items was SEK -1,610 (-1,341) million in 2022.

Accumulated translation differences *

Consolidated

SEK millions

Year	Main explanation to translation differences	Change	Accumulated	Pre-tax effect on change by hedging measures
Formation of the Group				
2000	The EUR was appreciated by 6 %, which affected the EUR based acquisition loans	-94	-94	-312
2001	The USD was appreciated by 10.7 %	97	3	-105
2002	The USD was depreciated by 16.7 %	-190	-187	165
2003	The USD was depreciated by 17.5 %	-38	-225	195
2004	The USD was depreciated by 9.0 %	-103	-328	-19
2005	The USD was appreciated by 20.3 % and the EUR was appreciated by 4.8 %	264	-64	-65
2006	The USD was depreciated by 13.5 % and the EUR was depreciated by 4.0 %	-269	-333	56
2007	The USD was depreciated by 5.7 % whereas the EUR was appreciated by 4.7 %	224	-109	13
2008	The USD was appreciated by 20.5 % and the EUR was appreciated by 16.2 %	850	744	-468
2009	The USD was depreciated by 7.5 % and the EUR was depreciated by 6.0 %	-392	352	220
2010	The USD was depreciated by 5.7 % and the EUR was depreciated by 12.9 %	-554	-202	99
2011	The USD was appreciated by 1.4 % whereas the EUR was depreciated by 0.8 %	-254	-456	34
2012	The USD was depreciated by 5.8 % and the EUR was depreciated by 3.6 %	-798	-1,254	214
2013	The USD was appreciated by 0.3 % and the EUR was appreciated by 4.1 %	39	-1,215	-83
2014	The USD was appreciated by 20.5 % and the EUR was appreciated by 6.3 %	439	-776	-1,033
2015	The USD was appreciated by 6.6 % whereas the EUR was depreciated by 4.0 %	-1,056	-1,832	301
2016	The USD was appreciated by 8.6 % and the EUR was appreciated by 4.6 %	1,882	50	-643
2017	The USD was depreciated by 9.4 % whereas the EUR was appreciated by 2.8 %	-1,339	-1,289	-207
2018	The USD was appreciated by 8.8 % and the EUR was appreciated by 4.2 %	641	-648	-571
2019	The USD was appreciated by 4.2 % and the EUR was appreciated by 2.1 %	632	-16	-288
2020	The USD was depreciated by 12.2 % and the EUR was depreciated by 3.7 %	-2,454	-2,470	313
2021	The USD was appreciated by 10.2 % and the EUR was appreciated by 1.5 %	1,681	-789	-165
2022	The USD was appreciated by 15.6 % and the EUR was appreciated by 8.9 %	1,872	1,083	-946

* Reported against other comprehensive income. Prior to 2009 these translation differences were reported against equity.

Consolidated financial position

Consolidated financial position			
ASSETS			
SEK millions	*Note*	2022	2021
Non-current assets			
Intangible assets	*17, 18*		
Patents and unpatented know-how		2,633	2,049
Trademarks		1,978	962
Licenses, renting rights and similar rights		18	32
Internally generated intangible assets		530	398
Goodwill		26,258	22,480
		31,417	25,921
Property, plant and equipment	*17, 19*		
Real estate		3,611	3,060
Machinery and other technical installations		2,423	2,370
Equipment, tools and installations		1,058	846
Construction in progress and advances to suppliers concerning property, plant and equipment		1,089	475
Right-of-use assets		2,529	2,324
		10,710	9,075
Other non-current assets			
Other long-term securities	*13, 14, 20*	475	1,396
Pension assets	*27*	201	70
Derivative assets	*13, 14, 15*	95	56
Deferred tax assets	*16*	1,895	1,694
		2,666	3,216
Total non-current assets		**44,793**	**38,212**
Current assets			
Inventories	*21*	14,775	10,525
Assets held for sale	*19*	100	25
Current receivables			
Accounts receivable	*13, 22, 36*	9,717	6,738
Current tax assets		763	883
Other receivables	*13, 23*	5,338	3,446
Prepaid costs and accrued income	*13, 24*	495	427
Derivative assets	*13, 14, 15*	605	458
		16,918	11,952
Current deposits			
Other current deposits	*13, 25*	311	291
Cash and cash equivalents	*13, 26*	4,352	3,356
Total current assets		**36,456**	**26,149**
TOTAL ASSETS		**81,249**	**64,361**

Consolidated financial position, continued

EQUITY AND LIABILITIES			
SEK millions	*Note*	2022	2021
Equity			
Attributable to owners of the parent			
Share capital		1,117	1,117
Other contributed capital		2,770	2,770
Other reserves		196	-1,728
Retained earnings		31,299	29,937
		35,382	32,096
Attributable to non-controlling interests	*12*	322	248
Total equity		**35,704**	**32,344**
Non-current liabilities			
Liabilities to credit institutions etc	*13, 29*	13,362	3,059
Lease liabilities	*13, 35*	1,549	1,453
Provisions for pensions and similar commitments	*27*	1,192	1,907
Provision for deferred tax	*16*	2,293	1,838
Other provisions	*28*	450	412
Derivative liabilities	*13, 14, 15*	140	63
Total non-current liabilities		**18,986**	**8,732**
Current liabilities			
Other current liabilities			
Liabilities to credit institutions etc	*13, 29*	1,700	5,185
Advances from customers		6,634	4,824
Accounts payable	*13*	4,891	3,371
Notes payable	*13*	423	131
Current tax liabilities		893	1,055
Lease liabilities	*13, 35*	1,122	974
Other liabilities	*13, 30*	5,269	3,557
Other provisions	*28*	2,164	1,811
Accrued costs and prepaid income	*13, 31*	2,770	2,171
Derivative liabilities	*13, 14, 15*	693	206
Total current liabilities		**26,559**	**23,285**
Total liabilities		**45,545**	**32,017**
TOTAL EQUITY AND LIABILITIES		**81,249**	**64,361**

Comments on the consolidated financial position

For comments on the individual lines in the statement on financial position, reference is made to Notes 12 to 36. For comments on the operating segments, see Note 1.

Capital employed
The average capital employed including goodwill and step-up values amounted to SEK 43,060 (34,677) million during the year.

Return on capital employed
The return on average capital employed including goodwill and step-up values amounted to 17.3 (20.0) percent during the year.

Capital turnover rate
The capital turnover rate calculated on the average capital employed including goodwill and step-up values amounted to 1.2 (1.2) times for the year.

Return on equity
Net income in relation to the average equity was 13.5 (15.8) percent during the year.

Solidity
The solidity, that is the equity in relation to total assets, was 43.9 (50.3) percent at the end of the year.

Net debt
The net debt was SEK 13,070 (7,024) million at the end of the year.

Net debt to EBITDA
Net debt in relation to EBITDA was 1.47 (0.87) times at the end of December.

Debt ratio
The debt ratio, that is the net debt in relation to equity, was 0.37 (0.22) times at the end of December.

Changes in consolidated equity

Changes in consolidated equity

Attributable to:	**Owners of the parent**								**Non-controlling interests**			**Total**
			Other reserves									
SEK millions	Share capital	Other contributed capital	Cash flow hedges	Market valuation of external shares	Translation differences	Revaluations	Retained earnings	Subtotal	Translation differences	Retained earnings	Subtotal	
As of December 31, 2020	**1,117**	**2,770**	**495**	**-123**	**-2,447**	**-1,728**	**28,824**	**28,908**	**7**	**156**	**163**	**29,071**
2021												
Comprehensive income												
Net income	–	–	–	–	–	–	4,759	4,759	–	42	42	4,801
Other comprehensive income	–	–	-347	340	1 639	443	–	2,075	21	–	21	2,096
Comprehensive income	–	–	-347	340	1 639	443	4,759	6,834	21	42	63	6,897
Transactions with shareholders												
Repurchase of shares	–	–	–	–	–	–	-1,339	-1,339	–	–	–	-1,339
Non-controlling interests in acquired companies	–	–	–	–	–	–	–	–	–	24	24	24
Dividends to owners of the parent	–	–	–	–	–	–	-2,307	-2,307	–	–	–	-2,307
Dividends to non-controlling interests	–	–	–	–	–	–	–	–	–	-2	-2	-2
As of December 31, 2021	**1,117**	**2,770**	**148**	**217**	**-808**	**-1,285**	**29,937**	**32,096**	**28**	**220**	**248**	**32,344**
2022												
Comprehensive income												
Net income	–	–	–	–	–	–	4,503	4,503	–	66	66	4,569
Other comprehensive income	–	–	-276	-41	1,993	248	–	1,924	20	–	20	1,944
Comprehensive income	–	–	-276	-41	1,993	248	4,503	6,427	20	66	86	6,513
Transactions with shareholders												
Repurchase of shares	–	–	–	–	–	–	-661	-661	–	–	–	-661
Cancellation of repurchased shares	-15	–	–	–	–	–	15	–	–	–	–	–
Bonus issue of shares without issuing any new shares	15	–	–	–	–	–	-15	–	–	–	–	–
Non-controlling interests in acquired companies	–	–	–	–	–	–	–	–	–	0	0	0
Dividends to owners of the parent	–	–	–	–	–	–	-2,480	-2,480	–	–	–	-2,480
Dividends to non-controlling interests	–	–	–	–	–	–	–	–	–	-12	-12	-12
As of December 31, 2022	**1,117**	**2,770**	**-128**	**176**	**1,185**	**-1,037**	**31,299**	**35,382**	**48**	**274**	**322**	**35,704**

Specification of changes in number of shares and share capital

Year	Event	Date	Change in number of shares	Total number of shares	Change in share capital SEK millions	Total share capital SEK millions
2000	Company formation	March 27, 2000	10,000,000	10,000,000	0.1	0.1
	New issue of shares	August 24, 2000	27,496,325	37,496,325	0.3	0.4
2002	Bonus issue of shares	May 3, 2002	37,496,325	74,992,650	0.4	1
	Bonus issue of shares	May 16, 2002	–	–	749	750
	New issue of shares	May 16, 2002	3,712,310	78,704,960	37	787
	New issue of shares	May 17, 2002	32,967,033	111,671,993	330	1,117
2008	Cancellation of repurchased shares	May 27, 2008	-4,323,639	107,348,354	–43	
	Bonus issue of shares	May 27, 2008	–	107,348,354	43	1,117
	Split 4:1	June 10, 2008	322,045,062	429,393,416	–	1,117
2009	Cancellation of repurchased shares	July 9, 2009	-7,353,950	422,039,466	–19	
	Bonus issue of shares	July 9, 2009	–	422,039,466	19	1,117
2011	Cancellation of repurchased shares	May 16, 2011	-2,583,151	419,456,315	–7	
	Bonus issue of shares	May 16, 2011	–	419,456,315	7	1,117
2022	Cancellation of repurchased shares	May 16, 2022	-5,579,492	413,876,823	–15	
	Bonus issue of shares	May 16, 2022	–	413,876,823	15	1,117

Comments on changes in consolidated equity

The articles of association of Alfa Laval AB (publ) state that the share capital should be between SEK 745,000,000 and 2,980,000,000 and that the number of shares should be between 298,000,000 and 1,192,000,000.

At January 1, 2022 the share capital of SEK 1,116,719,930 was divided into 419,456,315 shares. At the Annual General Meeting 2022 5,579,492 shares have been cancelled, which decreased the share capital with 14,584,300. At the same time a bonus issue was made with the same amount without issuing any new shares, which restored the size of the share capital. At the end of the year the share capital of SEK 1,116,719,930 was divided into 413,876,823 shares.

The Annual General Meeting 2021 mandated the Board to decide on repurchase of up to 5 percent of the issued shares with the purpose to cancel the repurchased shares and reduce the share capital. In total, 6,130,000 shares were repurchased under this repurchase programme. 550,508 of these shares were repurchased after the notice to the Annual General Meeting was sent and were not included in the cancellation of shares at the Annual General Meeting 2022. The Board will propose to the Annual General Meeting 2023 to cancel the remaining repurchased shares. Cancellation of 550,508 shares means that the share capital will decrease with SEK 1,485,377. At the same time the Board will propose that the Annual General Meeting decides to increase the share capital by a bonus issue with the same amount without issuing any new shares. In this way the size of the share capital is restored and the company avoids having to obtain permission from Bolagsverket or if disputed the local court to cancel the repurchased shares. If the Annual General Meeting decides to cancel the repurchased shares and thereby reduce the share capital and make the bonus issue the share capital will remain at SEK 1,116,719,930 but divided on 413,326,315 shares.

It is the number of repurchased shares when the notice to the Annual General Meeting is sent that is the basis for the decision on cancellation of shares at the Annual General Meeting.

The company has only issued one type of shares and all these have equal rights. There are no restrictions in law or in the articles of association in the negotiability of the shares.

The only shareholder holding more than 10 percent of the shares is Tetra Laval International SA, Switzerland, who owns 29.5 (29.1) percent. The employees of the company do not own any shares in the company through company pension trusts.

No restrictions exist in how many votes that each shareholder can represent at a general meeting of shareholders. The company has no knowledge of any agreements between shareholders that would limit the negotiability of their shares.

The articles of association stipulate that members of the Board are elected at the Annual General Meeting. Election or discharge of members of the Board is otherwise regulated by the provisions in the Swedish Companies Act and the Swedish Corporate Governance Code. According to the Companies Act changes in the articles of association are decided at general meetings of shareholders.

The senior credit facility with the banking syndicate and the corporate bonds each contain conditions that give the lenders the opportunity to terminate the loans and declare them due and payable if there is a change of control of the company through an acquisition of more than 50 and 30 percent respectively of the total number of shares.

The possibilities to distribute unappropriated profits from foreign subsidiaries are limited in certain countries due to local legislation. These limitations are not material. The limitations relate to:

- the existence of general restrictions concerning restricted equity in many countries,

- that subsidiaries in for instance China and India cannot take up loans to pay dividends, which limits the size of the dividends and

- rules on interest deduction limitations and thin capitalisation in many countries, for instance the U.S., Denmark and Norway limit the possibilities for these countries to increase debt to pay dividends.

Parent company cash flows

Parent company cash flows		
SEK millions	2022	2021
Cash flow from operating activities		
Operating income	-13	-16
Taxes paid	-307	-379
	-320	-395
Changes in working capital:		
Increase(-)/decrease(+) of receivables	1,430	3,300
Increase(+)/decrease(-) of liabilities	8	1
Increase(-)/decrease(+) in working capital	**1,438**	**3,301**
	1,118	**2,906**
Cash flow from investing activities		
Investment in subsidiaries	–	–
	–	**–**
Cash flow from financing activities		
Received interests	44	0
Repurchase of shares	-661	-1,339
Received dividends from subsidiaries	62	682
Paid dividends	-2,480	-2,307
Received group contribution	1,896	83
Paid group contribution	0	-4
	-1,139	**-2,885**
Cash flow for the year	**-21**	**21**
Cash and cash equivalents at the beginning of the year	21	–
Cash and cash equivalents at the end of the year	**–**	**21**

Parent company income

Parent company income *		
SEK millions	2022	2021
Administration costs	-14	-15
Other operating income	2	0
Other operating costs	-1	-1
Operating income	-13	-16
Dividends from subsidiaries	62	682
Interest income and similar result items	46	0
Interest expenses and similar result items	0	0
Result after financial items	95	666
Change of tax allocation reserve	578	-423
Group contributions	509	1,896
Result before tax	1,182	2,139
Tax on this year's result	-241	-303
Net income for the year	**941**	**1,836**

* The parent company income statement also constitutes its comprehensive income statement.

Parent company financial position

Parent company financial position

SEK millions	*Note*	2022	2021
ASSETS			
Non-current assets			
Financial non-current assets			
Shares in group companies	*20*	4,669	4,669
Current assets			
Current receivables			
Receivables on group companies		6,402	9,218
Current tax assets		139	73
Other receivables		2	2
		6,543	9,293
Cash and cash equivalents		–	21
Total current assets		6,543	9,314
TOTAL ASSETS		**11,212**	**13,983**
EQUITY AND LIABILITIES			
Equity			
Restricted equity			
Share capital		1,117	1,117
Statutory reserve		1,270	1,270
		2,387	2,387
Unrestricted equity			
Profit brought forward		5,566	6,872
Net income for the year		941	1,836
		6,507	8,707
Total equity		**8,894**	**11,094**
Untaxed reserves			
Tax allocation reserve, taxation 2017		–	578
Tax allocation reserve, taxation 2018		391	391
Tax allocation reserve, taxation 2019		698	698
Tax allocation reserve, taxation 2020		614	614
Tax allocation reserve, taxation 2021		99	99
Tax allocation reserve, taxation 2022		491	491
		2,293	2,871
Current liabilities			
Liabilities to group companies		22	14
Accounts payable		1	1
Other liabilities		2	3
		25	18
TOTAL EQUITY AND LIABILITIES		**11,212**	**13,983**

Changes in parent company equity

Changes in parent company equity				
SEK millions	Share capital	Statutory reserve	Unrestricted equity	Total
As of December 31, 2020	**1,117**	**1,270**	**10,518**	**12,905**
2021				
Comprehensive income				
Net income	–	–	1,836	1,836
	–	–	1,836	1,836
Transactions with shareholders				
Repurchase of shares	–	–	-1,339	-1,339
Dividends	–	–	-2,307	-2,307
As of December 31, 2021	**1,117**	**1,270**	**8,707**	**11,094**
2022				
Comprehensive income				
Net income	–	–	941	941
	–	–	941	941
Transactions with shareholders				
Repurchase of shares	–	–	-661	-661
Dividends	–	–	-2,480	-2,480
As of December 31, 2022	**1,117**	**1,270**	**6,507**	**8,894**

The share capital of SEK 1,116,719,930 (1,116,719,930) is divided among 413,876,823 (419,456,315) shares.

Notes to the financial statements

Accounting principles

The accounting principles mentioned below are only the ones that are relevant for the parent company and the consolidated group.

Basis of preparation

The consolidated financial statements have been prepared on a historical cost basis, except for certain financial instruments including derivatives that are valued at fair value. The statements are presented in SEK millions, unless otherwise stated.

Statement of compliance

Alfa Laval applies International Financial Reporting Standards (IFRS) as adopted by the European Union. Furthermore, recommendation RFR 1 "Supplementary accounting principles for consolidated groups" from the Council for Financial Reporting in Sweden is applied. Alfa Laval follows the Guidelines on Alternative Performance Measures issued by ESMA (European Securities and Markets Authority).

The accounting and valuation principles of the parent company comply with the Swedish Annual Accounts Act and the recommendation RFR 2 "Accounting for legal entities" issued by the Council for Financial Reporting in Sweden.

Changed/implemented accounting principles

The company has chosen to only comment the changed accounting principles that are relevant for the company's financial reporting. During 2022 and 2021 no changed accounting principles have been implemented.

Alternative Performance Measures

In the annual report, alternative performance measures are used. See page 198 for definitions. Alfa Laval follows the Guidelines on Alternative Performance Measures issued by ESMA (European Securities and Markets Authority).

Critical accounting principles

IFRS 3 "Business Combinations" means that goodwill and intangible assets with indefinite useful life are not amortised. They are instead tested for impairment both annually and when there is an indication. The effect of IFRS 3 can be considerable for the Group if the profitability within the Group or parts of the Group goes down in the future, since this could trigger a substantial impairment write down of the goodwill according to IAS 36 "Impairment of Assets". Such a write down will affect net income and thereby the financial position of the Group. The reported goodwill is SEK 26,258 (22,480) million at the end of the year. No intangible assets with indefinite useful life other than goodwill exist.

The Group has defined benefit plans, which are reported according to IAS 19 ”Employee Benefits”. This means that the plan assets are valued at fair value and that the present value of the benefit obligations in the defined benefit plans is decided through yearly actuarial calculations made by independent actuaries. If the value of the plan assets starts to decrease at the same time as the actuarial assumptions increase the benefit obligations the combined effect could result in a substantial deficit. The monetary magnitude comes from the fact that the deficit is the difference between two large numbers. The effect on profit and loss however only affects other comprehensive income and not net income. The risk has been limited since many of these defined benefit schemes are closed for new participants and replaced by defined contribution schemes.

The Group's reporting of provisions according to IAS 37 means that SEK 2,614 (2,223) million is reported as other provisions. This constitutes 3.2 (3.5) percent of the Group's assets and is important for the assessment of the Group's financial position, not the least since provisions normally are based on judgements of probability and estimates of costs and risks. If the accounting principles for provision would be changed sometime in the future, this could have a substantial impact on the Group's financial position.

Key sources of estimation uncertainty

The key source of estimation uncertainty is related to the impairment test of goodwill, since the testing is based on certain assumptions concerning future cash flows. See the section on critical accounting principles above for further details.

Judgements

In applying the accounting policies Management has made various judgements, apart from those involving estimations, that can significantly affect the amounts recognised in the financial statements. These judgements mainly relate to:

- probability in connection with business risks;
- the probable outcome of claims;
- the probable outcome of litigations;
- determination of percentage of completion in contracts with customers recognised over time;
- recoverability of accounts receivable;
- obsolescence in inventory; and
- classification of financial instruments.

Associates

The Group does not own shares in any material companies that fulfil the definition of an associate in IAS 28 ”Investments in Associates", that is where the ownership is between 20 and 50 percent.

Borrowing costs

Borrowing costs are accounted for according to IAS 23 ”Borrowing Costs", which means that the borrowing costs are charged to the profit and loss in the period to which they relate.

Transaction costs that arise in connection with raising a loan are capitalised and amortised over the maturity of the loan. The capitalised amount is reported net against the raised loan.

Business combinations – consolidation principles

The consolidated financial statements have been prepared according to IFRS 3 "Business Combinations" and IFRS 10 "Consolidated financial statements".

An entity shall be consolidated if a decisive influence is present. Control (decisive influence) is present when Alfa Laval has:

- power over the investee, which is described as having rights to direct the activities that significantly affect the investee's returns;
- exposure or rights to variable returns from the involvement in the investee; and
- the ability to use its power over the investee to affect the amount of the investor's returns.

A decisive influence does not need to arise purely through ownership of shares (voting rights). An investor can have a decisive influence over another entity without holding the majority of the shares. An entity must be consolidated until the day the control ceases, even if the control is present only during a limited period.

The consolidated financial statements include the parent company Alfa Laval AB (publ) and the subsidiaries in which it has a decisive influence.

The statement on consolidated financial position has been prepared in accordance with the purchase method, which means that the book value of shares in the subsidiaries is eliminated from the reported equity in the subsidiaries at the time of their acquisition. This means that the equity in the subsidiaries at the time of acquisition is not included in the consolidated equity.

The difference between the purchase price paid and the net assets of the acquired companies is allocated to the step-up values related to each type of asset, with any remainder accounted for as goodwill.

During the first 12 months after the acquisition the value of the goodwill is often preliminary. The reason to this is that experience has shown that there is some uncertainty linked to the different components of the purchase price allocation concerning:

- primarily the calculation of the allocation to different intangible step-up values, that are dependent on different judgemental questions and estimations;
- the calculation of tangible step-up values, that are dependent on external market valuations, which can extend in time before they can be finalised;
- adjustments of the purchase price contingent on contractual terms, that are dependent on the final size of the operating capital at the acquisition date, once this has been audited and the outcome has been approved by the parties; and
- the final value of the acquired equity, which is also dependent on the audit of the acquired closing balance sheet.

Since the goodwill is a residual that emerges once all other parameters in the purchase price allocation have been established, it will be preliminary and open for changes until all other values are final.

At acquisitions where there is a goodwill it should be stated what the goodwill is relating to. Since goodwill by definition is a residual, this is not always that easy. Generally speaking, the goodwill is usually relating to estimated synergies in procurement, logistics and corporate overheads. It can also be claimed that the goodwill is relating to the acquired entity's ability to over time recreate its intangible assets. Since the value of the intangible assets at the time of acquisition only can be calculated on the assets that exist then, no value can be attached to the patents etc. that the operations manage to create in the future partially as a replacement for the current ones and these are therefore referred to goodwill.

Goodwill and intangible assets with indefinite useful life are not amortised. These assets are instead tested for impairment both annually and when there is an indication. The impairment test is made according to IAS 36 "Impairment on assets".

Transaction costs are reported in net income. If the value of an additional purchase price is changed the change is reported in net income. In business combinations achieved in stages the goodwill is calculated and valued when the acquirer obtains control over a business. If the acquirer previously has reported an equity interest in the company the accumulated change in value of the holding is recognised in net income at the acquisition date. Changes in holdings in subsidiaries, where the majority owner does not lose its decisive influence, are reported in equity. This means that these transactions no longer will generate goodwill or lead to any gains or losses. In addition, the transaction will result in a transfer between owners of the parent and non-controlling interests in equity. If the non-controlling interest's share of reported losses is higher than its reported share of the equity, a negative non-controlling interest is reported.

Comparison distortion items

Items that do not have any link to the normal operations of the Group or that are of a non-recurring nature are classified as comparison distortion items. In the consolidated comprehensive income statement these are reported gross as a part of the most concerned lines but are specified separately in Note 8. To report these together with other items in the consolidated comprehensive income statement without this separate reporting in a note would have given a comparison distortion effect that would have made it difficult to judge the development of the ordinary operations for an outside viewer. Comparison distortion items affecting operating income are reported as a part of operating income, while comparison distortion items affecting the result after financial items are reported as a part of the financial net.

Comprehensive income

Alfa Laval has chosen to report the items in other comprehensive income as a part of one statement over comprehensive income instead of reporting the result down to net income for the year in one statement and the result below this down to comprehensive income in a separate statement.

Other comprehensive income is referring to items that are not transactions with shareholders and relates to for instance cash flow hedges, market valuation of external shares, translation differences and revaluations and deferred tax related to these.

Disclosures of interest in other entities

Information about interests in subsidiaries, associates, joint arrangements and unconsolidated structured entities must be disclosed in accordance with IFRS 12 "Disclosures of interest in other entities". The purpose with these disclosures is to enable the users of the financial reports to understand:

- the composition of the group;
- the effect of the interests on the financial statements; and
- any risks with the current interests.

Substantial qualitative and quantitative disclosures must be made of each interest. The disclosure requirements include the following:

- Financial information regarding subsidiaries with a considerable part of non-controlling interests.
- Disclosures on the judgments and estimation that have been made in judging whether an entity shall be consolidated or not and if an associate shall be accounted for or whether a joint arrangement is considered to be joint operation or a joint venture.
- Financial disclosures on interests in material associates and joint arrangements.

Disclosures relating to the company's shares

Paragraph 2a in chapter 6 of the Swedish Annual Accounts Act requires listed companies to disclose certain information relating to the company's shares in the Board of Directors' Report. This information is found at the end of the Board of Directors' Report, in the "Changes in consolidated equity" and in Note 6.

Employee benefits

Employee benefits are reported according to IAS 19 ”Employee Benefits”.

The present value of the benefit obligations in the defined benefit plans is decided through yearly actuarial calculations made by independent actuaries. The plan assets are valued at fair value. The net plan asset or liability is arrived at in the following way.

\+ the present value of the defined benefit obligation at December 31

\- the fair value of the plan assets at December 31

= a net liability if positive / a net asset if negative

If the calculation per plan gives a negative amount, thus resulting in an asset, the amount to be recognised as an asset for this particular plan is the lower of the two following figures:

- The above net negative amount.
- The present value of any economic benefits available in the form of refunds from the plan or reductions in future contributions to the plan. This is referred to as the asset ceiling.

The items that relate to the vesting of defined benefit pensions and gains and losses that arise when settling a pension liability and the financial net concerning the defined benefit plan are reported in the income statement above net income. Past service costs are recognised in the income statement already when the plan is amended or curtailed.

Actuarial gains and losses are accounted for currently in other comprehensive income. Changes in the obligations that relate to changes in actuarial assumptions are accounted for in other comprehensive income. None of these actuarial items will ever be reported in operating income but will instead remain in other comprehensive income.

The return on plan assets is calculated with the same interest rate as the discount rate. The difference between the actual return on plan assets and the interest income in the previous sentence is reported in other comprehensive income.

The plan assets are specified on different types of assets.

Sensitivity analysis must be made concerning reasonable changes in all assumptions made when calculating the pension liability.

The difference between short and long-term remunerations focuses on when the commitment is expected to be settled rather than the link to the employee's vesting of the commitment.

Termination benefits are accounted for at the earliest of the following – the time when the benefit offer cannot be withdrawn, alternatively in accordance with IAS 37 as a part of for instance restructuring the operations.

For Swedish entities the actuarial calculations also include future payments of special salary tax. The Swedish tax on returns from pension funds is reported currently as a cost in the profit and loss and are not included in the actuarial calculation for defined benefit pension plans.

The discount rate used to calculate the obligations is determined based on the market yields in each country at the closing date on high quality corporate bonds with a term that is consistent with the estimated term of the obligations. In countries that lack a deep market in such bonds the country's government bonds are used instead.

The costs for defined contribution plans are reported in Note 6.

The Swedish ITP plan is a multi-employer plan insured by Alecta. It is a defined benefit plan, but since the plan assets and liabilities cannot be allocated on each employer it is reported as a defined contribution plan according to item 30 in IAS 19. The construction of the plan does not enable Alecta to provide each employer with its share of the assets and liabilities or the information to be disclosed. The cost for the plan is reported together with the costs for other defined contribution plans in Note 6. Alecta reported a collective consolidation level at December 31, 2022 of 172 (172) percent. The collective consolidation level is defined as the fair value of Alecta's plan assets in percent of the insured pension commitments calculated according to Alecta's actuarial assumptions, which are not in accordance with IAS 19. Such a surplus can be distributed among the employers or the beneficiaries, but there is no agreement concerning this that enables the company to report a receivable on Alecta.

Events after the closing date

Events after the closing date are reported according to IAS 10 and the Swedish Annual Accounts Act in the notes.

Fair value measurement

IFRS 13 "Fair Value Measurement" describes how a fair value is established when such value is to be or may be used in accordance with each IFRS standard. In accordance with IFRS a fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (i.e. an exit price).

The standard presents elucidations on the fair value concept including the following areas:

- Concepts such as "highest and best use" and "valuation premise" are described. These are only applicable on non-financial assets.
- Market participants are assumed to act in a way that maximizes the value for all involved parties in situations where there is no guidance concerning the calculation of fair value in individual IFRS standards.
- The effect of so-called block discounts (large position in relation to the market) may never be included in the calculation of fair value.
- Deciding fair value when the market activity is falling.

Disclosures must be made to explain what valuation models that are used and what information that is used in these models and which effects the valuation has caused in the result.

Financial instruments

The reporting of financial instruments is governed by the following four accounting and financial reporting standards:

- IFRS 9 "Financial Instruments";
- IAS 32 "Financial Instruments: Presentation";
- IFRS 7 "Financial Instruments: Disclosures"; and
- IFRS 13 "Fair Value Measurement".

IFRS 9 means that the company's business model and the characteristics of the asset influence the classification and measurement of financial assets.

Debt instruments are all financial instruments except derivatives and shares. The company´s purpose with holding a debt instrument is called its business model. Depending on what business model a company is using for managing its debt instruments the accounting treatment is different. The following business models exist in IFRS 9:

- Held to collect – the debt instrument is held to maturity to collect the contracted cash flows (interest and principal).
- Trading – the company trades with the debt instruments.
- Mixed model – a mix of the two above models.

Alfa Laval business model for managing its debt instruments is "Held to collect". This classification does not mean that we occasionally cannot sell debt instruments before maturity even for large amounts or that we regularly cannot sell many small debt instruments before maturity.

IFRS 9 means that financial derivatives, holdings of bonds and external shares are adjusted to fair value. IFRS 7 contains expanded disclosure requirements related to the significance of financial instruments for the company's financial position and performance and the nature and extent of risks arising from financial instruments.

IFRS 13 describes how a fair value is established when such value is to be or may be used in accordance with each IFRS standard. Disclosures must be made to explain what valuation models that are used and what information that is used in these models and which effects the valuation has caused in the result.

Both IFRS 9 and IFRS 7 formally contain a considerable amount of information that should be presented. According to IFRS 7.B3 the company however should decide how much detail it provides in order not to overburden the financial statements with excessive details.

Both financial assets and financial liabilities are classified into three different portfolios:

- Valued at fair value through profit or loss;
- Valued at fair value through other comprehensive income and
- Valued at amortised cost.

The classification into different portfolios reflects the valuation of the instruments, i.e. if the instrument is valued at fair value or amortised cost and also where in the statement of consolidated comprehensive income that the valuation to fair value is reported.

The amortised cost is normally equal to the amount recognised upon initial recognition, less any principal repayments and plus or minus any effective interest adjustments.

Prepaid costs, prepaid income and advances from customers are not defined as financial instruments since they will not result in future cash flows.

Disclosures must be made on the methods and, when a valuation technique is used, the assumptions applied in determining the fair value of each class of financial assets and liabilities. The methods are to be classified in a hierarchy of three levels:

1. Quoted prices in active markets;
2. Other inputs than quoted prices that are directly observable (prices) or indirectly observable (derived from prices); and
3. Unobservable market data.

The fair values of holdings of bonds are arrived at using market prices according to level 1. The effect of the measurement at fair value is reported in net income. The fair value adjustment of these instruments is reflected directly on the item bonds in the statement of financial position.

The fair values of shares in external companies are arrived at using market prices according to level 1 or other inputs according to level 2. The effect of the measurement at fair value is reported in other comprehensive income. The fair value adjustment of these instruments is reflected directly on the item other long-term securities in the statement of financial position.

The fair values of the Group's currency forward contracts, currency options, interest-rate swaps, metal forward contracts and electricity futures are arrived at using market prices according to level 1. The fair value changes are arrived at by comparing the conditions of the derivative entered into with the market price for the same instrument at the closing date and with the same maturity date. The effect of the measurement at fair value is reported in other comprehensive income if the derivative constitutes an effective cash flow hedge and otherwise on the concerned line above net income. The fair value adjustment of these instruments is reported as derivative assets or derivative liabilities in the statement of financial position.

For each class of financial instruments disclosures shall be made on credit risk and an analysis of financial assets that are past due or impaired. Within Alfa Laval credit risk is in reality mainly related to accounts receivable. The disclosures just mentioned are therefore to be found in Note 22.

IFRS 9 has a model for expected credit losses. It is a three steps model that reflects changes in the credit risk. The steps are:

1. Recorded at inception (normally an historical experience-based percentage);
2. For credit risks that have increased significantly since initial recognition (the credit risk has increased significantly if the receivable is more than 30 days overdue; otherwise based on indications of the customer having payment difficulties or financial weakness); and
3. Related to objective evidence of impairment (incurred losses).

The model results in a provision for bad debts. Only at a final loss the receivable is written off.

Government grants

Government grants are recognised in profit and loss over the same periods as the costs the grants are intended to compensate for. The grants are recognised in the income statement as a deduction of these costs.

Group contributions to and from the parent company

The parent company is accounting for group contributions according to the alternative rule in RFR 2 issued by the Council for Financial Reporting in Sweden. This means that both received and given group contributions are reported as appropriations in the income statement.

Hedge accounting

Alfa Laval only applies two types of hedge accounting: cash flow hedges and hedges of net investments in foreign operations.

Cash flow hedges

Alfa Laval has implemented documentation requirements to qualify for hedge accounting on derivative financial instruments.

The effect of the fair value adjustment of derivatives is reported as a part of other comprehensive income for the derivatives where hedge accounting is made (according to the cash flow hedging method) and above net income only when the underlying transaction has been realised. Hedge accounting requires the derivative to be appropriate and expected to be effective regarding the identified risks.

For the derivatives where hedge accounting is not made the fair value valuation is reported above net income. The fair value adjustment of derivatives is reported separately from the underlying instrument as a separate item called derivative assets/derivative liabilities in the statement of financial position.

Hedges of net investments in foreign operations

In order to finance acquisitions of foreign operations loans are raised, if possible, in the same currency as the net investment. The loans thereby constitute a hedge of the net investment in each currency. Exchange rate differences relating to these loans are therefore booked to other comprehensive income.

Income Taxes

Income taxes are reported in accordance with IAS 12 "Income Taxes".

Current tax is the amount of income taxes payable (recoverable) in respect of the taxable profit (tax loss) for a period. Current tax liabilities (receivables) for the current and prior periods are measured at the amount expected to be paid to (recovered from) the tax authorities, using the tax rates (and tax laws) that have been enacted or substantively enacted by the closing date. In essence, this means that current tax is calculated according to the rules that apply in the countries where the profit was generated.

Deferred tax liabilities are the amounts of income taxes payable in future periods in respect of taxable temporary differences. Deferred tax liabilities are recognised for all taxable temporary differences, except for goodwill.

Deferred tax assets are the amounts of income taxes recoverable in future periods in respect of: (a) deductible temporary differences; (b) the carry-forward of unused tax losses; and (c) the carry-forward of unused tax credits. Deferred tax assets are recognised for all deductible temporary differences to the extent that it is probable (>50 percent) that taxable profit will be available against which the deductible temporary difference can be utilised. Deferred tax assets are recognised for the carry-forward of unused tax losses and unused tax credits to the extent that it is probable (>50 percent) that future taxable profit will be available against which the unused tax losses and unused tax credits can be utilised.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the closing date.

If it is not any longer probable that sufficient taxable profits will be available against which a deferred tax asset can be utilised, then the deferred tax asset is reduced accordingly.

Inventories

The Group's inventory has been accounted for after elimination of inter-company gains. The inventory has been valued according to the "First-In-First-Out" (FIFO) method at the lowest of cost or net realisable value, taking into account obsolescence.

This means that raw material and purchased components normally are valued at the acquisition cost, unless the market price has fallen. Work in progress is valued at the sum of direct material and direct labour costs with a mark-up for the product's share in capital costs in the manufacturing and other indirect manufacturing costs based on a forecasted assumption on the capacity utilisation in the factory. Finished goods are normally valued at the delivery value (i.e. at cost) from the factory if the delivery is forthcoming. Spare parts that can be in the inventory during longer periods of time are normally valued at net realisable value.

Joint ventures

Joint ventures are consolidated according to IFRS 11 "Joint arrangements". Joint arrangements are defined as a contractual arrangement where two or more parties have a joint decisive influence.

It is crucial to be able to judge whether a party has control over another party, that is decisive influence or if it rather is a substantial or common influence. If it is the latter, then it is a so-called joint arrangement, which could be either:

– a joint operation; or
– a joint venture.

Jointly owned assets and joint activities are called joint operations. Each owner or party accounts for his share of assets, liabilities, revenues and costs.

Joint ventures are consolidated according to the equity method. This means that the interest is accounted for on one line in the consolidated statement of financial position and that the share of the result is accounted for on one line in the consolidated statement of comprehensive income. It is the net income in the joint ventures that is booked into one line in the operating income. The counter entry is an increase or decrease of the value of shares in joint ventures. Received dividends reduce the value of the shares in joint ventures. The sales volume and other result items and the balance items in the joint ventures will no longer be reported in the statements over consolidated comprehensive income and consolidated financial position in any of the two owner companies.

Leasing

Leasing is accounted for according to IFRS 16 "Leases", which covers the recognition, measurement, presentation and disclosure of leases by both lessors and lessees.

In connection with the transition a practical expedient has been applied that means that the new leasing definition is only applied on new lease contracts instead of on all leasing contracts.

Alfa Laval has decided to apply a practical expedient for leasing contracts where the contract period is maximum 12 months or the leased asset is of low value. With reference to the materiality rules in IAS 8.8, Alfa Laval has chosen to apply IFRS 16 for leases concerning buildings and land, company cars and other vehicles, forklifts, large servers and large printers. The present value for other leases is estimated to be non-material. The leasing fees for these leases are expensed as incurred.

Lease contracts can include both a leasing part and a service part. According to IFRS 16, the company in these cases can choose to separate them from each other and thus only recognise the leasing part in the balance sheet or capitalise the entire contract. Alfa Laval has chosen to exclude the service part from the lease accounting and it is instead expensed as before.

When Alfa Laval is the lessee, leased assets are accounted for as right-of-use assets and a corresponding financial payable to the lessor in the statement on financial position. The leasing fee to the lessor is accounted for as financial cost calculated as interest on the outstanding payable and as amortisation of the payable. The right-of-use asset is depreciated according to plan in the same manner as for purchased assets.

For lessors a classification into operational and financial leases is made exactly as under IAS 17. When Alfa Laval is the lessor, leased assets that are classified as financial leases are accounted for as a financial receivable from the lessee in the statement on financial position. The leasing fee received from the lessee is accounted for as financial income calculated as interest on the outstanding receivable and as amortisation of the receivable.

IFRS 16 contains a number of disclosures requirements.

Levies

Levies relate to levies/taxes that governmental or corresponding bodies are charging companies in accordance with laws or regulations with exception of income taxes, penalties and fines. IFRIC 21 "Levies" is an interpretation that clarifies when a liability for levies is to be accounted for. The obligating event that gives rise to the reporting of a liability is the activity that triggers the payment of the levy. IFRIC 21 only treats the accounting for the liability side and not whether the debit side is a cost or an asset. One example of a levy is the Swedish real estate tax, which is levied on the owner of a property at January 1. At inception of the year the liability is booked and a corresponding prepaid cost, which is then phased as a cost over the year.

Non-current assets (tangible and intangible)

Assets have been accounted for at cost, net after deduction of accumulated depreciation according to plan. Depreciation according to plan is based on the assets' acquisition values and is calculated according to the estimated useful life of the assets.

The following useful lives have been used:

Tangible:	
Computer programs, computers	3.3 years
Office equipment	4 years
Vehicles	5 years
Machinery and equipment	7–14 years
Land improvements	20 years
Buildings	25–33 years
Right-of-use assets	depends on the lease term
Intangible:	
Patents and unpatented know-how	10–20 years
Trademarks	10–20 years
Licenses, renting rights and similar rights	10–20 years
Internally generated intangible assets	5 years

The depreciation is made according to the straight-line method.

Any additions to the purchase price in connection with investments in non-current assets or acquisitions of businesses are amortised over the same period as the original purchase price. This means that the time when the asset is fully depreciated is identical regardless of when payments are made. This is a reflection of the fact that the estimated useful life of the asset is the same.

Upon sale or scrapping of assets, the results are calculated in relation to the net book value after depreciation according to plan. The result on sales is included in operating income.

Impairment of assets

When there are indications that the value of a tangible asset or an intangible asset with a definite useful life has decreased, there is a valuation made if it must be written down according to IAS 36 "Impairment of Assets". If the reported value is higher than the recoverable amount, a write down is made that burdens net income. When assets are up for sale, for instance items of real estate, a clear indication of the recoverable amount is received that can trigger a write down.

Goodwill and intangible assets with indefinite useful life are not amortised. These assets are instead tested for impairment both annually and when there is an indication. The impairment test is made according to IAS 36 "Impairment on assets".

The recoverable amount for goodwill and intangible assets with indefinite useful life is determined from the value in use based on discounted future cash flows. For other assets the recoverable amount is normally determined from the fair value less costs to sell based on an observable market price.

For the impairment testing of goodwill, three of Alfa Laval's operating segments, the three business divisions "Energy", "Food & Water" and ”Marine" have been identified as the cash-generating units within Alfa Laval. Technically a recently acquired business activity could be followed independently during an initial period, but acquired businesses are normally integrated into the divisions at a fast rate. This means that the independent traceability is lost fairly soon and then any independent measurement and testing becomes impracticable. The net present value is based on the projected EBITDA figures for the next five years, less projected investments and changes in operating capital during the same period and thereafter the perceived expected average industry growth rate. The used discount rate is the pre-tax weighted average cost of capital (WACC).

Non-current assets and disposal groups held for sale and discontinued operations

The Group is applying IFRS 5 "Non-current Assets Held for Sale and Discontinued Operations". IFRS 5 specifies the accounting for assets and disposal groups held for sale and the disclosures to be made for discontinued operations.

Assets and disposal groups held for sale are measured at the lower of carrying amount and fair value less costs to sell, except for deferred tax items and defined benefit obligations. No depreciation of such assets is made. An asset or disposal group held for sale is an asset whose carrying amount will be recovered basically through a sale rather than through continuing use. It must be available for immediate sale in its current condition. The sale must be highly probable, that is a decision must have been made and an active sales effort must have been initiated. The sale must be expected to be finalised within one year. Non-current assets are reclassified to current assets and presented separately in the statement on financial position. All assets and liabilities relating to disposal groups are presented separately in the statement of financial position.

Objectives, policies and processes for managing capital

IAS 1 "Presentation of Financial Statements" paragraphs 134 and 135 contain disclosure requirements on the company's objectives, policies and processes for managing capital. This information is disclosed in a separate section after the description of the accounting principles.

Other operating income and other operating costs

Other operating income relates to for instance commission, royalty and license income. Other operating costs refer mainly to restructuring costs and royalty costs.

Comparison distortion items that affect the operating income are reported in other operating income and other operating costs.

Provisions

The Group is applying IAS 37 "Provisions, Contingent Liabilities and Contingent Assets" for the reporting of provisions, contingent liabilities and contingent assets.

A provision is recognised when and only when:

- there is a present legal or constructive obligation as a result of past events;
- it is probable that a cost will be incurred in settling the obligation; and
- a reliable estimate can be made of the amount of the obligation.

The amount recognised as a provision is the best estimate of the cost required to settle the present obligation at the closing date.

In measuring the provision:

- risks and uncertainties are taken into account;
- the provisions are discounted, where the effect of the time value of money is material. When discounting is used, the increase of the provision over time is recognised as an interest cost;
- future events, such as changes in law and technology, are taken into account where there is sufficient objective evidence that they will occur; and
- gains from the expected disposal of assets are not taken into account, even if the expected disposal is closely linked to the event giving rise to the provision.

If a reimbursement of some or all of the costs to settle a provision is expected (e.g. through insurance contracts, indemnity clauses or supplier's warranties), the reimbursement is recognised:

- when and only when, it is virtually certain that the reimbursement will be received if the obligation is settled. The amount recognised for the reimbursement must not exceed the amount of the provision; and
- as a separate asset (gross). In the consolidated comprehensive income statement, however, the income related to the reimbursement is netted against the cost for the provision.

Provisions are reviewed at each closing date and adjusted to reflect the current best estimate. If it is no longer probable that a payment to settle the obligation will be incurred, the provision is reversed.

A provision must only be used for the purpose it was originally recognised for. Provisions are not recognised for future operating losses. An expectation of future operating losses is though an indication that certain assets of the operation may be impaired. If a contract is onerous, the present obligation under the contract is recognised and measured as a provision, once the assets used in order to finalize the contract have been tested for impairment.

A provision for restructuring costs is recognised only when the general recognition criteria are met. A constructive obligation to restructure arises only when there is:

- a detailed formal plan for the restructuring, identifying at least:
  - a) the business or part of a business concerned;
  - b) the principal locations affected;
  - c) the location, function and approximate number of employees who will be compensated for terminating their services;
  - d) the costs that will be undertaken; and
  - e) when the plan will be implemented; and
- a valid expectation in those affected that the restructuring will be carried out.

A management or board decision to restructure does not give rise to a constructive obligation at the closing date unless the company has, before the closing date:

- started to implement the restructuring plan; or
- communicated the restructuring plan to those affected by it in a sufficiently specific manner to raise a valid expectation in them that the restructuring will happen.

When a restructuring involves the sale of an operation, no obligation arises for the sale until the company is committed to the sale, i.e. through a binding sales agreement.

A restructuring provision only includes the direct costs arising from the restructuring, which are those that are both:

- necessarily entailed by the restructuring; and
- not associated with the ongoing activities of the company.

Research and development

Research costs are charged to the result in the year in which they are incurred. Development costs are charged to the result in the year in which they are incurred provided that they do not fulfil the conditions for instead being capitalised according to IAS 38 "Intangible Assets".

Revenue recognition

Revenue from contracts with customers and revenues from leasing are reported as "Net sales" in the statement of consolidated comprehensive income. "Net sales" are referring to sales value less sales taxes, cancellations and discounts. Contracts with customers relate to sale of goods, services and projects.

IFRS 15 "Revenue from Contracts with Customers" covers how revenue recognition on contracts with customers shall be made. Revenue recognition is based on five steps:

1. Identify the contract with a customer.
2. Identify the performance obligations in the contract.
3. Determine the transaction price.
4. Allocate the transaction price to the performance obligations in the contract.
5. Recognise revenue when the entity satisfies a performance obligation.

A performance obligation is a promise in a contract with a customer to transfer to the customer either:

- a good or service (or a bundle of goods or services) that is distinct; or
- a series of distinct goods or services that are substantially the same and that have the same pattern of transfer to the customer.

Two or more contracts entered into at or near the same time with the same customer are accounted for as a single contract if:

- the contracts are negotiated as a package; and/or
- the amount of consideration to be paid in the contracts are linked to each other; and/or
- the goods or services in the contracts are a single performance obligation.

A contract modification is treated as a separate contract if added products or services:

- are distinct; and
- have a stand-alone selling price.

Alfa Laval shall recognise the revenue when the performance obligation has been satisfied by transferring control over a promised good or service to the customer.

Performance obligations can be satisfied either over time or at a point in time.

Alfa Laval transfers control of a good or service over time and, therefore, satisfies a performance obligation and recognises revenue over time, if one of the following criteria is met:

- the customer simultaneously receives and consumes the benefits provided by Alfa Laval's performance as Alfa Laval performs. This is normally the case for Alfa Laval's service offerings;
- Alfa Laval creates or enhances an asset that the customer controls as the asset is created or enhanced. This is normally the case when Alfa Laval performs the work at the customer's premises, which mainly relates to installation/commissioning; or
- Alfa Laval's performance does not create an asset with an alternative use to Alfa Laval and Alfa Laval has an enforceable right to payment for performance completed to date.

Alternative use to Alfa Laval means if Alfa Laval can sell the equipment to another customer. The number of engineering hours spent by Alfa Laval on making a product or process solution customer specific with a unique configuration is a good indication of whether there is an alternative use to Alfa Laval or not. As a practical expedient, only orders of more than EUR 1 million and with more than 200 engineering hours are recognised over time.

In order to establish the performance over time an output or input method is used. In Alfa Laval output methods are more applicable to service and component deliveries, whereas input methods are more applicable to projects and module sales. Depending on the nature of the project, the following methods are used:

Input methods:
- The proportion that the project costs incurred for work performed to date bear to the estimated total project costs.
- Surveys of work performed.

Considering the type of projects that Alfa Laval companies are involved in, the first method is usually the preferred.

Output methods:
- Completion of a physical proportion of the performance obligations.

If a performance obligation is not satisfied over time it is satisfied at a point in time. To establish the point in time when the customer obtains control of a promised asset and Alfa Laval satisfies a performance obligation, the following control criteria must be considered:

- Alfa Laval has a present right to payment for the asset.
- The customer has legal title to the asset.
- The customer has physical possession of the asset.
- The customer has the significant risks and rewards of ownership of the asset.
- The customer has accepted the asset.

Alfa Laval uses a variety of delivery terms depending on the customers preference, including Ex Works. Alfa Laval's preference is to use DAP (Delivered At Place) or DDP (Delivered Duty Paid) since these gives Alfa Laval better control that the customer really receives the goods in working order.

It is common that Alfa Laval provides a warranty in connection with the sale. The nature of the warranty can vary significantly across contracts. Normally warranties provide a customer with assurance that the related product will function as the parties intended according to the agreed-upon specifications. This is an assurance-type warranty. Alfa Laval's warranties normally cover a 12 months' period and are accounted for as a provision.

IFRS 15 contains a number of disclosures requirements.

Operating segments

IFRS 8 means that the reporting of operating segments must be made according to how the chief operating decision maker monitors the operations, which may deviate from IFRS. Furthermore, information according to IFRS for the company as a whole must be given about products and services as well as geographical areas and information about major customers.

The difference between the operating income for the operating segments and the operating income according to IFRS for the company as a whole is explained by two reconciliation items.

Alfa Laval's operating segments are the divisions. The chief operating decision maker within Alfa Laval is its Board of Directors.

Transactions in foreign currencies

Receivables and liabilities denominated in foreign currencies have been valued at year-end rates of exchange.

Within the Group, exchange gains and losses on loans denominated in foreign currencies that finance acquisitions of foreign subsidiaries are transferred to other comprehensive income as foreign currency translation adjustments if the loans act as a hedge to the acquired net assets. There they offset the translation adjustments resulting from the consolidation of the foreign subsidiaries. In the parent company, these exchange differences are reported above net income.

IAS 21 "The Effects of Changes in Foreign Exchange Rates" covers among other things the existence of functional currencies. Almost all of Alfa Laval's subsidiaries are affected by changes in foreign exchange rates for their procurement within the Group. They do however usually sell in their local currency and they have more or less all of their non-product related costs and their personnel related costs in their local currency. This means that none of Alfa Laval's subsidiaries qualify for the use of another functional currency than the local currency, with the following exception. Subsidiaries in highly inflationary countries report their closings in the functional hard currency that is valid in each country.

In the consolidation, the foreign subsidiaries have been translated using the current method. This means that assets and liabilities are translated at closing exchange rates and income and expenses are translated at the year's average exchange rate. The translation difference that arises is a result of the fact that net assets in foreign companies are translated at one rate at the beginning of the year and another at year-end and that the result is translated at average rate. The translation differences are part of other comprehensive income.

Recently issued accounting pronouncements

International Accounting Standards Board (IASB) has not issued any new or revised accounting pronouncements, which may be applicable on Alfa Laval and are effective for fiscal years beginning on or after January 1, 2023.

International Accounting Standards Board (IASB) has not issued any financial reporting interpretation developed by the International Financial Reporting Interpretations Committee (IFRIC), which may be applicable on Alfa Laval and are effective for fiscal years beginning on or after January 1, 2023.

Otherwise Alfa Laval will further evaluate the effects of the application of the new or revised accounting standards or interpretations before each time of application.

Objectives, policies and processes for managing capital

Alfa Laval defines its managed capital as the sum of consolidated net debt and equity including the part that is attributable to non-controlling interests. At the end of 2022 the managed capital was SEK 48,774 (39,368) million.

The Group's objective when managing capital is to safeguard the Group's ability to continue as a going concern and provide an adequate return for shareholders and benefits for other stakeholders.

When managing the capital, the Group monitors several measures including:

Measure				Outcome		Average over last		
	Goal	Target standard	Target not set	2022	2021	3 years	5 years	8 years
Invoicing growth per year	≥5% *			27.4%	-1.3%	5.1%	9.5%	6.1%
Adjusted EBITA margin **	15% *			15.8%	17.4%	16.9%	16.9%	16.6%
Return on capital employed **	≥20%			17.3%	20.0%	18.8%	20.4%	19.6%
Net debt to EBITDA **		≤2.0		1.47	0.87	0.94	0.93	1.16
Cash flow from operating activities including investments in fixed assets ***		10%		2.8%	9.9%	9.5%	9.0%	8.5%
Investments ***			X	3.6%	3.0%	3.2%	3.2%	2.7%
Return on equity			X	13.5%	15.8%	14.0%	16.7%	16.4%
Solidity			X	43.9%	50.3%	47.3%	45.1%	42.3%
Debt ratio **			X	0.37	0.22	0.24	0.26	0.35
Interest coverage ratio **			X	27.9	38.4	31.2	33.1	30.1
Credit rating			X	BBB+	BBB+			

* Average over a business cycle. ** Alternative performance measures. *** In % of sales.

These measures are connected to each other as communicating vessels. This means that if actions are taken that primarily aim at a certain measure, they will also have an impact on other measures to a varying degree. It is therefore important to consider the whole picture.

In order to maintain a good capital structure, the Group may for instance raise new loans or amortise on existing loans, adjust the amount of dividends paid to shareholders, return capital to shareholders, repurchase own shares, issue new shares or sell assets.

As examples on the Group's active work with managing its capital the following can be mentioned:

- On August 1, 2022 Alfa Laval has raised two loans of EUR 100 million from Svensk Exportkredit that matures in 2027 and 2028 respectively and one loan of EUR 100 million from Svenska Handelsbanken that matures in 2024, with a possibility to extend it for another year.
- The company's Euro Medium Term Note (EMTN) programme was increased from EUR 1,500 million to EUR 2,000 million in November 2021. Under the programme, three tranches of corporate bonds totalling EUR 900 million have been issued, one in June 2019 and two in February 2022. The tranche of EUR 500 million that would have matured in September 2022 was repaid already in June 2022.
- The company's commercial paper programme was increased from SEK 2,000 million to SEK 4,000 million in November 2021 with an unchanged duration of 1–12 months.
- On April 22, 2021 Alfa Laval successfully refinanced the company's revolving credit facility with a EUR 700 million credit facility with a banking syndicate. The facility has a maturity of five years with a possibility to extend it for further two years and it includes a possibility to increase by EUR 200 million. During 2022 the first extension option of 1 year was utilised.

Risks

Risks are divided into financial risks and operational risks, which are described below.

In order to handle and minimise the risks, Alfa Laval has established a comprehensive set of Group wide policies and an internal control framework. To support the work with internal control an extensive set of minimum internal controls has been established.

During the year, managers and other key personnel have made a self-assessment based on a selection of the most important minimum internal controls.

Internal control is monitored by both internal audit and by the external auditors.

Financial risks

Financial risks are referring to financial instruments.

Financial instruments

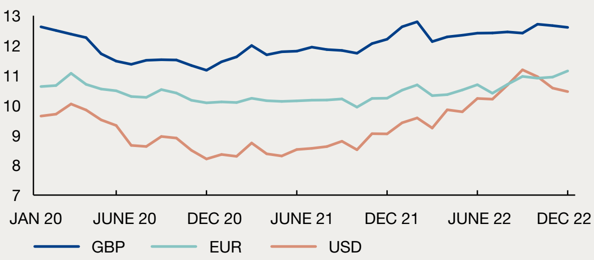
Alfa Laval has the following financial instruments: cash and cash equivalents, deposits, trade receivables, bank loans, trade payables and a limited number of derivative instruments to hedge primarily currency rates or interests, but also the price of metals and electricity. These include currency forward contracts, currency options, interest-rate swaps, metal forward contracts and electricity futures. See Notes 13 and 14 for more information on these financial instruments.

Treasury policy

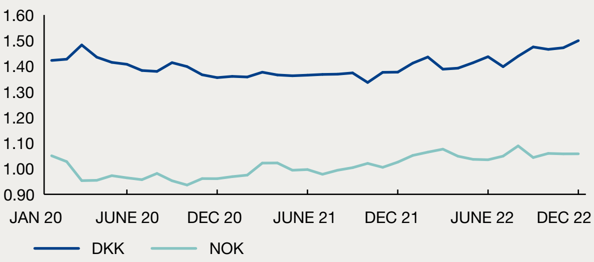
In order to control and limit the financial risks, the Board of Directors for the Group has established a treasury policy. The Group has an aversive attitude toward financial risks, which is expressed in the policy. It establishes the distribution of responsibility between the local companies and the central finance function in Alfa Laval Treasury International, what financial risks the Group can accept and how the risks should be limited.

<table>
<tr><th>Risk</th><th>Explanation</th><th>Mitigation</th></tr>
<tr><td colspan="3">Financial risks</td></tr>
<tr><td>Price risk</td><td>There are three different types of price risks: currency risk, interest risk and market risk. See below.</td><td></td></tr>
<tr><td>Currency risk</td><td>
Due to the Alfa Laval Group's international business activities and geographical spread the Group is exposed to currency risks. The exchange rate movements in the major currencies for the Group during the last years are presented below (SEK/foreign currency):

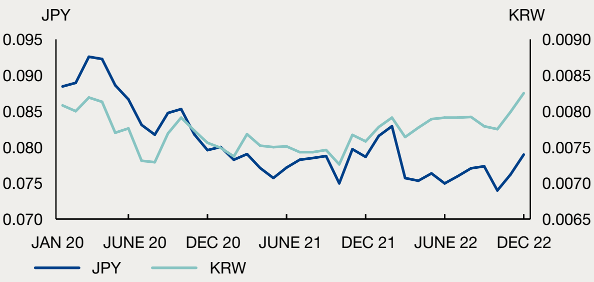
Exchange rate fluctuations – UK pounds, Euro, US dollars



Exchange rate fluctuations – Danish and Norwegian kronor



Exchange rate fluctuations – Japanese yen, Korean won



</td><td></td></tr>
</table>

Risk	Explanation	Mitigation
	Currency risk is divided into transaction exposure and translation exposure.	

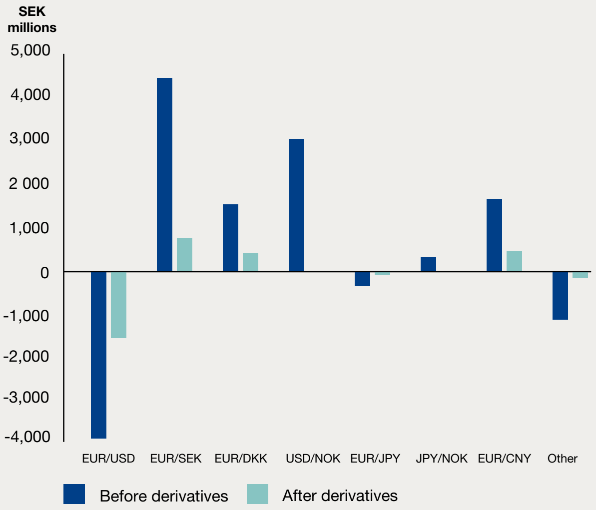
Transaction exposure

Transaction exposure relates to currency risks that arise due to exchange rate fluctuations that affect the currency flows that are generated by the business activities

During 2022 Alfa Laval's sales to countries outside Sweden amounted to 97.7 (97.1) percent of total sales.

The Group's net transaction exposure at December 31, 2022 in the most important currencies before and after derivatives for the coming 12 months amounts to:

Net transaction exposure per currency pair at December 31, 2022 for the coming 12 months



The positive bars are a reflection of:

– subsidiaries in Sweden and Denmark exporting in EUR;

– subsidiaries in Norway exporting mainly in USD but also in JPY; and

– subsidiaries in China exporting in EUR.

The negative bars are a reflection of subsidiaries in mainly the U.S. and Japan importing in EUR.

Currency contracts for projected flows are entered into continuously during the year. For contract-based exposures the derivatives follow the duration of the underlying contract. This means that the company experiences the effects from the market currency rate movements with a varying degree of delay.

If the currency rates between SEK and the most important foreign currencies are changed by +/- 10 % it has the following effect on operating income, if no hedging measures are taken:

Effect on operating income by exchange rate fluctuations excluding hedging measures

Consolidated				
SEK millions	2022		2021	
Exchange rate change against SEK	+ 10%	- 10%	+ 10%	- 10%
USD	656	-656	535	-535
EUR	281	-281	259	-259
CNY	163	-163	110	-110
NOK	-278	278	-293	293
DKK	-209	209	-169	169
JPY	41	-41	35	-35
Other	-28	28	-31	31
Total	**626**	**-626**	**446**	**-446**

Alfa Laval's local sales companies normally sell in domestic currency to local end customers and have their local cost base in local currency. Exports from production and logistical centres to other Group companies are invoiced in the exporting companies' domestic currencies, except for Sweden, Denmark and the UK where the exports are denominated in EUR.

The Group is principally exposed to currency risk from potential changes in contracted and projected flows of payments and receipts. The objective of foreign exchange risk management is to reduce the impact of foreign exchange movements on the Group's income and financial position.

The Group normally has natural risk coverage through sales as well as costs in local currencies. The treasury policy states that the local companies are responsible for identifying and hedging exchange rate exposures on all commercial flows via Alfa Laval Treasury International.

Transaction exposure from firm committed orders shall be hedged to 100 percent when the value of the net exposure exceeds EUR 200,000. Furthermore, companies with yearly net exposure exceeding EUR 1,000,000 must hedge at least 50 percent of the next 12 months net exposure concerning all uncommitted flows and committed flows below EUR 200,000. The total hedge must never exceed 100 percent. Longer hedging contracts of 13-24 months for uncommitted exposures require special approval.

Alfa Laval Treasury International can add to or reduce the total hedging initiated by the local companies in the currencies that Alfa Laval has commercial exposure up to but not exceeding 100 percent and down to but not below 50 percent of the commercial exposure for each currency in a given time period.

Risk | **Explanation** | **Mitigation**

Outstanding currency forward contracts and currency options for the Group amounted to the following at the end of the year:

Outstanding currency forward contracts and currency options

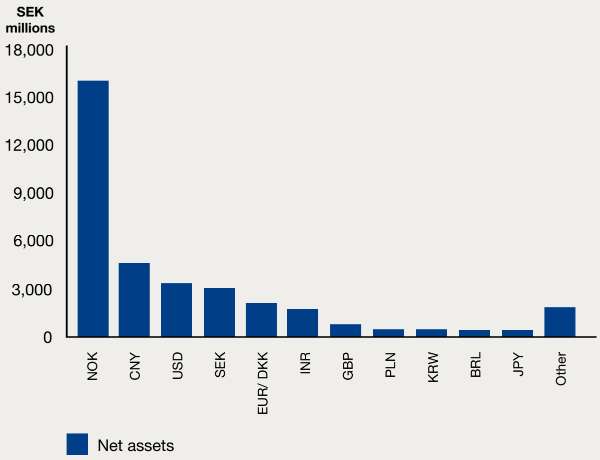
Consolidated				
Millions	2022		2021	
	Original currency	SEK	Original currency	SEK
Outflows:				
USD	-787	-8,230	-812	-7,349
EUR	-506	-5,646	-409	-4,184
JPY	-6,940	-548	-5,155	-405
SGD	–	–	-2	-14
CAD	-14	-112	-13	-93
AUD	-7	-50	-3	-20
NZD	-1	-7	-1	-9
Total		**-14,593**		**-12,074**
Inflows:				
NOK	4,915	5,200	4,929	5,055
SEK	5,362	5,362	4,211	4,211
CNY	1,487	2,236	1,441	2,045
DKK	1,136	1,703	597	822
GBP	2	31	2	30
PLN	10	24	13	29
CHF	–	–	0	3
SGD	8	60	–	–
Total		**14,616**		**12,195**

Translation exposure

Translation exposure relates to the currency risks that arise due to the translation of the subsidiaries' statements on financial position from local currency to SEK.

When the subsidiaries' statements of financial position in local currency are translated into SEK a translation difference arises that is due to the current year being translated at a different closing rate than last year and that the comprehensive income statement is translated at the average rate during the year whereas the statement of financial position is translated at the closing rate at December 31. The translation differences are reported against other comprehensive income. The translation exposure consists of the risk that the translation difference represents in terms of impact on comprehensive income. The risk is largest for the currencies where the Group has the largest net assets and where the exchange rate movements against SEK are largest. The Group's net assets or liabilities for the major currencies are distributed as follows:

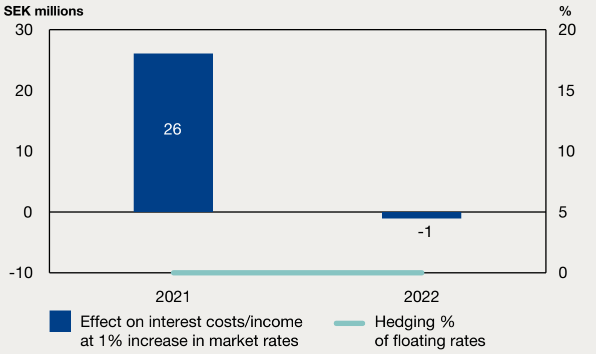
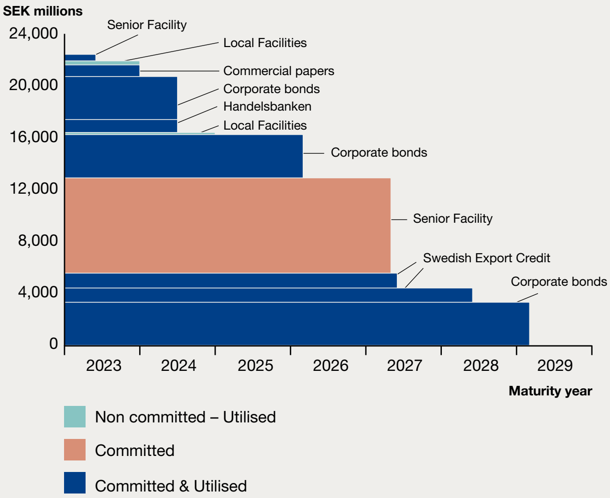
Net assets by currency



The assets and liabilities in EUR and DKK are seen together since the rate for DKK is fixed against the EUR.

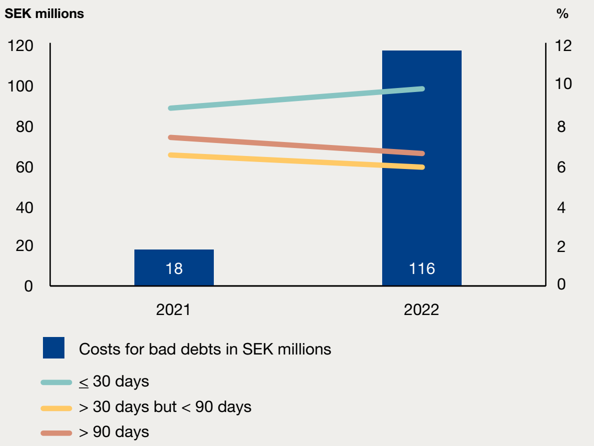
The translation differences are a central responsibility and are managed by distributing the loans on different currencies based on the net assets in each currency and through cross currency swaps. Loans taken in the same currency as there are net assets in the Group, decrease these net assets and thereby decrease the translation exposure.

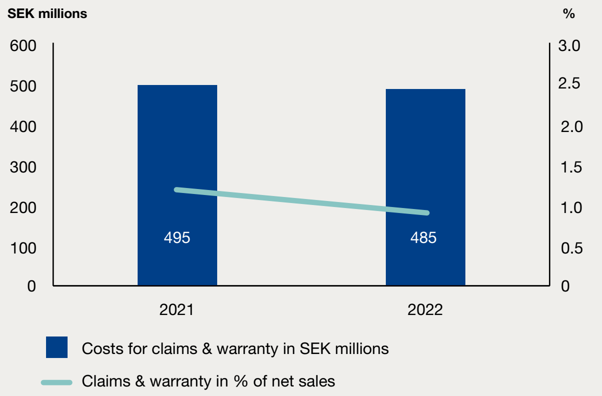
These hedges of net investments in foreign operations work in the following way. Exchange gains and losses on loans denominated in foreign currencies that finance acquisitions of foreign subsidiaries are reported as a part of other comprehensive income if the loans act as a hedge to the acquired net assets. In other comprehensive income they offset the translation adjustments resulting from the consolidation of the foreign subsidiaries. In the Group, net exchange differences of SEK -946 (-165) million relating to debts in foreign currencies have been charged to other comprehensive income as hedges of net investments in foreign operations. The loans that hedge net investments in foreign operations are denominated in EUR since this foreign currency has the largest impact on the statement of financial position. Since the Group uses part of its cash flows to amortise the loans in order to improve the financial net, the extent of this hedge tends to decrease over time. A change in the net assets of the foreign subsidiary over time can have the same effect.

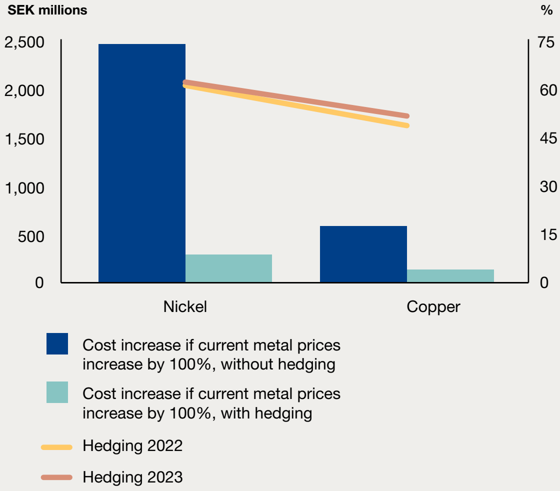
Risk	Explanation	Mitigation
Interest risk	By interest risk is meant how changes in the interest level affect the financial net of the Group and how the value of financial instruments vary due to changes in market interest rates. At December 31, 2022, the total debt portfolio of SEK 15,062 (8,244) million was split on loans with fixed interest of SEK 11,392 (8,175) and loans with floating interest rates of SEK 3,670 (69) million. The average interest and currency duration for all loans including derivatives was 29.1 (16.6) months at the end of 2022. Calculated on an overall increase of market rates by 100 basis points (1 percentage unit), the interest net of the Group would change according to the bar chart below. The reason why it was an income in 2021 was that large parts of the cash and cash equivalents and the current deposits had floating interest rates at the same time as the loans with floating interest rates were insignificant. **Interest sensitivity analysis versus hedging % of floating rates**  	The Group attempts to manage the interest risk by: – seeking a balance between floating and fixed interest rates in the debt portfolio and – through the use of derivative financial instruments such as interest rate swaps. The high portion of loans with fixed interest rate at December 31, 2022 meant a low interest risk. The treasury policy states that: – the interest rate risk is measured separately for each main currency and for the total debt; and – the average interest duration for the total portfolio should be between 6 and 36 months.
Market risk	Market risk is defined as the risk for changes in the value of a financial instrument due to changed market prices. This applies only to financial instruments that are listed or otherwise traded, which for Alfa Laval concern bonds and other securities and other long-term securities totalling SEK 387 (1,353) million.	The market risk for these is perceived as low. For other financial instruments, the price risk only consists of currency risk and interest risk.
Liquidity risk and refinancing risk	Liquidity risk is defined as the risk that the Group would incur increased costs due to lack of liquid funds. Refinancing risk is defined as the risk that the refinancing of maturing loans becomes difficult or costly. In summary the maturity structure of the loans and the loan facilities is as follows: **Maturity structure of Group funding**  	Alfa Laval Treasury International is responsible for ensuring that: – the Group has a sufficient liquidity reserve, including cash & bank, short-term investments and unutilized committed credit facilities, – a too large part of the outstanding debt is not maturing within the coming 12 month period and – the remaining average credit duration of the total debt portfolio is not too short. The loans of the Group are mainly long-term and only mature when the agreed loan period expires. Since the maturity of the loans is distributed over time the refinancing risk is reduced. Alfa Laval has two loans of EUR 100 million from Svensk Exportkredit that matures in 2027 and 2028 respectively and one loan of EUR 100 million from Svenska Handelsbanken that matures in 2024, with a possibility to extend it for another year. Alfa Laval has a revolving credit facility of EUR 700 million corresponding to SEK 7,806 million on December 31, 2022 with a banking syndicate. The facility has a maturity of five years from April 2022 with a possibility to extend it for another year and it includes a possibility to increase by EUR 200 million. At December 31, 2022 SEK 500 million of the facility was utilised. The commercial paper programme of SEK 4,000 million, was utilised with SEK 900 million at December 31, 2022. On December 31, 2022, Alfa Laval has three tranches of corporate bonds listed on the Irish stock exchange, each of EUR 300 million that matures in June 2024, in February 2026 and in February 2029 respectively. The tranche of EUR 500 million that would have matured in September 2022 was repaid already in June 2022.

Risk	Explanation	Mitigation
Cash flow risk	Cash flow risk is defined as the risk that the size of future cash flows linked to financial instruments is fluctuating.	This risk is mostly linked to changed interest and currency rates. To the extent that this is perceived as a problem, different derivative instruments are used to fix rates. See description of exposure and hedging measures under interest and currency risks. Maturity analyses of the contractual undiscounted cash flows for loans (including interests) are shown in Note 29 and for currency derivatives, interest derivatives, metal futures and electricity futures in Note 15.
Counterpart risk	Counterpart risk is defined as the risk that the counterpart is not able to fulfill its contractual obligations. Financial instruments that potentially subject the Group to significant concentrations of credit risk consist principally of cash and cash equivalents, deposits and derivatives. Received bank guarantees and letters of credit move the credit risk from the customer to the bank, but can still contain a credit risk, but now towards the bank.	The Group has a bank strategy with the objective to establish, maintain and develop strong bank relations at Group level. This in order to provide the Group with long- term banking support, a relevant product range and geographical coverage. The banks at Group level must have a credit rating from two rating institutions of minimum A. The Group maintains cash and cash equivalents and current and non-current investments with various financial institutions approved by the Group. These financial institutions are located in major countries throughout the world and the Group's policy is designed to limit exposures to any one institution. The risk for a counterpart not fulfilling its commitments is limited through the selection of financially solid counterparts and by limiting the engagement per counterpart. The Group performs periodic evaluations of the relative credit standing of those financial institutions that are considered in its investment strategy. The Group does not require collateral on these financial instruments. The Group is exposed to credit risk in the event of non-performance by counterparts to derivative instruments. The Group limits this exposure by diversifying among counterparts with high credit ratings and by limiting the volume of transactions with each counterparty. Furthermore, the Group has entered into ISDA agreements (International Swaps and Derivatives Association) with the counterparts in order to be able to offset assets and liabilities in case of a counterparty default. Alfa Laval has never encountered a counterparty default, which means that such an offset never has been made. In total it is the Group's opinion that the counterpart risks are limited and that there is no concentration of risk in these financial instruments.

Operational risks

Risk	Explanation	Mitigation
Business risks		
Credit risk/Risk for bad debts	The risk that the customer cannot pay for delivered goods due to financial difficulties. The amount of accounts receivable being overdue is an indication of the risk the company runs for ending up in a bad debt situation. The Group's costs for bad debts and the overdues in percent of accounts receivable are presented in the following graph. **Costs for bad debts / overdues in % of accounts receivable** 	Alfa Laval has established a Group Credit Policy to manage and mitigate the credit risk. The Group sells to a large number of customers in countries all over the world. That some of these customers from time to time face payment problems or go bankrupt is unfortunately part of reality in an operation of Alfa Laval's magnitude. All customers except Tetra Laval represent less than 1 percent of net sales and thereby represent a limited risk. Alfa Laval regularly collects credit information on new customers and, if needed, on old customers. Earlier payment habits have an impact on the acceptance of new orders. On markets with political or financial risks, the Group strives to attain credit insurance solutions. Accounts receivable constitutes the single largest financial asset according to Note 13. With reference to the above description, it is management's opinion that there is no material concentration of risk in this financial asset.

Risk	Explanation	Mitigation
Risk for claims	The risk for the costs Alfa Laval would incur to rectify faults in products or systems and possible costs for penalties. The Group's net claim costs and their relation to net sales are found in the following graph. **Claim costs in SEK millions and in % of net sales**  	Alfa Laval strives to minimize these costs through an ISO certified quality assurance. The major risks for claim costs appear in connection with new technical solutions and new applications. The risks are limited through extensive tests at the manufacturing site and at the customer site.
Economic risk		
Competition	The Group operates in competitive markets, which can impact the company's development negatively.	In order to address this competition, the Group has for instance: – organized the operations into divisions based on business units in order to get a customer focused market penetration; – a strategy for acquisition of businesses in order to for instance reinforce the presence on certain markets or widen the Group's product offering; – worked with creating a competitive cost level based on its international presence; and – worked with securing the availability of strategic metals and components in order to maintain the ability to deliver.
Business climate	In an overall economic downturn, the Group tends to be affected with a delay of six to twelve months depending on business division. The same applies with an economic upturn.	The fact that the Group is operating on a large number of geographical markets and within a wide range of business units means a diversification that limits the effects of fluctuations in the business climate. Historically, fluctuations in the business climate have not generated decreases in orders received by more than approximately 10–15 percent. The downturn in the business climate in 2009 and 2010 however meant a considerably larger decline in order intake. This was partly due to the fact that the decline happened abruptly from a very high level of demand that was the culmination of a long-lasting boom and that the price level in connection with this peak was inflated by substantial increases in raw material prices.
Pandemics	The outbreak of the COVID-19 pandemic proved to have a large impact on the world economy and the international business climate. Lockdowns in many regions within countries or in entire countries have during certain periods limited Alfa Laval's ability to visit potential customers and perform service on site at customers but has only to a limited extent impacted the company's supply chain and ability to manufacture products. Future pandemics can, depending on the rate of the spread of the infection and the risk for severe illness and death have smaller or larger consequences than COVID-19.	Global and local crisis management work and obedience to advice, instructions and rules from authorities are important to be able to short and long term handle the consequences of the pandemic. Cost reduction programmes and the flexibility in different national work time reduction schemes are important components to reduce costs to match the declining revenues. Employees outside the manufacturing have to a large extent been able to work from home. Travelling has been severely restricted and has to a large extent been replaced by digital meetings.

Risk	Explanation	Mitigation
Commodity prices	The Group depends on deliveries of stainless steel, carbon steel, copper and titanium etc and on electricity for the manufacture of products. The prices in some of these markets are volatile and the supply of titanium has occasionally been limited. There are a limited number of possible suppliers of titanium. The risk for severely increased prices or limited supply constitutes serious risks for the operations. The possibilities to pass on higher input prices to an end customer vary from time to time and between different markets depending on the competition. The below graph below shows how much of the purchases of nickel and copper that have been hedged during 2022 and how much of the expected purchases during 2023 that were hedged at the end of 2022. The graph also presents to what extent the Group's costs for these purchases during 2023 would be affected if the prices would double from the level at December 31, 2022. **Sensitivity analysis and metal price hedging** 	The Group is addressing this risk by securing long-term supply commitments and through fixed prices from the suppliers during six to twelve months and through derivatives for metals and electricity. For metals: – The exposures for the coming 12 months of expected flows must be hedged between 30–70 percent. – In certain situations, exposures beyond 12 months can also be hedged. For electricity the coming 12 months' expected exposure shall be hedged between 30-90 percent and the coming 13–24 months can be hedged up to 80 percent. During periods of large price increases the customer price on titanium products has been linked to Alfa Laval's procurement costs for titanium. The Group has during certain periods experienced large price fluctuations for many raw materials, but in particular for stainless steel, carbon steel, copper and titanium. During 2022 the metal prices have fluctuated heavily. The price volatility for the most important metals is presented below. **Nickel**  **Copper**  **Aluminium**  The Group uses metal futures to secure the price on strategic metals.
Supply chain and logistical disruptions	During 2022, many companies have experienced supply chain and logistical disruptions. Alfa Laval has not been hit by this to any larger extent, but sub-suppliers have from time to time experienced shortages of mainly sourced semiconductors for control panels but also electronics for engines. Due to the risk for continued extensive outbreaks of COVID-19 in China and the ongoing war in Ukraine, the risk for continued disruptions is large.	Alfa Laval has a global footprint with 37 major manufacturing units across Europe, Asia, the US and Latin America. The company has well-established business continuity plans and a global supply chain with alternative sourcing solutions for most products and services and close collaboration with key suppliers.

Risk	Explanation	Mitigation
Legal and compliance risks		
Non-compliance with socioeconomic or environmental legislation	Alfa Laval's global and diversified business means that the Group is required to adhere to a variety of laws and regulations. Failure to meet socio-economic or environmental requirements could lead to legal and financial consequences, and negatively impact the company's reputation.	Policies, procedures and training programmes are in place to ensure that legal risks relating to its business activities are identified and that decisions are made on the appropriate level in the organisation. The legal counsel supports the business in identifying and handling these legal risks. A whistle-blowing system is in place where employees can report any breaches of laws or Alfa Laval policies anonymously without repercussions.
Bribery and corruption	If Alfa Laval employees fail to comply with anti-bribery and anti-corruption laws, this could potentially lead to loss of business, financial penalties and reputational damage.	The Alfa Laval Anti-Bribery and Anti-Corruption Policy is applicable to all employees within the Group. The policy sets procedures for preventing, detecting, reporting and investigating acts of bribery and corruption. Training is a focus area to ensure an understanding of the risks associated with improper behaviour in this area.
Material source or type	Alfa Laval uses metals that may originate from areas classified as "conflict areas". We manufacture products for customers with specific demands due to industry standards, for example marine, food and pharmaceutical customers.	Alfa Laval supports the US Securities and Exchange Commission's rules and other initiatives concerning conflict minerals. Alfa Laval established a Conflict Minerals Policy in 2013. Due diligence is conducted in our supply chain to minimise the risk that minerals originate from conflict areas (especially in the Democratic Republic of Congo). Alfa Laval's Supplier Risk & Compliance unit has processes in place to identify risks and monitor potential high-risk suppliers. The Alfa Laval Regulatory Operations unit monitors emerging legislation to ensure adherence in prioritized areas.
Unfair competition and antitrust	Infringements of applicable competition rules may result in Alfa Laval having to pay fines and losing goodwill.	The Fair Competition Policy provides guidelines to assist employees with how to adhere to competition law/antitrust laws, rules and regulation. Employees working with sales or purchasing are obliged to comply with this policy.
Export control and trade sanction regulations	Breach of export control and trade sanction regulations can lead to a denial of trade privileges, criminal proceedings and reputational damage.	The Alfa Laval Export Control Policy establishes rules for Group-wide handling of the relevant export control regulations, adherence to applicable trade sanctions and it ensures that no products or services supplied by Alfa Laval are used in relation to weapons of mass destruction.
Risk for and in connection with litigations	This risk for the costs the Group may incur in managing litigations, costs in connection with settlements and costs for imposed penalties. The Group is involved in a few litigations, mainly with customers.	Any estimated loss risks are provided for.
Asbestos-related lawsuits	The Alfa Laval Group was as of December 31, 2022, named as a co-defendant in a total of 485 asbestos-related lawsuits with a total of approximately 485 plaintiffs.	Alfa Laval strongly believes the claims against the Group are without merit and intends to vigorously contest each lawsuit. Based on current information and Alfa Laval's understanding of these lawsuits, Alfa Laval continues to believe that these lawsuits will not have a material adverse effect on the Group's financial condition or results of operation.
Supply chain risks		
Business Principles deviation in the supply chain	Deviations could have an adverse impact on people, the environment and society that could damage the company's reputation.	Alfa Laval works to have a supply chain that follows laws and the company's business principles. All suppliers sign contracts where they agree to abide by the Alfa Laval Business Principles. Suppliers are assessed based on a risk analysis (country/process) and high-risk suppliers are regularly audited. All employees within the procurement organisation and many suppliers are trained in all areas that are covered by the business principles.
Human Rights breaches	The risk that the human rights of individuals linked to Alfa Laval are violated. For example, child labour, forced labour and freedom of association.	Alfa Laval's Business Principles build on the UN Global Compact, the OECD Guidelines for multinational enterprises, the UN Guiding Principles for Business and Human Rights and incorporate the UK Modern Slavery Act. Suppliers sign off on these business principles in their contracts with Alfa Laval. High-risk suppliers are also audited that they follow the business principles.

Risk	Explanation	Mitigation
Production or product related risks		
Risk connected to technical development	The risk that a competitor develops a new technical solution that makes Alfa Laval's products technically obsolete and therefore difficult to sell.	Alfa Laval makes a deliberate investment in research and development aiming at being in the absolute frontline of technical development.
Risk for technically related damages	The risk for the costs Alfa Laval may incur in connection with a product delivered by the Group breaking down and causing damages to life and property. The main risk in this context concerns high-speed separators, due to the large forces that are involved when the bowl in the separator spins with a very high number of revolutions. In a breakdown the damages can be extensive.	Alfa Laval makes extensive testing and has an ISO certified quality assurance. The Group has product liability insurance. The number of damages is low and few damages have occurred historically.
Health & Safety	Health and safety risks such as occupational diseases and accidents. The risk that an employee is injured or killed in a workplace accident.	The Alfa Laval Occupational Health & Safety (OHS) Policy guides the work together with our OHS Manual. The purpose with these is to safeguard a healthy and safe working environment by preventing accidents, occupational diseases and other health risks. We have a process to continuously monitor high-risk areas in our operations, train employees and enforce changes.
Environmental risks		
Major environmental incident at a site	An incident that causes a significant environmental damage could lead to long-term environmental impact, negative impact on people, fines and reputational damage to the company.	The Alfa Laval Environmental Policy is applicable to the entire Alfa Laval Group. Environmental performance is monitored and measured through Environmental Management Systems. The large sites are ISO 14001 certified. Smaller sites work according to Environmental Management Systems where risks are identified, and effective countermeasures are implemented.
Use of hazardous chemicals	Using hazardous chemicals could lead to severe illness or have a serious negative impact on our environment or society.	The Alfa Laval Group Restricted Substance List (former Alfa Laval Group Black & Grey List) is the primary tool to control the use of hazardous chemical substances. The list comprises legislations and global agreements deemed relevant for our products and area of business with an annexed list of the concerned substances. It is updated annually to reflect any legislative changes. The substances in the Restricted Substance List is divided in three categories: Banned, Restricted and Substances of Concerns.
Climate and water	Climate change can lead to increased costs and constrain production. Water scarcity in the supply chain or at our sites can constrain production. Cost of energy or carbon emissions can increase due to climate legislations. However, the biggest risks are connected to climate change and extreme weather in our exposed operations and supply chains in North America, China and India. Although all sites can be affected, these three regions stick out in the medium (5–10y) to long term (10–40y).	Alfa Laval does not use significant amounts of energy in our production, but we are affected through our supply chain. To continuously improve, we have targets to both increase energy efficiency and to reduce carbon emissions. Alfa Laval production is not water intensive, and most water facilities are closed loop. The environmental strategy for 2022 includes targets for energy efficiency, carbon emissions and water usage. Read more in the Environmental chapter in the Sustainability Report. During 2022 Alfa Laval has conducted a holistic risk assessment looking at how climate change will affect Alfa Laval's financial result (short term 0–5y, medium term 5–10y and long term 10–40y). This resulted in a high-level conclusion that some enterprise adaptation is needed and a decision to conduct an in-depth study during 2023, to better understand site specific situations and the mitigation needed.
IT related risks		
Loss of intellectual property, financial or personal data	Loss of intellectual property, financial or personal data due to for instance unauthorized access to Alfa Laval's computer systems.	Alfa Laval holds compulsory trainings on information security awareness. Policies describe what is confidential information and how the information should be classified. Alfa Laval's IT agreements contain the necessary Information Security components. Information security is also monitored in our project model – feasibility, pre-study and project. A template is also sent at an early stage to all potential suppliers to identify if there are any possible infringements of information security.

Risk	Explanation	Mitigation
Human capital risks		
Risk connected to attracting and retaining talents	Companies that do not succeed in attracting and retaining talents risk experiencing an inferior development compared to companies that succeed with this.	To offer interesting positions, personal and professional development, a good working environment and competitive compensation and benefits are prioritized areas within Alfa Laval.
Other risks		
Business interruption risks	The risk that single units or functions within the Group can be hit by business interruption due to: – strikes and other labour market conflicts; – fires, natural catastrophes etc; – computer access violations, lack of backups etc.; and – corresponding problems at major sub-suppliers.	Alfa Laval has a well-developed dialog with the local unions, which reduces the risk for conflicts and strikes where Alfa Laval is directly involved. It is however more difficult to protect the company against conflicts in other parts of the labour market, for instance within transportation. Alfa Laval is minimizing the following two risks through an active preventive work at each site in line with the developed global policies in each area under supervision of manufacturing management, the Group's Risk Management function, Real Estate Management, IT and HR. Problems at major sub-suppliers are minimized by Alfa Laval trying to use several suppliers of input goods that when needed can cover up for a drop in production somewhere else. The wish for long-term and competitive delivery agreements however puts restrictions on the level of flexibility that can be achieved. When there is a shortage, the total supply may be too limited to allow exchangeability. HPR stands for "Highly Protected Risk" and is the insurance industry's highest rating for risk quality. This rating is reserved for those commercial properties where the exposure for physical damages is reduced to a minimum considering building construction, operations and local conditions. HPR means that all physical risks in and around the facility are documented and that these are kept within certain limits. Alfa Laval's production facility in Lund in Sweden, which is the Group's largest and most important facility is HPR classified, as well as the production facilities in Chesapeake and Newburyport in the U.S. A number of other key production facilities are being evaluated and may eventually become HPR classified. An HPR classification means that the facility has state of the art fire and machinery protection systems and that the responsible personnel has adequate security routines to make sure that these protection systems are maintained and in function. In addition, known possible sources of ignition are under strict control to prevent a fire from starting. For an HPR facility the risk for a physical damage is brought to a minimum, which minimises the risk for business interruption that could have extensive consequences for Alfa Laval and its customers. For other production facilities, not HPR classified, the aim is also to reduce the risk for damage and business interruption to a minimum by keeping, among other things, ignition sources under strict control. Loss prevention visits are conducted according to a schedule based on size and importance for Alfa Laval.
Political risk	The risk that the authorities, in the countries where the Group is operating, by political decisions or administration make continued operations difficult, expensive or impossible for the Group.	The Group is mainly operating in countries where the political risk is considered to be negligible or minor. The operations that are performed in countries where the political risk is deemed to be higher are not material.
Insurance risks	These risks refer to the costs that Alfa Laval may incur due to an inadequate insurance coverage for property, business interruption, liability, transport, life and pensions.	The Group strives to maintain an insurance coverage that keeps the risk level at an acceptable level for a Group of Alfa Laval's size and still is cost efficient. At the same time a continuous work is going on to minimise the risks in the operations through proactive measures.
Risks connected to credit terms	The limited freedom of action that can be imposed on the Group through restrictions connected to credit terms in loan agreements.	Alfa Laval's strong solidity and profitability limits this risk.

Notes

Note 1. Operating segments

Alfa Laval's business is divided into three Business Divisions ”Energy”, ”Food & Water” and ”Marine” that sell to external customers and are responsible for the manufacturing of the products and one division “Operations & Other” covering procurement, logistics, distribution and production development as well as corporate overhead and non-core businesses. These four divisions constitute Alfa Laval's four operating segments.

The customers to the Energy Division purchase products and systems for energy applications, whereas the customers to the Food & Water Division purchase products and systems for food and water applications. The customers to the Marine Division purchase products, systems and digital solutions for marine and offshore applications.

The three first Business Divisions are in turn split into a number of Business Units. The Energy Division consists of four Business Units: Brazed & Fusion Bonded Heat Exchangers, Energy Separation, Gasketed Plate Heat Exchangers and Welded Heat Exchangers. The Food & Water Division consists of six Business Units: Decanters, Food Heat Transfer, Food Systems, Hygienic Fluid Handling, High Speed Separators and Desmet. The Marine Division consists of five Business Units: Boiler Systems, Digital Solutions, Environmental Products, Marine Separation & Heat Transfer Equipment and Pumping Systems.

The operating segments are only responsible for the result down to and including operating income excluding comparison distortion items and for the operating capital they are managing. This means that financial assets and liabilities, pension assets, provisions for pensions and similar commitments and current and deferred tax assets and liabilities are a Corporate responsibility and not an operating segment responsibility. This also means that the financial net and income taxes are a Corporate responsibility and not an operating segment responsibility.

The operating segments are only measured based on their transactions with external parties.

Orders received

Consolidated		
SEK millions	2022	2021
Energy	17,294	13,675
Food & Water	21,909	16,664
Marine	19,442	15,379
Operations & Other	0	0
Total	**58,645**	**45,718**

Order backlog

Consolidated		
SEK millions	2022	2021
Energy	8,517	5,791
Food & Water	14,381	6,823
Marine	14,122	10,340
Operations & Other	0	0
Total	**37,020**	**22,954**

Net sales

Consolidated		
SEK millions	2022	2021
Energy	15,074	12,383
Food & Water	20,691	14,640
Marine	16,370	13,888
Operations & Other	0	0
Total	**52,135**	**40,911**

Operating income in management accounts

Consolidated		
SEK millions	2022	2021
Energy	2,761	1,897
Food & Water	3,339	2,637
Marine	1,741	2,211
Operations & Other	-507	-441
Total	7,334	6,304
Reconciliation with Group total:		
Comparison distortion items	-767	-192
Consolidation adjustments *	-48	14
Total operating income	6,519	6,126
Financial net	-340	16
Result after financial items	**6,179**	**6,142**

* Difference between management accounts and IFRS.

Operating income in management accounts is very close to operating income under IFRS. There are only two differences. Operating income in management accounts does not include comparison distortion items nor all the consolidation adjustments that are made in the official accounts.

Assets / Liabilities

Consolidated	Assets		Liabilities	
SEK millions	2022	2021	2022	2021
Energy	17,330	13,262	6,574	5,252
Food & Water	21,196	11,714	8,291	5,144
Marine	30,932	28,718	7,241	6,317
Operations & Other	1,983	1,486	1,097	801
Subtotal	71,441	55,180	23,203	17,514
Corporate	9,808	9,181	22,342	14,503
Total	**81,249**	**64,361**	**45,545**	**32,017**

Corporate refers to items in the statement on financial position that are interest bearing or are related to taxes.

Investments

Consolidated		
SEK millions	2022	2021
Energy	535	403
Food & Water	360	315
Marine	235	250
Operations & Other	723	261
Total	**1,853**	**1,229**

Depreciation

Consolidated		
SEK millions	2022	2021
Energy	518	433
Food & Water	568	360
Marine	970	840
Operations & Other	336	354
Total	**2,392**	**1,987**

Note 2. Information about geographical areas

Countries with more than 10 percent of either net sales, non-current assets or investments are reported separately.

Net sales

Consolidated

	2022		2021	
	SEK millions	%	SEK millions	%
To customers in:				
Sweden	1,206	2.3	1,166	2.9
Other EU	12,889	24.7	9,837	24.0
Other Europe	4,812	9.2	4,182	10.2
USA	8,784	16.9	6,031	14.7
Other North America	1,081	2.1	763	1.9
Latin America	2,388	4.6	1,606	3.9
Africa	778	1.5	500	1.2
China	7,153	13.7	6,803	16.6
South Korea	3,801	7.3	3,160	7.7
Other Asia	8,559	16.4	6,346	15.6
Oceania	684	1.3	517	1.3
Total	**52,135**	**100.0**	**40,911**	**100.0**

Net sales are reported by country on the basis of invoicing address, which is normally the same as the delivery address.

Non-current assets

Consolidated

	2022		2021	
	SEK millions	%	SEK millions	%
Sweden	2,942	6.6	2,273	5.9
Denmark	5,348	11.9	4,847	12.7
Other EU	8,829	19.7	3,978	10.4
Norway	15,393	34.4	15,573	40.8
Other Europe	416	0.9	377	1.0
USA	4,236	9.5	3,692	9.7
Other North America	158	0.4	137	0.4
Latin America	379	0.8	269	0.7
Africa	9	0.0	8	0.0
Asia	4,394	9.8	3,788	9.9
Oceania	118	0.3	110	0.3
Subtotal	42,222	94.3	35,052	91.8
Other long-term securities	475	1.1	1,396	3.6
Pension assets	201	0.4	70	0.2
Deferred tax asset	1,895	4.2	1,694	4.4
Total	**44,793**	**100.0**	**38,212**	**100.0**

Investments

Consolidated

	2022		2021	
	SEK millions	%	SEK millions	%
Sweden	641	34.6	258	20.9
Italy	46	2.5	154	12.5
Other EU	252	13.6	216	17.6
Norway	150	8.1	208	16.9
Other Europe	33	1.8	23	1.9
North America	124	6.7	85	7.0
Latin America	23	1.2	13	1.1
Africa	1	0.0	0	0.0
China	453	24.5	206	16.7
Other Asia	123	6.6	60	4.9
Oceania	7	0.4	6	0.5
Total	**1,853**	**100.0**	**1,229**	**100.0**

Note 3. Information about products and services

Net sales by product/service

Consolidated

SEK millions	2022	2021
Own products within:		
Separation	8,613	7,107
Heat transfer	20,149	16,274
Fluid handling	11,275	9,291
Marine environmental	3,995	4,063
Other	0	0
Associated products	4,567	1,555
Services	3,536	2,621
Total	**52,135**	**40,911**

The split of own products within separation, heat transfer and fluid handling is a reflection of the current three main technologies. Marine environmental is a product area basically outside the main technologies. Other is own products outside these four product areas. Associated products are mainly purchased products that compliment Alfa Laval's product offering. Services cover all sorts of service and service agreements excluding spare parts.

Note 4. Information about major customers

Alfa Laval does not have any customer that accounts for 10 percent or more of net sales. Tetra Pak within the Tetra Laval Group is Alfa Laval's single largest customer with a volume representing 4.0 (4.7) percent of net sales. See Note 33 for more information.

Note 5. Employees*

Average number of employees - total

Consolidated

	Number of female employees		Total number of employees	
	2022	2021	2022	2021
Parent company	–	–	–	–
Subsidiaries in Sweden (8)	653	592	2,625	2,425
Total in Sweden (8)	653	592	2,625	2,425
Total abroad (163)	3,586	3,187	16,377	14,994
Total (171)	**4,239**	**3,779**	**19,002**	**17,419**

* Full time equivalents.

The figures in brackets in the text column state how many companies had employees as well as salaries and remunerations in 2022.

Average number of employees – in Sweden by municipality

Consolidated

	2022	2021
Botkyrka	615	584
Eskilstuna	243	239
Lund	1,254	1,165
Ronneby	328	274
Stockholm	14	12
Vänersborg	98	97
Other *	73	54
Total	**2,625**	**2,425**

* "Other" refers to municipalities with less than 10 employees and also includes employees at branch offices abroad.

Average number of employees - by country/district

Consolidated

	Number of female employees		Total number of employees	
	2022	2021	2022	2021
Argentina	13	11	49	40
Australia	20	20	84	80
Belgium	18	2	80	23
Brazil	144	93	590	463
Bulgaria	4	1	11	5
Chile	7	7	32	29
Colombia	22	18	44	40
Denmark	482	446	1,875	1,734
Philippines	14	5	37	17
Finland	27	27	106	112
France	186	169	920	810
United Arab Emirates	26	23	111	112
Greece	9	8	31	28
Hong Kong	13	9	34	26
India	111	80	1,441	1,253
Indonesia	24	20	103	84
Iran	–	–	0	1
Italy	168	162	759	744
Japan	62	57	242	241
Canada	21	20	100	96
China	823	743	3,776	3,456
Korea	55	51	306	302
Latvia	5	6	9	9
Lithuania	3	1	48	22
Malaysia	60	44	164	124
Mexico	13	11	59	51
Netherlands	84	84	353	370
Norway	248	227	1,213	1,132
New Zeeland	2	2	19	18
Panama	6	5	17	16
Peru	6	5	24	21
Poland	112	100	430	382
Portugal	4	4	8	8
Qatar	–	–	8	7
Romania	2	2	11	10
Russia	68	93	169	226
Saudi Arabia	1	–	38	47
Switzerland	3	3	10	12
Singapore	78	68	257	241
Slovakia	2	2	8	9
Slovenia	5	4	14	15
Spain	27	27	108	103
UK	82	60	387	320
Sweden	653	592	2,625	2,425
South Africa	16	12	43	43
Taiwan	20	18	46	44
Thailand	18	17	57	55
Czech Republic	5	6	25	26
Turkey	16	15	74	64
Germany	71	67	276	269
Ukraine	1	2	9	12
Hungary	2	2	11	11
USA	368	321	1,701	1,593
Vietnam	6	4	34	21
Austria	3	3	16	17
Total	**4,239**	**3,779**	**19,002**	**17,419**

Gender distribution

Consolidated

		2022			2021	
	Total number	Male %	Female %	Total number	Male %	Female %
Board members (excluding deputies)	12	83.3	16.7	13	76.9	23.1
President and other executive officers	9	77.8	22.2	9	77.8	22.2
Managers in Sweden	325	75.7	24.3	304	76.0	24.0
Managers outside Sweden	2,684	81.1	18.9	2,441	81.2	18.8
Managers total	3,009	80.6	19.4	2,745	80.6	19.4
Employees in Sweden	2,625	75.1	24.9	2,425	75.6	24.4
Employees outside Sweden	16,377	78.1	21.9	14,994	78.7	21.3
Employees total	19,002	77.7	22.3	17,419	78.3	21.7

Note 6. Salaries and remunerations

Salaries and remunerations – total

Consolidated

SEK millions	2022	2021
Board of Directors, Presidents and Vice Presidents	326	283
- out of which, variable	74	59
Other	10,226	8,293
Total salaries and remunerations	10,552	8,576
Social security costs	1,762	1,462
Pension costs, defined benefit plans	105	105
Pension costs, defined contribution plans	707	633
Total personnel costs	**13,126**	**10,776**

The Group's pension costs and pension liabilities relating to the Board of Directors, presidents and vice presidents amounts to SEK 30 (29) million and SEK 263 (266) million respectively. SEK 67 (70) million of the pension liabilities is covered by the Alfa Laval Pension Fund.

Equity compensation benefits

During the period 2021 to 2022 no equity related benefits existed within Alfa Laval.

Variable remunerations

All employees have either a fixed salary or a fixed base salary. For certain personnel categories the remuneration package also includes a variable element. This relates to personnel categorises where it is customary or part of a market offer to pay a variable part. Variable remunerations are most common in sales related jobs and on higher managerial positions. Normally the variable part constitutes a minor part of the total remuneration package.

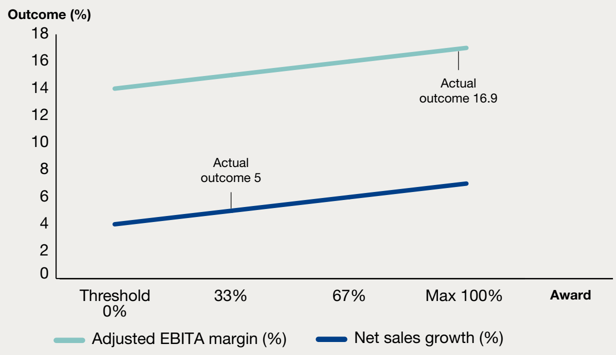
Cash-based long-term incentive programme

The Board of Directors decided in 2022 to implement step five of the modified cash based long-term incentive programme for maximum 95 senior managers in the Group including the Chief Executive Officer and the persons defined as executive officers. The Annual General Meeting 2021 decided to implement step four of the programme for the same target group. The outcome of the modified programme depends on how the adjusted EBITA margin and the net sales growth have developed during the three-year period, with a 50/50 weight between the targets. This means that there will be no award during the first two years since it is first in year three that it can be determined to what extent the targets have been achieved. Maximum outcome is awarded when the targets are exceeded. The remuneration from the modified long-term incentive programme can constitute maximum 25, 40 or 50 percent of the fixed remuneration depending on position. Payment to the participants in the programme is made after year three and only provided that they are still employed at the date of payment (except in case of termination of employment due to retirement, death or disability). If the employee resigns or is dismissed before the end of the three-year period, the employee will not be entitled to any pay-out. If the employee moves to a position that is not eligible for this programme, a pro-rata payment will be made after the end of the three year period. Paid remunerations from the long-term incentive programme do normally not affect the pensionable income or the holiday pay.

In 2022 step three, four and five of the modified programme were running in parallel.

The outcome of step one covering the period January 1, 2020 – December 31, 2022 was:

Long-term incentive plan 2020–2022



The performance targets were:

Long-term incentive plans

	Performance targets	
	Threshold	Maximum
Adjusted EBITA margin (%)	14.0	17.0
Net sales growth (%)	4	7
If achieved, the award is (%)	0	100

The actual outcome and the resulting award were:

Long-term incentive plans

Consolidated

	Outcome				
Plan 2020–2022	2020	2021	2022	Average	Award in %
Adjusted EBITA margin (%)	17.4	17.4	15.8	16.9	96.67
Net sales growth (%)	-11	-1	27	5	33.33
	Outcome				
Plan 2019–2021	2019	2020	2021	Average	Award in %
Adjusted EBITA margin (%)	17.2	17.4	17.4	17.3	100.00
Net sales growth (%)	14	-11	-1	1	0.00
	Outcome				
Plan 2018–2020	2018	2019	2020	Average	Award in %
Adjusted EBITA margin (%)	16.5	17.2	17.4	17.0	100.00
Net sales growth (%)	15	14	-11	6	66.67

There are three opportunity levels in the plan and the award per opportunity level and the total cost for the plan was:

Long-term incentive plans, Award

Consolidated

	Outcome per maximum opportunity			Total cost	Paid
	25%	40%	50%	SEK millions	in
Plan 2020-2022	16.25%	26.00%	32.50%	36	2023
Plan 2019-2021	12.50%	20.00%	25.00%	27	2022
Plan 2018-2020	20.83%	33.33%	41.67%	42	2021

Remuneration policy for executive officers

The remuneration policy for executive officers is established by the Annual General Meeting. The complete policy is found in Note 37.

The remunerations to the Chief Executive Officer/Managing Director are decided by the Board of Directors based on proposals from the Remuneration Committee according to the guidelines established by the Annual General Meeting. The remunerations to the other members of Group Management are decided by the Remuneration Committee according to the same guidelines. The principle used when deciding the remunerations to executive officers is to offer a competitive remuneration where the remuneration package is mainly based on a fixed monthly salary, with an option for a company car and in addition to that a variable remuneration of up to 50 percent of the salary (managing director up to 60 percent of the salary). The outcome of the variable remuneration depends on the level of fulfilment of the established mainly financial targets and to a limited extent also qualitative objectives. The guidelines for pension, termination and severance pay differ between the Chief Executive Officer/Managing Director and the other executive officers, see the below table.

The Board of Directors decided in 2022 to implement step five of the modified cash based long-term incentive programme for maximum 95 senior managers in the Group including the Chief Executive Officer and the persons defined as executive officers. The Annual General Meeting 2021 decided to implement step four of the programme for the same target group. The outcome of the modified programme depends on how the adjusted EBITA margin and the net sales growth have developed during a three-year period, with a 50/50 weight between the targets. This means that there will be no award during the first two years since it is first in year three that it can be determined to what extent the targets have been achieved. Maximum outcome is awarded when the targets are exceeded. The remuneration from the modified long-term incentive programme can constitute maximum 25, 40 or 50 percent of the fixed remuneration depending on position. Payment to the participants in the programme is made after year three and only provided that they are still employed at the date of payment.

Salaries and remunerations to Group Management

Consolidated	Group Management			
	Chief Executive Officer/President Tom Erixon		Other executive officers	
SEK thousands	2022	2021	2022	2021
Salary and remunerations				
Fixed remuneration				
Base salary	15,069	14,420	30,437	29,437
Other benefits [1]	445	918	2,846	887
Variable remuneration [2]				
Variable salary	8,652	6,300	13,868	8,059
Cash-based long-term incentive programme	3,605	5,834	5,965	9,310
Total salary and remuneration	27,771	27,472	53,116	47,693
Pension costs				
Retirement and survivors' pension [3]	7,549	7,231	11,039	12,040
Life, disability and health care insurance [4]	41	40	445	384
Total pension costs	7,590	7,271	11,484	12,424
Total remuneration	**35,361**	**34,743**	**64,600**	**60,117**
Proportion of fixed and variable remuneration				
Fixed remuneration including fixed pension costs	65%	65%	65%	66%
Variable remuneration including variable pension costs	35%	35%	35%	34%
Number of other executive officers at year end			8	8
Variable salary (STI)				
Included	Yes		Yes	
Un-guaranteed target of base salary	30%		Not set	
Maximum of base salary	60%		50%	50%
Cash-based long-term incentive programme (LTIP)				
Included	Yes		Yes	
Current year award [5]	4,855	3,605	7,854	5,921
Vested unpaid awards at December 31	4,855	3,605	7,854	5,921
Commitment for early retirement [6]	No		Yes	
Commitment for severance pay	Yes [7]		Yes [8]	
Commitment for retirement and survivors' pension	[9]		[10]	

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[1] Value of company car, housing benefit, taxable daily allowances, holiday pay and payment for vacation taken in cash.

[2] Refers to what was paid during the year.

[3] Defined contribution based.

[4] Defined benefit based.

[5] Based on current base salary.

[6] From the age of 62. A defined contribution solution for early retirement with a premium of 15 percent of the pensionable salary.

[7] If Alfa Laval terminates his employment before the age of 61, he will receive 24 months' remuneration, between 61 and 62 he will receive 12 months' remuneration and from 62 he will receive 6 months' remuneration.

[8] Maximum 2 years' salary. The commitments define the conditions that must be fulfilled in order for them to become valid.

[9] Is not included in the ITP plan. He has a defined contribution benefit comprising 50 percent of the base salary. In addition, he may exchange salary and variable remunerations for a temporary old age and family pension.

[10] For salaries above 30 base amounts there is a defined contribution pension solution with a premium of 30 percent of the pensionable salary above 30 base amounts. Until May 1, 2012 the executive officers also had a special family pension that represented a supplement between the old age pension and the family pension according to ITP. For the persons that were executive officers on May 1, 2012 the special family pension has been converted to a premium based supplementary retirement pension based on the premium level in December 2011. In addition, they may exchange salary and variable remunerations for a temporary old age and family pension.

One of the other executive officers in Group Management, Jan Allde left the company on October 31, 2022 and his successor Fredrik Ekström joined Group Management on November 1, 2022. Their costs are included in the above table for the period they have been part of Group Management.

During 2021 two of the other executive officers in Group Management retired, Peter Torstensson as per January 1, 2021 and Susanne Pahlén-Åklundh as per August 1, 2021. Thomas Möller joined Group Management from August 1, 2021. Their costs are included in the above table for the period they have been part of Group Management.

Board of Directors

For 2022, the Board of Directors receive a total fixed remuneration of SEK 7,170 (7,545) thousand, which is distributed among the members elected at the Annual General Meeting that are not employed by the company. These Directors do not receive any variable remuneration.

Remunerations to Board members *

Consolidated

SEK thousands		2022	2021
Fees by function:			
Chairman of the Board		1,900	1,850
Other members of the Board		635	615
Supplement to:			
Chairman of the Audit Committee		300	250
Other members of the Audit Committee		150	150
Chairman of the remuneration committee		75	75
Other members of the remuneration committee		75	75
Fees by name:			
Dennis Jönsson	Chairman	2,125	2,075
Henrik Lange	Member	935	865
Ray Mauritsson	Member	635	615
Heléne Mellquist	Member	–	765
Maria Moræus Hanssen	Member	635	615
Lilian Fossum Biner	Member	785	615
Finn Rausing	Member	635	615
Jörn Rausing	Member	710	690
Ulf Wiinberg	Member	710	690
Total		**7,170**	**7,545**

* Elected at the Annual General Meeting and not employed by the company.

The reported remunerations refer to the period between two Annual General Meetings.

The Chairman of the Board does not have any agreement on future retirement or severance pay with Alfa Laval.

The audit committee and the remuneration committee have had the following members during the last two years:

	2022	2021
Audit Committee:		
Chairman	Henrik Lange	Henrik Lange
Other member	Dennis Jönsson	Dennis Jönsson
Other member	Lilian Fossum Biner	Heléne Mellquist
Remuneration committee:		
Chairman	Dennis Jönsson	Dennis Jönsson
Other member	Ulf Wiinberg	Ulf Wiinberg
Other member	Jörn Rausing	Jörn Rausing

The members of the committees are appointed at the constituent meeting of the Board of Directors directly after the Annual General Meeting.

Note 7. Information on auditors and auditors' fee

The line "Group auditors" in the below table is referring to the auditors elected at Annual General Meeting of Alfa Laval AB (publ). The Annual General Meetings 2021 and 2022 decided to elect EY as the Group's auditors for the coming year.

Fees and expense compensation

Consolidated

SEK millions	2022	2021
Audit engagements		
Group auditors	48	39
Other audit firms	1	2
Total	**49**	**41**
Audit related services		
Group auditors	1	1
Other audit firms	0	1
Total	**1**	**2**
Tax services		
Group auditors	9	7
Other audit firms	15	9
Total	**24**	**16**
Other services		
Group auditors	3	3
Other audit firms	10	18
Total	**13**	**21**
Expenses		
Group auditors	0	0
Other audit firms	0	0
Total	**0**	**0**
Total		
Group auditors	61	50
Other audit firms	26	30
Total	**87**	**80**

An audit engagement includes examining the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. It also includes an examination in order to give an opinion on the Board's discharge from liability. Audit related services are audit services that are outside the audit engagement. Tax services refer to advices given in connection with various tax matters. All other assignments are defined as other services. Expenses refer to reimbursements of travel costs, secretarial services etc.

Note 8. Comparison distortion items

Comparison distortion items

Consolidated

SEK millions	2022	2021
Other operating income		
Comparison distortion items:		
– Realised gain on sale of businesses	–	3
– Realised gain on sale of properties	–	9
Other operating costs		
Comparison distortion items:		
– Provision for financial consequences of Russia's war on Ukraine	-400	–
– Restructuring costs	-367	-204
Net comparison distortion items	**-767**	**-192**

The comparison distortion items during 2022 are relating to costs triggered by Russia's war on Ukraine and for a restructuring programme for parts of the Marine Division and the Business Unit for Welded Heat Exchangers in the Energy Division to adjust capacity imbalances in the supply organization and manage the impact as we transit from fossil to sustainable energy solutions. See description in the Board of Directors' report for more details.

The comparison distortion items during 2021 were relating to the final step in the restructuring program that was started during the fourth quarter 2020 and the realised gains on the sale of the remaining air heat exchanger operation in India to LU-VE and on the sale of a property in India. The total restructuring cost including write down of goodwill was SEK 945 million, out of which SEK 741 million was charged in 2020 and the remaining SEK 204 million was charged in 2021.

Note 9. Depreciation and amortisation

Split by function

Consolidated

SEK millions	2022	2021
Cost of goods sold	-1,606	-1,465
Sales	-353	-134
Administration	-229	-211
Research and development	-10	-55
Other income and costs	-194	-122
Total	**-2,392**	**-1,987**

Split by type of asset

Consolidated

SEK millions	2022	2021
Intangible assets		
Patents and unpatented know-how	-468	-362
Trademarks	-451	-410
Licenses, renting rights and similar rights	-9	-34
Internally generated intangible assets	-94	-22
	-1,022	-828
Tangible assets		
Purchased assets		
Buildings and ground installations	-249	-232
Machinery	-424	-373
Equipment	-227	-155
	-900	-760
Leased assets		
Right-of-use asset real estate	-384	-314
Rigth-of-use asset machinery	-18	-14
Rigth-of-use asset equipment	-68	-71
	-470	-399
Sum tangible assets	-1,370	-1,159
Total	**-2,392**	**-1,987**

Note 10. Dividends and other financial income and costs

Split by type

Consolidated

SEK millions	2022	2021
Dividends from other	0	41
Gain or loss on sale of marketable securities	2	-10
Fair value changes in marketable securities	3	4
Total	**5**	**35**

Note 11. Interest income/expense and financial exchange rate gains/losses

Split on type of income/expense or gain/loss

Consolidated

SEK millions	2022	2021
Interest income		
Leasing	5	0
Other interest	90	45
Exchange rate gains		
Unrealised	104	59
Realised	68	258
Total	**267**	**362**
Interest expenses		
Leasing	-87	-74
Other interest	-232	-143
Exchange rate losses		
Unrealised	-146	-82
Realised	-147	-82
Total	**-612**	**-381**

In the Group, reported net exchange differences of SEK -946 (-165) million relating to debts in foreign currencies have been charged to other comprehensive income. These debts finance the acquisition of shares in foreign subsidiaries and act as a hedge to the acquired net assets. The amount is charged with tax resulting in a net after tax impact on other comprehensive income of SEK -751 (-131) million.

Split on type of income/expense or gain/loss

Parent company

SEK millions	2022	2021
Interest income		
External companies	0	–
Subsidiaries	44	–
Exchange rate gains		
Unrealised	2	0
Total	**46**	**0**
Interest costs		
External companies	0	–
Total	**0**	**–**

Note 12. Non-controlling interests

Alfa Laval has the following subsidiaries with non-controlling interests. None of these non-controlling interests are material.

Specification of subsidiaries with non-controlling interests

SEK millions, unless otherwise stated		Non-controlling interest %		Attributable to non-controlling interest			
				Net income		Equity	
Company name	Country of domicile	2022	2021	2022	2021	2022	2021
Alfa Laval Aalborg Indústria e Comércio Ltda	Brazil	0.5	0.5	0	0	0	0
ClimaTempo Participacoes SA	Brazil	49	49	12	0	18	15
Agência Brasileira de Meteorologia Ltda	Brazil	49.01	49.01	1	1	7	5
Climanet Serviços de Internet Ltda	Brazil	49	49	-2	2	2	3
TV Meteorológica Ltda*	Brazil	70.42	70.42	0	0	1	1
Somar Meteorologia Ltda	Brazil	49	49	1	0	1	1
Southern Marine Weather Services Ltda	Brazil	49	49	0	0	2	1
Liyang Sifang Stainless Steel Products Co., Ltd.	China	35	35	52	38	285	218
Desmet Rosedowns GmbH	Germany	20	–	0	–	0	–
Ziepack SA	France	49	49	2	1	6	4
AO Alfa Laval Potok	Russia	0.0005	0.0005	0	0	0	0
Total				**66**	**42**	**322**	**248**

* Alfa Laval has a controlling interest.

Note 13. Classification of financial assets and liabilities

Financial assets

Consolidated

		Measured at					
		Fair value through				Amortised cost	
	Valuation hierarchy level	Profit or loss		Other comprehensive income			
SEK millions		2022	2021	2022	2021	2022	2021
Non-current assets							
Other non-current assets							
Other long-term securities	1 and 2	–	–	270	1,231	–	–
Derivative assets	2	–	4	95	52	–	–
Current assets							
Current receivables							
Accounts receivable	*	–	–	–	–	9,717	6,738
Notes receivable	*	–	–	–	–	435	456
Other receivables	*	–	–	–	–	4,903	2,990
Accrued income	*	–	–	–	–	45	92
Derivative assets	2	111	75	494	383	–	–
Current deposits							
Deposits with banks	*	–	–	–	–	187	163
Bonds and other securities	1	114	118	–	–	–	–
Debt instruments	*	–	–	–	–	3	4
Other deposits	*	–	–	–	–	7	6
Cash and cash equivalents	*	–	–	–	–	4,352	3,356
Total financial assets		**225**	**197**	**859**	**1,666**	**19,649**	**13,805**

Financial liabilities

Consolidated

		Measured at					
		Fair value through				Amortised cost	
	Valuation hierarchy level	Profit or loss		Other comprehensive income			
SEK millions		2022	2021	2022	2021	2022	2021
Non-current liabilities							
Liabilities to credit institutions etc	*	–	–	–	–	13,362	3,059
Lease liabilities	*	–	–	–	–	1,549	1,453
Derivative liabilities	2	5	–	135	63	–	–
Current liabilities							
Liabilities to credit institutions etc	*	–	–	–	–	1,700	5,185
Accounts payable	*	–	–	–	–	4,891	3,371
Notes payable	*	–	–	–	–	423	131
Lease liabilities	*	–	–	–	–	1,122	974
Other liabilities	*	–	–	–	–	5,269	3,557
Accrued costs	*	–	–	–	–	2,753	2,159
Derivative liabilities	2	94	25	599	181	–	–
Total financial liabilities		**99**	**25**	**734**	**244**	**31,069**	**19,889**

* Valued at amortised cost.

Valuation hierarchy level 1 is according to quoted prices in active markets for identical assets and liabilities.

Valuation hierarchy level 2 is out of directly or indirectly observable market data outside level 1.

Derivatives measured through other comprehensive income only relate to cash flow hedges.

All of the financial instruments above sum up either to the corresponding item in the statement on financial position or to the item specified in the notes referred to in the statement on financial position. The risks linked to these financial instruments including any concentrations of risk are presented in the sections on risks on pages 146–150.

Result of financial instruments

The result of the bonds and other current and non-current securities measured at fair value through profit or loss is found in Note 10 as fair value changes in securities.

The result of financial assets measured at amortised cost is presented in Note 11 as other interest income for deposits with banks, other deposits and cash and cash equivalents. The other financial assets measured at amortised cost do not generate a result but only a cash-in of the principal amount.

The result of the financial liabilities measured at amortised cost is presented in Note 11 as other interest costs for the liabilities to credit institutions etc. The other financial liabilities measured at amortised cost do not generate a result but only a cash-out of the principal amount.

The result of the derivative instruments impacting net income is presented below:

Result effect on net income of derivatives

Consolidated

SEK millions	2022	2021
Reported in cost of goods sold, relating to:		
Currency forward contracts	-470	354
Metal forward contracts	392	116
Electricity futures	40	11
Derivative assets and liabilities measured at fair value through profit or loss	42	24
Subtotal	**4**	**505**
Reported in interest income in the financial net, relating to:		
Currency swaps	23	–
Subtotal	**23**	**–**
Reported in exchange gains and losses in the financial net, relating to:		
Currency forward contracts	–	102
Derivative assets and liabilities measured at fair value through profit or loss	-42	31
Subtotal	**-42**	**133**
Total impact on net income	**-15**	**638**

The result of the derivative assets and liabilities measured at fair value through other comprehensive income is reported as part of other comprehensive income in the consolidated comprehensive income statement.

Note 14. Fair value of financial instruments

The fair value changes in shares in external companies are made under other comprehensive income and amounts to SEK -13 (357) million, see the consolidated comprehensive income statement.

The fair value changes in marketable securities are made on the line dividends and other financial income and costs in the consolidated comprehensive income statement and amounts to SEK 3 (4) million, see Note 10.

The net of derivative assets and derivative liabilities in the consolidated financial position is a net liability of SEK -133 million (net asset of SEK 245) million), which are specified below:

Fair value of derivatives

Consolidated

SEK millions	Currency pairs		Difference between contracted rate and current rate 2022	2021
Derivative assets/liabilities				
Foreign exchange forward contracts:	EUR	USD	0	-71
	EUR	SEK	-244	6
	EUR	AUD	1	-1
	EUR	CAD	4	0
	EUR	CNY	-9	82
	EUR	JPY	-4	1
	EUR	SGD	1	-3
	EUR	INR	-7	13
	USD	CAD	0	1
	USD	DKK	-39	-22
	USD	GBP	1	–
	USD	KRW	0	-8
	USD	INR	-4	1
	CAD	SEK	1	0
	DKK	NOK	-2	3
	DKK	SEK	-3	-1
	NOK	EUR	10	-8
	NOK	USD	-178	25
	CNY	JPY	–	1
	CNY	SEK	3	15
	CNY	USD	-1	4
	JPY	NOK	-1	16
	JPY	KRW	–	-1
	KRW	EUR	-2	–
	PLN	SEK	–	1
	Other	Other	-1	1
Subtotal			-474	55
Currency options			-39	3
Metal forward contacts			319	163
Electricity futures			61	24
Total, corresponding to a net derivative asset (+) or liability (-)			**-133**	**245**

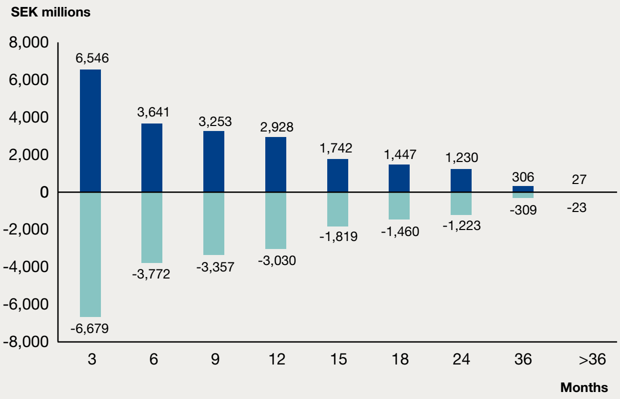
For currency options and electricity futures hedge accounting has not been applied. For foreign exchange forward contracts, interest rate swaps and metal forward contracts hedge accounting has been applied when the conditions for hedge accounting have been fulfilled.

The fair value adjustment of derivatives is made through other comprehensive income if hedge accounting can be applied and the derivatives are effective. In all other cases the fair value adjustment is made above net income. The corresponding entries are made on derivative assets and liabilities and not on the underlying financial instruments in the statement on financial position.

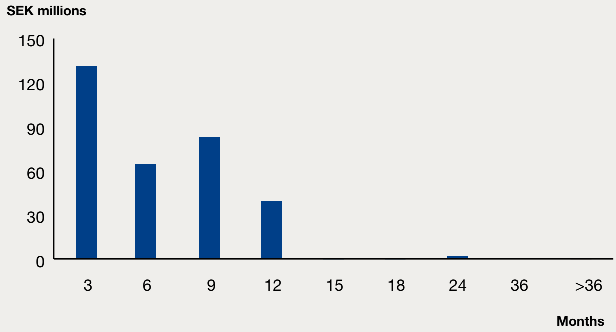
Note 15. Maturity analysis of derivatives

The future undiscounted cash flows for the different types of derivatives are shown in the following three graphs:

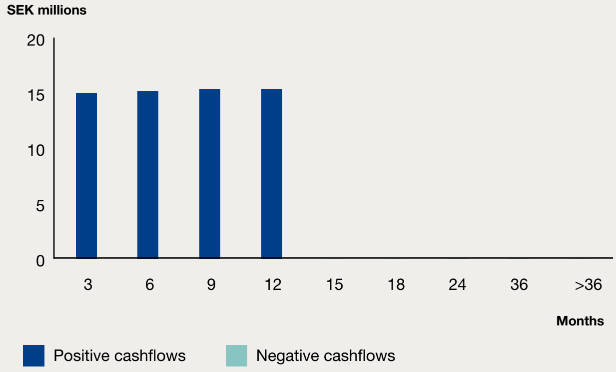
Maturity analysis for currency derivatives



Maturity analysis for metal derivatives



Maturity analysis for electricity futures



Note 16. Current and deferred taxes

Tax on this year's net income and other taxes

Consolidated

SEK millions	2022	2021
Major components of the Group's tax cost:		
Current tax cost	-1,579	-1,500
Adjustment for current taxes on prior periods	120	250
Deferred tax costs/income on changes in temporary differences	-138	-53
Deferred tax costs/income on changes in tax rates or new taxes	1	1
Previously unrecognised tax assets related to tax losses and tax credits	20	0
Previously unrecognised deferred tax assets related to tax losses, tax credits and temporary differences	1	2
Deferred tax cost from the write down or reversal of a previous write down of a deferred tax asset	1	-8
Dividend distribution tax	0	0
Other taxes	-36	-33
Total tax cost	**-1,610**	**-1,341**

Other taxes are mainly referring to wealth tax.

Tax on this year's other comprehensive income

Consolidated

SEK millions	2022	2021
Major components of the Group's tax cost		
Deferred tax on:		
Cash flow hedges	69	87
Market valuation of external shares	-28	-17
Translation difference	142	-21
Revaluations of defined benefit obligations	-81	-124
Total tax cost	**102**	**-75**

The difference between the tax costs of the group and the tax cost based upon applicable tax rates can be explained as follows:

Tax cost reconciliation

Consolidated

SEK millions	2022	2021
Result after financial items	6,179	6,142
Tax according to applicable tax rates	-1,454	-1,478
Tax effect of:		
Non-deductible costs	-352	-244
Non-taxable income	183	234
Differences between reported official depreciation and depreciation according to tax rules	6	-6
Differences between reported other official appropriations and other appropriations according to tax rules	-55	-110
Tax losses and tax credits	-22	56
Adjustment for current tax on prior periods	120	239
Adjustment deferred tax	0	1
Dividend distribution tax	0	0
Other	-36	-33
Total tax costs	**-1,610**	**-1,341**

Alfa Laval has provisions for uncertain tax positions and they are booked as a part of current tax liabilities when for instance a local tax audit or a taxation decision indicate an increased tax burden and the company makes the judgement that the tax authority wholly or partially can gain success in the future litigation.

Temporary differences exist when there is a difference between the book value and the tax base of assets and liabilities. The Group's temporary differences have resulted in a deferred tax asset or a deferred tax liability relating to the following assets and liabilities:

Deferred tax assets and liabilities

Consolidated

	2022		2021	
SEK millions	Assets	Liabilities	Assets	Liabilities
Relating to:				
Intangible non-current assets	9	1,362	13	924
Tangible non-current assets	121	188	72	141
Inventory	212	56	145	58
Other current assets	4	11	3	5
Financial assets	43	11	2	6
Short term liabilities	1,520	83	1,513	27
Tax losses and tax credits *	130	–	10	–
Other	21	747	20	761
Subtotal	2,060	2,458	1,778	1,922
Possible to net	-165	-165	-84	-84
Total deferred taxes	**1,895**	**2,293**	**1,694**	**1,838**

* The Group has reported a deferred tax asset on unused tax losses and tax grants of SEK 665 (98) million. These unused tax losses and tax grants are essentially not restricted in time.

In the Group there are temporary differences and unused tax losses and tax credits of SEK 999 (412) million that have not resulted in corresponding deferred tax assets, since these are not likely to be used within foreseeable time. The temporary differences are mainly relating to pensions, where the date of payment is so far into the future that considering discounting and uncertainty concerning future profit levels no asset is deemed to exist. The unused tax losses and tax grants are essentially not restricted in time, but the tax losses that can be utilised per year can be restricted to a certain proportion of the taxable result.

The nominal tax rate has changed in the following countries between 2021 and 2022 or will change during 2023.

Tax rates by country

Consolidated

Percent	2023	2022	2021
Colombia	35.0	35.0	31.0
France	25.0	25.0	27.5
Greece	22.0	22.0	24.0
Indonesia	22.0	20.0	22.0
Netherlands	25.8	25.8	25.0
UK	25.0	19.0	19.0
South Africa	27.0	28.0	28.0
Turkey	20.0	23.0	25.0

The tax rates for 2022 and 2021 have been used to calculate the actual tax each year, while the tax rates for 2023 and 2022 have been used to calculate the deferred tax for 2022 and 2021 respectively.

The Group's normal effective tax rate is approximately 26 (26) percent based on taxable result, and it is calculated as a weighted average based on each subsidiary's part of the result before tax. One-time items can however increase or decrease the tax rate for an individual year.

The total tax cost for 2021 was decreased by the following non-recurring items:

– the tax effect of SEK 175 million in total from received tax incentives and repaid taxes in connection with closed tax litigations and

– the tax effect of SEK 49 million in total from utilizing tax losses.

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Notes

Tax cost per country/district

Consolidated

SEK millions (unless otherwise stated)	2022 Earnings before tax and received dividends	2022 Tax cost	2022 Tax percentage (%)	2021 Earnings before tax and received dividends	2021 Tax cost	2021 Tax percentage (%)
Top ten countries/districts						
China	1,584	-388	24.5%	1,337	-342	25.6%
Sweden	1,517	-363	23.9%	1,625	-343	21.1%
USA	692	-156	22.5%	80	-12	15.7%
Brazil	339	-107	31.5%	134	-54	40.5%
UK	662	-102	15.4%	44	-1	2.1%
India	388	-101	26.1%	354	-60	16.9%
Denmark	432	-88	20.4%	585	-86	14.6%
Norway	746	-78	10.5%	844	-212	25.1%
Japan	132	-43	32.7%	75	-27	36.1%
Hong Kong	90	-38	42.3%	50	-27	54.9%
Total top ten countries/districts	**6,582**	**-1,464**	**22.2%**	**5,128**	**-1,164**	**22.7%**
Other countries/districts						
With a positive result	2,052	-230	11.2%	987	-157	15.9%
With losses	-179	13	7.2%	-53	8	15.5%
Total all countries/districts	**8,455**	**-1,681**	**19.9%**	**6,062**	**-1,313**	**21.6%**
Consolidation entries						
Elimination of appropriations	-479	97	20.3%	436	-89	20.4%
Amortisation of step-up values	-943	211	22.4%	-796	150	18.8%
Central provisions and consolidation adjustments	-854	-237	-27.8%	440	-89	20.2%
Total	**6,179**	**-1,610**	**26.1%**	**6,142**	**-1,341**	**21.8%**

The above table presents the earnings before tax and received dividends, the tax cost and the tax percentage per country for the top ten countries/districts separately and the others grouped under profit generating and loss-making respectively and the consolidation entries in order to arrive at the total. The local results include appropriations. The reason why the result is before received dividends is that these mostly are non-taxable. The top ten countries/districts are defined as the ten countries/districts with the highest tax cost in 2022. The comparison figures 2021 are for these ten countries/districts, although they might not have been among the ten countries/districts with highest tax cost also in 2021.

Observe that individual companies in the top ten countries/districts and in the group with a positive result can report losses. The group with losses can contain individual companies with profits. Also observe that the presented result is without correction for any non-deductible costs and non-taxable revenues outside received tax free dividends.

Companies with losses in countries/districts without tax pooling might have unused tax losses that have not resulted in a corresponding deferred tax asset, since these are not likely to be used. The lack of such a deferred tax income in these cases has an impact on the tax percentage in the concerned countries/districts.

Note 17. Goodwill and step-up values – acquisition of businesses

The allocation of step-up values to tangible and intangible assets and the residual goodwill in effect means that all acquisitions are valued at market. In order to separate out this valuation effect Alfa Laval focuses on EBITA, where any amortisation of step-up values is excluded. The development of these step-up values and any goodwill is shown in the table below.

Movement schedule

Consolidated

SEK millions	Opening balance 2022	Acquisitions	Planned depreciation/ amortisation	Translation difference	Closing balance 2022
Buildings	180	–	-33	13	160
Land and land improvements	-61	–	–	7	-54
Patents and unpatented know-how	1,946	820	-459	221	2,528
Trademarks	962	1,330	-451	131	1,972
Other	–	2	0	0	2
Subtotal step-up values	3,027	2,152	-943	372	4,608
Goodwill	22,480	2,237	–	1,541	26,258
Total	**25,507**	**4,389**	**-943**	**1,913**	**30,866**

During 2022 the Group has not recorded any impairment losses related to step-up values.

There is no deferred tax liability calculated on the goodwill. The deferred tax liability on the other step-up values is SEK 983 (622) million.

For assets sold, net gains or losses are recognised on the cost basis including any related step-up value.

The next table shows each acquisition separately. Any later adjustments to the allocations are referred to the original year of the acquisition. The figures for the allocations are based on the prevailing rates at the time the transactions took place and any change in exchange rates until December 31, 2022 is shown as a translation difference. The corresponding presentation by asset type is found in Notes 18 and 19.

Acquisition of businesses since 2000

Consolidated

SEK millions

Year	Businesses	Buildings	Land and land improvements	Inventory	Patents and unpatented know-how	Trademarks	Other	Total step-up values	Goodwill	Total
2000	Alfa Laval Holding	1,058	-228	340	1,280	461	1,112	4,023	3,683	7,706
2002	Danish Separation Systems	–	–	–	–	–	–	–	118	118
2003	Toftejorg	1	–	–	–	–	–	1	35	36
2005	Packinox	–	–	6	99	183	–	288	253	541
2006	Tranter	17	–	6	180	265	–	468	530	998
2007	AGC Engineering	–	–	–	–	12	–	12	20	32
	Helpman	9	8	–	36	–	–	53	4	57
	Publikt erbjudande Alfa Laval (India)	–	–	–	–	–	–	–	441	441
	DSO Fluid Handling	–	–	–	–	39	–	39	42	81
	Fincoil	–	–	–	233	–	–	233	241	474
2008	Høyer Promix A/S	–	–	–	–	–	–	–	16	16
	Nitrile India Pvt Ltd	–	–	–	–	–	–	–	6	6
	Standard Refrigeration	–	–	5	166	–	–	171	152	323
	Pressko AG	–	–	1	–	–	–	1	69	70
	Hutchison Hayes Separation	–	–	1	95	49	–	145	46	191
	P&D's Plattvärmeväxlarservice	–	–	–	–	–	–	–	10	10
	Ageratec	–	–	–	–	–	–	–	44	44
2009	Two providers of parts & service	–	–	–	–	291	–	291	210	501
	Onnuri Industrial Machinery	–	–	–	40	39	–	79	48	127
	HES Heat Exchanger Systems	–	–	–	83	–	–	83	59	142
	Public offer Alfa Laval (India)	–	–	–	–	–	–	–	311	311
	Termatrans	–	–	–	–	7	–	7	6	13
	Tranter acquisitions in Latin America	–	–	–	–	20	–	20	16	36
	ISO Mix	–	–	–	22	–	–	22	–	22
	LHE	–	–	–	298	297	–	595	344	939
2010	Champ Products	–	–	–	15	14	–	29	2	31
	A leading U.S. service provider	–	–	–	–	134	–	134	82	216
	G.S Anderson	–	–	–	35	–	–	35	23	58
	Astepo	–	–	–	24	15	–	39	8	47
	Si Fang Stainless Steel Products	–	–	–	27	16	–	43	42	85
	Definox	–	–	–	4	5	–	9	2	11
	Olmi	–	–	37	58	32	–	127	–	127
2011	Service company in the U.S.	–	–	–	–	150	–	150	126	276
	Aalborg Industries	248	–	–	430	860	–	1,538	3,630	5,168
2012	Vortex Systems	–	–	–	148	–	–	148	225	373
	Ashbrook Simon-Hartley	–	–	–	86	–	–	86	55	141
	Gamajet Cleaning Systems	–	–	–	47	–	–	47	37	84
	Air Cooled Exchangers (ACE)	–	–	–	585	–	–	585	346	931
2013	Niagara Blower Company	–	–	–	202	–	–	202	203	405
2014	Frank Mohn AS	–	–	38	1,160	3,793	–	4,991	9,831	14,822
	CorHex Corp	–	–	–	15	–	–	15	–	15
2015	Eftermarknadsbolag (separation)	–	–	–	–	32	–	32	24	56
	K-Bar Parts LLC	–	–	–	–	16	–	16	–	16
2019	Airec	–	–	–	60	–	–	60	22	82
2020	WCR Benelux	–	–	–	–	10	–	10	3	13
	Sandymount	–	–	–	41	–	–	41	15	56
2021	StormGeo	–	–	–	1,397	–	–	1,397	2,245	3,642
	LiftUP	–	–	–	106	–	–	106	109	215
2022	Desmet	–	–	–	681	1,330	–	2,011	2,121	4,132
	Scanjet	–	–	–	130	–	–	130	108	238
	Bunker Metric	–	–	–	9	–	2	11	8	19
	Accumulated during the period									
	Realised	-542	122	-435	–	–	–123	-978	-50	-1,028
	Write down	-6	-9	–	-89	–5	–	-109	-941	-1,050
	Planned depreciation/amortisation	-633	–	–	-5,757	-6,085	-993	-13,468	-612	-14,080
	Translation difference	8	53	1	582	-8	4	640	1,890	2,530
	Closing balance	**160**	**-54**	**–**	**2,528**	**1,972**	**2**	**4,608**	**26,258**	**30,866**

The acquisition of the Alfa Laval Holding AB group in connection with the acquisition by Industri Kapital of the Alfa Laval Group from Tetra Laval on August 24, 2000 is shown on the first row.

"Other" relates to step-up values from 2000 for "Machinery" of SEK 548 million and "Equipment" of SEK 452 million that have been fully depreciated or realised, for "Research and development" of SEK 54 million and "Capital gain (Industrial Flow)" of SEK 42 million that have been fully realised and for "Construction in process" of SEK 16 million that has been transferred to "Machinery".

Acquisition of businesses

During 2022

On September 13, 2022 Alfa Laval announced that it has acquired BunkerMetric, a Scandinavian software company that develops advanced decision support tools for marine bunker vessels. The acquisition is part of Alfa Laval's strategy to expand its digital marine service offering and will be part of the recently acquired StormGeo, a global leader in weather intelligence software and decision support services. BunkerMetric, headquartered in Denmark, supports ship operators in finding the best bunker procurement plan and improving voyage margins by using sophisticated algorithms. The optimization tools, together with StormGeo's advanced route services, will enable ship owners to streamline operations to help them improve their bottom line. BunkerMetric's procurement optimization tool will become a subscription service within StormGeo's existing offering. The purchase price is SEK 13 million, out of which all has been paid in cash. At the acquisition cash of SEK 1 million has been taken over. The costs directly linked to the acquisition (fees to lawyers, due diligence and assisting counsel) come in addition to this and have amounted to SEK 1 million, which is reported as other operating costs. The impact on the cash flow is thus SEK -13 million. Out of the difference between the purchase price paid and the net assets acquired SEK 9 million has been allocated to patents and un-patented know-how and SEK 2 million to other intangible assets (non-competition clause), while the residual SEK 8 million has been allocated to goodwill. The goodwill is relating to estimated synergies in procurement, logistics and corporate overheads and the company's ability to over time recreate its intangible assets. The value of the goodwill is still preliminary. The step-up value for patents and un-patented know-how is amortised over 10 years while the step-up value of the non-competition clause is amortised over 2 years. From the date of the acquisition the company has added SEK 1 million in orders received, SEK 1 million in invoicing and SEK 0 million in adjusted EBITA to Alfa Laval. If the company had been acquired at January 1, 2022 the corresponding figures would have been SEK 3 million, SEK 3 million and SEK 0 million respectively. At the end of December 2022, the number of employees was 1.

On August 31, 2022 Alfa Laval announced that it has closed the acquisition of Scanjet, a leading global supplier of tank cleaning equipment and solutions for marine, offshore and industrial applications. The acquisition will extend Alfa Laval's broad tanker offering, creating a more comprehensive product portfolio for cargo tanks. Scanjet's intelligent tank management solutions will be a valuable complement to Alfa Laval's sustainable marine offering as they reduce the water usage and energy consumption connected with tank cleaning. Adding Scanjet to Alfa Laval's portfolio will support customer efficiency at every stage of cargo handling. Scanjet has global presence with factories in Sweden, Poland and Indonesia. The purchase price is SEK 314 million, out of which SEK 268 has been paid in cash and SEK 46 million is retained for a period of 12 to 18 months. At the acquisition cash of SEK 40 million has been taken over. The costs directly linked to the acquisition (fees to lawyers, due diligence and assisting counsel) come in addition to this and have amounted to SEK 9 million, which is reported as other operating costs. The impact on the cash flow is thus SEK -237 million. Out of the difference between the purchase price paid and the net assets acquired SEK 130 million has been allocated to patents and un-patented know-how, while the residual SEK 108 million has been allocated to goodwill. The goodwill is relating to estimated synergies in procurement, logistics and corporate overheads and the company's ability to over time recreate its intangible assets. The value of the goodwill is still preliminary. The step-up value for patents and un-patented know-how is amortised over 10 years. From the date of the acquisition the company has added SEK 121 million in orders received, SEK 94 million in invoicing and SEK 17 million in adjusted EBITA to Alfa Laval. If the company had been acquired at January 1, 2022 the corresponding figures would have been SEK 346 million, SEK 281 million and SEK 41 million respectively. At the end of December 2022, the number of employees was 153.

On August 2, 2022 Alfa Laval announced that it has closed the acquisition of Desmet, part of the Desmet Ballestra Group, a world leader in engineering and supplying processing plants and technologies for edible oils and biofuel sectors. The acquisition will strengthen Alfa Laval's position in the renewable energy arena and complement its offering within edible oils. Headquartered in Brussels, Belgium, Desmet employs around 1,000 people in Europe, India, Southeast Asia, North America and Latin America. The acquired business was a part of the Desmet Ballestra Group and had a turnover of approximately EUR 300 million in 2021. The operational units and brands of Rosedowns and Stolz are included in the transaction. The Desmet Ballestra Group was owned by Financière DSBG and ultimately controlled by Kartesia and Farallon. The acquisition will operate as a stand-alone entity within the Food & Water Division of Alfa Laval. It strengthens Alfa Laval's position in the markets for edible oils, biofuels, and plant- and animal-based proteins for food and feed. The acquisition will have a positive impact on earnings per share and be marginally decretive to Alfa Laval's EBITA margin. "The acquisition will be an excellent fit for our offering of specialized processing equipment designed to increase both yield and quality of customers' end products," says Tom Erixon, President and CEO of Alfa Laval. "It will add know-how and expertise to accelerate future innovations within food, feed and biofuels – and strengthen our ability to support the transformation towards renewable fuels." The purchase price is SEK 3,632 million, out of which all has been paid in cash. At the acquisition cash of SEK 238 million has been taken over. The costs directly linked to the acquisition (fees to lawyers, due diligence and assisting counsel) come in addition to this and have amounted to SEK 37 million, which is reported as other operating costs. The impact on the cash flow is thus SEK -3 431 million. Out of the difference between the purchase price paid and the net assets acquired SEK 681 million has been allocated to patents and un-patented know-how and SEK 1,330 to the trademark Desmet, while the residual SEK 2,201 million has been allocated to goodwill. The goodwill is relating to estimated synergies in procurement, logistics and corporate overheads and the company's ability to over time recreate its intangible assets. The value of the goodwill is still preliminary. The step-up value for patents and un-patented know-how and the step-up value for the trademark Desmet are both amortised over 10 years. From the date of the acquisition the company has added SEK 1,374 million in orders received, SEK 2,474 million in invoicing and SEK 314 million in adjusted EBITA to Alfa Laval. If the company had been acquired at January 1, 2022 the corresponding figures would have been SEK 4,288 million, SEK 4,861 million and SEK 444 million respectively. At the end of December 2022, the number of employees was 1,071.

The acquisitions during 2022 are summarized in the following table. The larger acquisitions of Desmet and Scanjet are shown separately, whereas the acquisition of BunkerMetric is shown on a single line as other minor acquisitions. All acquired assets and liabilities were reported according to IFRS at the time of the acquisitions.

Acquisitions 2022

SEK millions	Desmet			Scanjet			Totalt
	Book value	Adjustment to fair value	Fair value	Book value	Adjustment to fair value	Fair value	Fair value
Property, plant and equipment	113	–	113	28	–	28	141
Right-of-use assets	93	–	93	–	–	–	93
Patents and unpatented know-how	22	681	703	–	130	130	833
Trademarks	–	1,330	1,330	–	–	–	1,330
Capitalised development costs	–	–	–	5	–	5	5
Other non-current assets	34	–	34	6	–	6	40
Inventory	212	–	212	85	–	85	297
Accounts receivable	1,032	–	1,032	31	–	31	1,063
Other receivables	810	–	810	6	–	6	816
Liquid assets	238	–	238	40	–	40	278
Provisions for pensions and similar commitments	-27	–	-27	–	–	–	-27
Other provisions	-17	–	-17	-1	–	-1	-18
Equity attributable to non-controlling interests	0	–	0	–	–	–	0
Loans	-47	–	-47	-47	–	-47	-94
Lease liability	-101	–	-101	–	–	–	-101
Accounts payable	-534	–	-534	-21	–	-21	-555
Advance payments	-469	–	-469	-7	–	-7	-476
Other liabilities	-1,392	–	-1,392	-20	–	-20	-1,412
Tax liabilities	-10	–	-10	–	–	–	-10
Deferred tax	-19	-438	-457	-2	-27	-29	-486
Acquired net assets	-62	1,573	1,511	103	103	206	1,717
Goodwill			2,121			108	2,229
Purchase price			-3,632			-314	-3,946
Costs directly linked to the acquisitions			-37			-9	-46
Retained part of purchase price			–			46	46
Liquid assets in the acquired businesses			238			40	278
Other minor acquisitions current year							-13
Payment of amounts retained in prior years							-4
Effect on the Group's liquid assets			-3,431			-237	-3,685

During 2021

On June 1, 2021 Alfa Laval completed the acquisition of StormGeo, a global leader in weather intelligence and advanced data science solutions. The acquisition is part of Alfa Laval's strategy to support the marine industry's efforts to make operations more efficient and will also enhance Alfa Laval's knowledge within digital services. The purchase price is fully financed via cash. The acquisition is neutral to Alfa Laval's EBITA margin and earnings per share. StormGeo, headquartered in Bergen in Norway, provides solutions and services for weather-sensitive operations, primarily in the marine industry, off-shore and other weather-dependent industries. The company's weather information services help customers mitigate risk, improve safety and make sustainable choices on routes and operations. StormGeo was founded in 1997 and has since 2014 been under the ownership of EQT, DNV GL and a group of employees. Total sales in 2020 amounted to NOK 714 million (SEK 699 million). StormGeo will become a part of the Alfa Laval Marine Division. The purchase price was SEK 3,016 million, out of which all was paid in cash. In addition, Alfa Laval repaid StormGeos external loans with SEK 655 million at the same time as liquid assets of SEK 105 million in the acquired businesses were taken over. The costs directly linked to the acquisition (fees to lawyers, due diligence and assisting counsel) came in addition to this and amounted to SEK 22 million, which was reported as other operating costs. The impact on the cash flow was thus SEK -3,588 million. Out of the difference between the purchase price paid and the net assets acquired SEK 1,397 million was allocated to patents and un-patented know-how, while the residual SEK 2,245 million was allocated to goodwill. The goodwill was relating to estimated synergies in procurement, logistics and corporate overheads and the company's ability to over time recreate its intangible assets. The value of the goodwill has been finalised in 2022. The step-up value for patents and un-patented know-how is amortised over 10 years. From the date of the acquisition the company added SEK 416 million in orders received, SEK 416 million in invoicing and SEK 47 million in adjusted EBITA to Alfa Laval. If the company had been acquired at January 1, 2021 the corresponding figures would have been SEK 707 million, SEK 707 million and SEK 87 million respectively. At the end of December 2021, the number of employees was 581.

On October 1 Alfa Laval acquired the Norwegian system manufacturer LiftUP. LiftUP is a market leader in removing waste from fish farms to reduce their impact on the marine environment. The acquisition is part of Alfa Laval's strategy of building up an attractive aquaculture product portfolio and creating an expanded and sustainable growth platform for the future. Founded in 1991, LiftUP is a world leading supplier of waste extraction systems for fish farms. Its technology can remove up to 70 percent of the sludge from open cages. The LiftUP system is a complement to the Alfa Laval Framo pumping system AquaStream, which brings up fresh low temperature water with high oxygen levels (from around 25 m depth) and creates a perfect sea current – thereby providing conditions similar to the deep fjords, creating an optimal environment for the fish. The acquired company had revenues of 75 MNOK (2020) with good profitability. It will now be part of the business unit Pumping Systems in the Marine Division. The purchase price was SEK 205 million, out of which all was paid in cash. At the acquisition cash of SEK 0 million was taken over. The costs directly linked to the acquisition (fees to lawyers, due diligence and assisting counsel) came in addition to this and amounted to SEK 2 million, which was reported as other operating costs. The impact on the cash flow was thus SEK -207 million. Out of the difference between the purchase price paid and the net assets acquired SEK 106 million was allocated to patents and un-patented know-how, while the residual SEK 109 million was allocated to goodwill. The goodwill was relating to estimated synergies in procurement, logistics and corporate overheads and the company's ability to over time recreate its intangible assets. The value of the goodwill has been finalised in 2022. The step-up value for patents and un-patented know-how is amortised over 10 years. From the date of the acquisition the company added SEK 18 million in orders received, SEK 16 million in invoicing and SEK 1 million in adjusted EBITA to Alfa Laval. If the company had been acquired at January 1, 2021 the corresponding figures would have been SEK 70 million, SEK 75 million and SEK 12 million respectively. At the end of December 2021, the number of employees was 14.

All acquired assets and liabilities were reported according to IFRS at the time of the acquisitions. The acquisitions during 2021 can be summarized as follows:

Acquisitions 2021

	StormGeo			LiftUP			Totalt
SEK millions	Book value	Adjustment to fair value	Fair value	Book value	Adjustment to fair value	Fair value	Fair value
Property, plant and equipment	19	–	19	7	–	7	26
Right-of-use assets	34	–	34	–	–	–	34
Patents and unpatented know-how	38	1,397	1,435	–	106	106	1,541
Capitalised development costs	184	–	184	12	–	12	196
Inventory	4	–	4	21	–	21	25
Accounts receivable	98	–	98	9	–	9	107
Other receivables	55	–	55	6	–	6	61
Liquid assets	105	–	105	0	–	0	105
Provisions for pensions and similar commitments	-10	–	-10	–	–	–	-10
Loans	-655	–	-655	-19	–	-19	-674
Lease liability	-38	–	-38	–	–	–	-38
Accounts payable	-13	–	-13	-4	–	-4	-17
Other liabilities	-122	–	-122	-17	–	-17	-139
Tax liabilities	-5	–	-5	-2	–	-2	-7
Deferred tax	-13	-307	-320	–	-23	-23	-343
Acquired net assets	-319	1,090	771	13	83	96	867
Goodwill			2,245			109	2,354
Purchase price			-3,016			-205	-3,221
Costs directly linked to the acquisitions			-22			-2	-24
Liquid assets in the acquired businesses			105			0	105
Overtaken bank loans			-655			–	-655
Other minor acquisitions current year							-13
Payment of amounts retained in prior years							-20
Effect on the Group's liquid assets			-3,588			-207	-3,828

Impairment testing

An impairment test has been performed at the end of 2022 indicating that there is not any need to further write down the goodwill.

Three of Alfa Laval's operating segments, the three business divisions "Energy", "Food & Water" and "Marine" have been identified as the cash-generating units within Alfa Laval. Technically a recently acquired business activity could be followed independently during an initial period, but acquired businesses are normally integrated into the divisions at a fast rate. This means that the independent traceability is lost fairly soon and then any independent measurement and testing becomes impracticable.

The recoverable amount of the cash-generating units is based on their value in use, which is established by calculating the net present value of future cash flows. The net present value is based on the projected EBITDA figures for the next five years, less projected investments and changes in operating capital during the same period and thereafter the perceived expected average industry growth rate.

This projection is based on the following components:

– The projection for 2023 is based on the Group's normal 12 month revolving "Forecast" reporting. This is based on a very large number of rather detailed assumptions throughout the organisation concerning the business cycle, volume growth, market initiatives, product mix, currency rates, cost development, cost structure, R&D etc.

– The projection for the years 2024 till 2027 is based on Management's general assumptions concerning the business cycle, volume growth, market initiatives, product mix, currency rates, cost development, cost structure, R&D etc.

– The projection for the years 2028 and onwards is based on the perceived expected average industry growth rate of 2.25 (2.25) percent.

The assumptions used for the projections reflect past experiences or information from external sources.

The used discount rate is the pre-tax weighted average cost of capital (WACC) of 9.86 (9.11) percent.

There exists no reasonably possible change in a key assumption in the impairment test that would cause the carrying amount to exceed the recoverable amount. The reason is that the recoverable amounts with a very good margin exceed the carrying amounts. Due to this a sensitivity analysis is not presented.

Alfa Laval does not have any intangible assets with indefinite useful lives other than goodwill.

Goodwill has been allocated to the following cash-generating units:

Goodwill

Consolidated

SEK millions	2022	2021
Energy	3,431	3,115
Food & Water	5,017	2,515
Marine	17,810	16,850
Total	**26,258**	**22,480**

Note 18. Intangible non-current assets

Patents and unpatented know-how

Consolidated

SEK millions	2022	2021
Accumulated acquisition values		
Opening balance	7,433	5,512
Purchases	4	45
Acquisition of businesses	177	122
Sales/disposals	-3	-5
Reclassifications	1	48
Step-up values	820	1,503
Translation difference	471	208
Closing balance	**8,903**	**7,433**
Accumulated amortisation		
Opening balance	-5,384	-4,736
Acquisition of businesses	-155	-84
Sales/disposals	0	5
Reclassifications	-4	-41
Amortisation of step-up value	-459	-355
Amortisation for the year	-9	-7
Translation difference	-259	-166
Closing balance	**-6,270**	**-5,384**
Closing balance, net book value	**2,633**	**2,049**

Trademarks

Consolidated

SEK millions	2022	2021
Accumulated acquisition values		
Opening balance	6,889	6,499
Purchases	6	–
Step-up values	1,330	–
Translation difference	555	390
Closing balance	**8,780**	**6,889**
Accumulated amortisation		
Opening balance	-5,927	-5,198
Amortisation of step-up values	-451	-410
Amortisation for the year	0	–
Translation difference	-424	-319
Closing balance	**-6,802**	**-5,927**
Closing balance, net book value	**1,978**	**962**

Licenses, renting rights and similar rights

Consolidated

SEK millions	2022	2021
Accumulated acquisition values		
Opening balance	212	183
Purchases	2	36
Sales/disposals	-17	-25
Reclassifications	-63	4
Step-up values	2	–
Translation difference	9	14
Closing balance	**145**	**212**
Accumulated amortisation		
Opening balance	-180	-163
Sales/disposals	17	24
Reclassifications	54	5
Amortisation of step-up values	0	–
Amortisation for the year	-9	-34
Translation difference	-9	-12
Closing balance	**-127**	**-180**
Closing balance, net book value	**18**	**32**

Internally generated intangible assets

Consolidated

SEK millions	2022	2021
Accumulated acquisition values		
Opening balance	633	111
Acquisition of businesses	86	394
Expenses	197	123
Sales/disposals	-11	–
Reclassifications	56	-5
Translation difference	39	10
Closing balance	**1,000**	**633**
Accumulated amortisation		
Opening balance	-235	-4
Acquisition of businesses	-81	-210
Sales/disposals	4	–
Reclassifications	-46	1
Amortisation for the year	-94	-22
Translation difference	-18	0
Closing balance	**-470**	**-235**
Closing balance, net book value	**530**	**398**

Internally generated intangible assets are referring to capitalised IT costs and capitalised development cost related to R&D.

Goodwill

Consolidated

SEK millions	2022	2021
Accumulated acquisition values		
Opening balance	24,320	20,574
Goodwill in connection with acquisition of businesses	2,237	2,354
Translation difference	1,418	1,392
Closing balance	**27,975**	**24,320**
Accumulated amortisation		
Opening balance	-1,840	-1,494
Translation difference	123	-346
Closing balance	**-1,717**	**-1,840**
Closing balance, net book value	**26,258**	**22,480**

Note 19. Property, plant and equipment

Real estate

Consolidated

SEK millions	2022	2021
Accumulated acquisition values		
Opening balance	6,247	5,953
Purchases	250	155
Acquisition of businesses	130	11
Sales/disposal	-166	-259
Reclassifications	365	42
Reclassification to assets for sale	-265	-106
Translation difference	584	451
Closing balance	**7,145**	**6,247**
Accumulated depreciation		
Opening balance	-3,187	-3,075
Acquisition of businesses	-49	-5
Sales/disposals	166	255
Reclassifications	-3	4
Reclassification to assets for sale	165	81
Depreciation of step-up value	-33	-31
Depreciation for the year	-216	-201
Translation difference	-377	-215
Closing balance	**-3,534**	**-3,187**
Closing balance, net book value	**3,611**	**3,060**

Non-current assets held for sale

Within Alfa Laval these assets are normally relating to real estate.

The property in Alonte in Italy, the properties in Eastbourne and Cwmbran in the UK, the property in Singapore, one property in Norway and four smaller properties in India are for sale and are expected to be sold within the next year. These have therefore been classified as current assets held for sale with SEK 100 (25) million. The fair value of the properties for sale exceeds the book value by approximately SEK 246 (128) million.

Machinery and other technical installations

Consolidated

SEK millions	2022	2021
Accumulated acquisition values		
Opening balance	8,112	7,550
Purchases	260	292
Acquisition of businesses	105	5
Sales/disposal	-746	-190
Reclassifications	133	80
Translation difference	398	375
Closing balance	**8,262**	**8,112**
Accumulated depreciation		
Opening balance	-5,742	-5,321
Acquisition of businesses	-90	-4
Sales/disposals	696	172
Reclassifications	-29	49
Depreciation for the year	-424	-373
Write down	-12	-2
Translation difference	-238	-263
Closing balance	**-5,839**	**-5,742**
Closing balance, net book value	**2,423**	**2,370**

Equipment, tools and installations

Consolidated

SEK millions	2022	2021
Accumulated acquisition values		
Opening balance	3,263	2,926
Purchases	219	149
Acquisition of businesses	184	98
Sales/disposal	-367	-229
Reclassifications	105	51
Translation difference	4	268
Closing balance	**3,408**	**3,263**
Accumulated depreciation		
Opening balance	-2,417	-2,125
Acquisition of businesses	-136	-79
Sales/disposals	386	201
Reclassifications	24	-18
Depreciation for the year	-227	-155
Translation difference	20	-241
Closing balance	**-2,350**	**-2,417**
Closing balance, net book value	**1,058**	**846**

Construction in progress and advances to suppliers concerning property, plant and equipment

Consolidated

SEK millions	2022	2021
Accumulated acquisition values		
Opening balance	475	261
Purchases	915	429
Reclassifications	-481	-249
Translation difference	180	34
Closing balance	**1,089**	**475**
Closing balance, net book value	**1,089**	**475**

Right-of-use asset real estate

Consolidated

SEK millions	2022	2021
Accumulated acquisition values		
Opening balance	2,931	2,576
New or adjusted leases	422	406
Acquisition of businesses	167	78
Sales/disposal	-192	-96
Reclassifications	-30	-177
Translation difference	235	144
Closing balance	**3,533**	**2,931**
Accumulated depreciation		
Opening balance	-773	-601
Acquisition of businesses	-79	-44
Sales/disposals	182	95
Reclassifications	-66	137
Depreciation for the year	-384	-314
Translation difference	-72	-46
Closing balance	**-1,192**	**-773**
Closing balance, net book value	**2,341**	**2,158**

Right-of-use asset machinery

Consolidated

SEK millions	2022	2021
Accumulated acquisition values		
Opening balance	65	58
New or adjusted leases	19	9
Sales/disposal	-20	-6
Reclassifications	-1	-1
Translation difference	11	5
Closing balance	**74**	**65**
Accumulated depreciation		
Opening balance	-41	-34
Sales/disposals	18	5
Reclassifications	3	4
Depreciation for the year	-18	-14
Translation difference	-6	-2
Closing balance	**-44**	**-41**
Closing balance, net book value	**30**	**24**

Right-of-use asset equipment, tools and installations

Consolidated

SEK millions	2022	2021
Accumulated acquisition values		
Opening balance	314	271
New or adjusted leases	72	68
Acquisition of businesses	7	–
Sales/disposal	-49	-28
Reclassifications	3	-3
Translation difference	22	6
Closing balance	**369**	**314**
Accumulated depreciation		
Opening balance	-172	-118
Acquisition of businesses	0	–
Sales/disposals	42	17
Reclassifications	0	4
Depreciation for the year	-68	-71
Translation difference	-13	-4
Closing balance	**-211**	**-172**
Closing balance, net book value	**158**	**142**

Note 20. Other non-current assets

Shares in subsidiaries, joint ventures and other companies

	Consolidated		Parent company	
SEK millions	2022	2021	2022	2021
Shares in subsidiaries	–	–	4,669	4,669
Shares in joint ventures	205	165	–	–
Shares in other companies	270	1,231	–	–
Total	**475**	**1,396**	**4,669**	**4,669**

Alfa Laval does not hold any shares in unconsolidated structured entities.

The consolidated financial statements include the parent company Alfa Laval AB (publ) and the subsidiaries in which it has a decisive influence, which in all cases refer to companies where the parent company directly or indirectly had an ownership of more than 50 percent during the period. These are consolidated according to the purchase method and are referred to as subsidiaries. Most of the subsidiaries are owned to 100 percent and only 11 (10) companies have non-controlling interests, see Note 12. The subsidiaries are displayed in the table on pages 174–177. Since all consolidated companies are owned to more than 50 percent there is no risk that judgements if a decisive influence exists or not at ownerships below 50 percent means that companies from time to time are included or not included in the consolidation.

Alfa Laval also has interests in 5 (5) small joint ventures, out of which one has a fully owned subsidiary, that are consolidated according to the equity method since no decisive influence exists. These are displayed in a separate table on page 177. The risks associated with joint ventures are basically business oriented and are not materially different than the risks linked to subsidiaries, with one exception. The exception relates to the risk of disagreeing with the other joint venture partner concerning for instance larger investments, financing and future direction for market penetration and product development, which could result in a sub-optimal development of the operations. Since Alfa Laval's joint ventures are of marginal significance for the Group as a total this risk is judged to be small.

The share of capital in the below tables is in all cases the same as the share of voting rights.

The below specification of shares contains some simplifications, for instance in connection with ownership in multiple layers or when the ownership is split on several owners or at cross-holdings. This is in order not to unnecessarily burden the presentation. A complete specification of shares can be ordered by contacting Alfa Laval's head office in Lund.

Specification of shares in subsidiaries

Company name	Registration number	Domicile	Number of shares	Share of capital %	Book value SEK millions
Alfa Laval Holding AB	556587-8062	Lund, Sweden	8,191,000	100	4,461
Alfa Laval NV		Maarssen, Netherlands	887,753	100	–
Alfa Laval Inc.		Newmarket, Canada	1,000,000	67	–
Alfa Laval S.A. DE C.V.		Tlalnepantla, Mexico	45,057,057	100	–
Alfa Laval S.A.		San Isidro, Argentina	1,223,967	95	–
Alfa Laval Ltda		Sao Paulo, Brazil	21,129,066	100	–
Framo do Brasil Ltda.		Rio de Janeiro, Brazil	14,850	4.67	–
Alfa Laval SpA		Santiago, Chile	2,735	100	–
Alfa Laval S.A.		Bogota, Colombia	11,563	95	–
Alfa Laval S.A.		Lima, Peru	4,346,832	100	–
Alfa Laval Venezolana S.A.		Caracas, Venezuela	10,000	100	–
Alfa Laval Oilfield C.A.		Caracas, Venezuela	203	81	–
Alfa Laval Taiwan Ltd		Taipei, Taiwan	1,499,994	100	–
Alfa Laval (China) Ltd		Hong Kong, China	79,999	100	–
Alfa Laval (Jiangyin) Manufacturing Co Ltd		Jiang Yin, China		100	–
Alfa Laval Flow Equipment (Kunshan) Co Ltd		Jiangsu, China		30	–
Alfa Laval Flow Equipment (Kunshan) Co Ltd		Jiangsu, China		70	–
Alfa Laval (Shanghai) Technologies Co Ltd		Shanghai, China		100	–
Wuxi MCD Gasket Co Ltd		Jiang Yin, China		100	–
Tranter Heat Exchangers (Beijing) Co Ltd		Beijing, China		100	–
Liyang Sifang Stainless Steel Products Co., Ltd		Liyang City, China		65	–
Alfa Laval (Taicang) Technologies Co Ltd		Taicang City, China		100	–
Alfa Laval Iran Ltd		Teheran, Iran	32,983	100	–
Framo Korea Ltd		Busan, South Korea	20,000	100	–
Alfa Laval Philippines Inc.		Makati, Philippines	72,000	100	–
Alfa Laval Singapore Pte Ltd		Singapore	5,000,000	100	–
Alfa Laval (Thailand) Ltd		Bangkok, Thailand	1,199,999	100	–
Alfa Laval Technologies Equipment and Service Solutions LLC		Abu Dhabi, United Arab Emirates	100	100	–
Alfa Laval Middle East Ltd		Nicosia, Cyprus	40,000	100	–
Alfa Laval Service Operations Qatar LLC		Doha, Qatar	9,800	49	–
Alfa Laval Benelux NV/SA		Brussels, Belgium	98,284	100	–
N.V. Desmet Belgium S.A.		Savatem, Belgium	146,540	100	–
Desmet Ballestra Latin America, S.A. de C.V.		Mexico City, Mexico	59,999	99.9	–
Desmet Ballestra Argentina S.A.		Buenos Aires, Argentina	9,276,277	97.8	–
Desmet Ballestra Brasil Ltda		Sao Paulo, Brazil	2,100,217	25	–
Desmet Ballestra Brasil Ltda		Sao Paulo, Brazil	6,159,206	75	–
Desmet Ballestra (Shanghai) Co., Ltd.		Shanghai, China	9,144,505	100	–
Desmet Ballestra India Private Limited		Bangalore, India	259,645	99.9	–
Desmet Ballestra Engineering Center Private Limited		Bangalore, India	9,999	99.9	–
Desmet Malaysia Sdn. Bhd.		Shah Alam, Malaysia	1,000,000	100	–
Desmet Singapore Pte. Ltd.		Singapore	4,000,000	100	–
Desmet Ballestra India Private Limited		Bangalore, India	1	0.1	–
Desmet Ballestra Engineering Center Private Limited		Bangalore, India	1	0.1	–
Stolz SAS		Wailly Beaucamp, France	2,039,230	100	–
Stolz Sequipag SAS		Wailly Beaucamp, France	168,819	100	–
Desmet Stolz Singapore Pte. Ltd.		Singapore	2	100	–
Desmet Stolz Vietnam LLC		Ho Chi Minh City, Vietnam	4,156,200,000	100	–
Desmet España Empresarial SA		Madrid, Spain	12,922,100	100	–
Desmet Ballestra Latin America, S.A. de C.V.		Mexico City, Mexico	1	0.1	–
Desmet Ballestra Argentina S.A.		Buenos Aires, Argentina	207,259	2.2	–
Desmet Rosedowns Ltd		Hull, UK	23,408	100	–
Desmet Ballestra Rosedowns India Private Limited		Bangalore, India	9,900	99	–
Desmet Rosedowns GmbH		Eversen, Germany	54,252	80	–
Desmet Ballestra Rosedowns India Private Limited		Bangalore, India	100	1	–
Desmet Rus LLC		Moscow, Russia	1	100	–
Alfa Laval EOOD		Sofia, Bulgaria	100	100	–
Alfa Laval Slovakia S.R.O.		Bratislava, Slovakia		1	–
Alfa Laval Spol S.R.O.		Prague, Czech Republic		20	–
Alfa Laval Nordic OY		Espoo, Finland	20,000	100	–
Alfa Laval Benelux BV		Maarssen, Netherlands	20,000	100	–
PHE Holding AB	556306-2404	Lund, Sweden	2,500	100	–
Tranter Heat Exchangers Canada Inc.		Edmonton, Canada	100	100	–
Tranter Indùstria e Comércio de Equipamentos Ltda		Sao Paulo, Brazil	2,018,370	100	–
Tranter India Pvt Ltd		Pune, India	3,009,999	100	–
Alfa Laval India Pvt Ltd		Pune, India	1	0	–
Alfa Laval Korea Ltd		Seoul, South Korea	36,400	10	–
Alfa Laval Korea Holding Company Ltd		Chungnam, South Korea	13,318,600	100	–
Alfa Laval Korea Ltd		Seoul, South Korea	327,600	90	–
Alfa Laval Corhex Ltd		Daejeon, South Korea	50,000	100	–
LHE Co. Ltd		Gim Hae, South Korea	4,104,000	90	–
LHE Co. Ltd		Gim Hae, South Korea	456,000	10	–
Tranter International AB	556559-1764	Vänersborg, Sweden	100,000	100	–

Specification of shares in subsidiaries, continued

Company name	Registration number	Domicile	Number of shares	Share of capital %	Book value SEK millions
Multbran AB	556662-3988	Lund, Sweden	2,723	100	–
Alfa Laval India Pvt Ltd		Pune, India	1	0	–
Breezewind AB	556773-6532	Lund, Sweden	1,000	100	–
Alfa Laval India Pvt Ltd		Pune, India	1	0	–
Alfa Laval Corporate AB	556007-7785	Lund, Sweden	13,920,000	100	–
Alfa Laval S.A.		San Isidro, Argentina	64,419	5	–
Alfa Laval S.A.		Bogota, Colombia	609	5	–
Definox (Beijing) Stainless Steel Equipment Ltd		Beijing, China		100	–
Alfa Laval India Pvt Ltd		Pune, India	17,832,712	100	–
Tranter India Pvt Ltd		Pune, India	1	0	–
PT Alfa Laval Indonesia		Jakarta, Indonesia	16,240	100	–
Alfa Laval Malaysia Sdn Bhd		Shah Alam, Malaysia	10,000	100	–
Alfa Laval d.o.o.		Trzin, Slovenia		100	–
Alfa Laval Kolding A/S		Kolding, Denmark	40	100	–
Alfa Laval Nordic A/S		Rödovre, Denmark	1	100	–
Alfa Laval Copenhagen A/S		Söborg, Denmark	1	100	–
Alfa Laval Nakskov A/S		Nakskov, Denmark	242,713	100	–
Alfa Laval Aalborg A/S		Aalborg, Denmark	2,560,972	100	–
Alfa Laval Aalborg Indústria e Comércio Ltda		Petrópolis, Brazil	5,969,401	99.5	–
Alfa Laval Qingdao Ltd		Jiaozhou City, China		100	–
Alfa Laval Aalborg Oy		Rauma, Finland	3,000	100	–
Alfa Laval Nijmegen BV		Nijmegen, Netherlands	182	100	–
Alfa Laval Aalborg Holding Pty Ltd		North Wyong, Australia	2,875,010	100	–
Alfa Laval Aalborg Pty Ltd		North Wyong, Australia	225,000	100	–
Alfa Laval Olmi SpA		Suisio, Italy	500,000	100	–
Alfa Laval Italy Srl		Milan, Italy		33.3	–
Alfa Laval Nordic AS		Oslo, Norway	100	100	–
Framo AS		Nesttun, Norway	95,347,695	100	–
Framo do Brasil Ltda.		Rio de Janeiro, Brazil	303,002	95.33	–
Framo Shanghai Ltd.		Shanghai, China	0	100	–
Framo Singapore PTE Ltd.		Singapore	1,000,000	100	–
Framo Nederland BV		Spijkenisse, Netherlands	500	100	–
Framo Nippon KK		Tokyo, Japan	600	100	–
Framo Fusa AS		Fusa, Norway	86,236	100	–
Framo Holsnøy AS		Frekhaug, Norway	25,000	100	–
LiftUP AS		Eikelandsosen, Norway	106	100	–
Eikelandsheiane 1 AS		Fusa, Norway	30,000	100	–
Framo Flatøy AS		Frekhaug, Norway	45,330	100	–
Framo Services AS		Nesttun, Norway	10,000	100	–
PHE Holding AS		Nesttun, Norway	45,000	100	–
StormGeo AS		Bergen, Norway	125,960	100	–
StormGeo Ltd		Aberdeenshire, UK	1,000	100	–
StormGeo Japan KK		Tokyo, Japan	500	100	–
StormGeo Pte Ltd		Singapore	100,000	100	–
StormGeo Inc		Seoul, South Korea	40,000	100	–
StormGeo PH Inc		Makati City, Philippines	2,000	100	–
StormGeo Ltd		Hong Kong, China	100	100	–
StormGeo Denmark A/S		Söborg, Denmark	400,000	100	–
StormGeo FZ LLC		Dubai, United Arab Emirates	50	100	–
StormGeo AB	556761-9472	Stockholm, Sweden	10,000	100	–
StormGeo GmbH		Hamburg, Germany	25,000	100	–
StormGeo Brasil AS		Bergen, Norway	30,000	100	–
StormGeo do Brasil Servicos Meteorologicos Ltda		Rio de Janeiro, Brazil	150,000	100	–
ClimaTempo Participacoes SA		Sao Paulo, Brazil	985,864	51	–
Agência Brasileira de Meteorologia Ltda		Sao Paulo, Brazil	859,999	100	–
Climanet Serviços de Internet Ltda		Sao Paulo, Brazil	45,000	100	–
TV Meteorológica Ltda		Sao Paulo, Brazil	5,800	58	–
Somar Meteorologia Ltda		Sao Paulo, Brazil	790,000	100	–
Southern Marine Weather Services Ltda		Sao Paulo, Brazil	1,400,000	100	–
UAB StormGeo		Vilnius, Lithuania	2,500	100	–
Alfa Laval Nordic AB	556243-2061	Tumba, Sweden	1,000	100	–
Scanjet Holding AB	556705-2286	Sjöbo, Sweden	1,300	100	–
Scanjet Asia Pacific Pte Ltd		Singapore	200,000	100	–
PT Scanjet Production		Batam, Indonesia	417,400	100	–
Scanjet Service EOOD		Varna, Bulgaria	200	100	–
Maas Marine & Industrial Equipment BV		Rotterdam, Netherlands	40	100	–
Scanjet Ariston AS		Porsgrunn, Norway	780,000	100	–
Scanjet Production sp z oo		Lobesz, Poland	100	100	–
Scanjet Marine & Systems AB	556291-2427	Sjöbo, Sweden	2,000	100	–
PSM Systems Ltd		Haywards Heath, UK	146,000	100	–
PSM Instrumentation Ltd		Haywards Heath, UK	600	100	–
Alfa Laval Treasury International (publ) AB	556432-2484	Lund, Sweden	50,000	100	–
Alfa Laval India Pvt Ltd		Pune, India	1	0	–
Alfa Laval Europe AB	556128-7847	Lund, Sweden	500	100	–
Alfa Laval Technologies AB	556016-8642	Lund, Sweden	100	100	–
Fastighets AB Kälby 1:55	559358-4849	Lund, Sweden	25,000	100	–
Alfa Laval India Pvt Ltd		Pune, India	1	0	–

Specification of shares in subsidiaries, continued

Company name	Registration number	Domicile	Number of shares	Share of capital %	Book value SEK millions
Alfa Laval International Engineering AB	556039-8934	Lund, Sweden	4,500	100	–
Alfa Laval Oilfield C.A.		Caracas, Venezuela	47	19	–
AO Alfa Laval Potok		Koroljov, Russia	31,092,939	100	–
Alfa Laval Makine Sanayii ve Ticaret Ltd Sti		Istanbul, Turkey	27,001,755	99	–
Alfa Laval SIA		Riga, Latvia	125	100	–
Alfa Laval Australia Pty Ltd		Homebush, Australia	2,088,076	100	–
Alfa Laval New Zeeland Pty Ltd		Hamilton, New Zeeland	1,000	100	–
Alfa Laval Holding BV		Maarssen, Netherlands	60,035,631	100	–
Alfa Laval (Pty) Ltd		Isando, South Africa	2,000	100	–
Alfa Laval SA (Pty) Ltd		Isando, South Africa	100	100	–
Alfa Laval Slovakia S.R.O.		Bratislava, Slovakia		99	–
Alfa Laval Spol S.R.O.		Prague, Czech Republic		80	–
Alfa Laval Holding SAS		Saint-Priest, France	2,000,000	100	–
Alfa Laval France & North West Africa SAS		Saint-Priest, France	606,700	100	–
Alfa Laval Moatti SAS		Elancourt, France	24,000	100	–
Alfa Laval Spiral SAS		Nevers, France	79,999	100	–
MCD SAS		Guny, France	71,300	100	–
Alfa Laval Vicarb SAS		Grenoble, France	200,000	100	–
Canada Inc.		Newmarket, Canada	480,000	100	–
Alfa Laval Inc.		Newmarket, Canada	481,600	33	–
SCI du Companil		Grenoble, France	32,165	100	–
Alfa Laval Packinox SAS		Courbevoie, France	348,115	100	–
Ziepack SA		Courbevoie, France	37,701	51	–
Tranter SAS		Nanterre, France		100	–
Definox SAS		Clisson, France	10,000	100	–
Alfa Laval Holding GmbH		Glinde, Germany	1	100	–
Alfa Laval Mid Europe GmbH		Wiener Neudorf, Austria	1	100	–
Tranter Warmetauscher GmbH		Guntramsdorf, Austria		100	–
Alfa Laval Mid Europe GmbH		Glinde, Germany	1	100	–
Tranter GmbH		Artern, Germany	1	100	–
Alfa Laval Heat Exchanger Service GmbH		Frechen, Germany	1	100	–
Alfa Laval Mid Europe AG		Dietlikon, Switzerland	647	100	–
Alfa Laval Single Member SA		Koropi, Greece	807,000	100	–
Alfa Laval Kft		Budapest, Hungary	1	100	–
Alfa Laval SpA		Monza, Italy	1,992,276	99	–
Alfa Laval Italy Srl		Milan, Italy		66.7	–
WCR Benelux BV		Veenendahl, the Netherlands	180	100	–
Alfa Laval Polska Sp.z.o.o.		Warsaw, Poland	7,600	100	–
Alfa Laval Kraków Sp.z.o.o.		Krakow, Poland	80,080	100	–
Alfa Laval (Portugal) Ltd		Linda-A-Velha, Portugal		1	–
Alfa Laval SRL		Bucharest, Romania	38,566	100	–
Alfa Laval Iberia SA		Madrid, Spain	99,999	99.999	–
Alfa Laval (Portugal) Ltd		Linda-A-Velha, Portugal	1	99	–
Alfa Laval Holdings Ltd		Camberley, UK	14,053,262	100	–
Alfa Laval Ltd		Camberley, UK	11,700,000	100	–
Tranter Ltd		Doncaster, UK	10,000	100	–
Alfa Laval Eastbourne Ltd		Eastbourne, UK	10,000	100	–
Alfa Laval Makine Sanayii ve Ticaret Ltd Sti		Istanbul, Turkey	1	1	–
Alfa Laval USA Inc.		Richmond, Virginia, USA	1,000	100	–
Alfa Laval US Holding Inc.		Richmond, Virginia, USA	180	100	–
Alfa Laval Inc.		Richmond, Virginia, USA	44,000	100	–
Alfa Laval Niagara Inc.		Buffalo, New York, USA	4,000,200	100	–
Framo Houston Inc.		La Porte, Texas, USA	5,000	100	–
Desmet USA Inc		Marietta, Georgia, USA	500	100	–
Alfa Laval US Treasury Inc.		Richmond, Virginia, USA	1,000	100	–
DSO Fluid Handling Inc.		Irvington, New Jersey, USA	100	100	–
AGC Heat Transfer Inc.		Bristow, Virginia, USA	1,000	100	–
Tranter Inc.		Wichita Falls, Texas, USA	1,000	100	–
MCD Gaskets Inc.		Richmond, Virginia, USA	1,000	100	–
Definox Inc.		New Berlin, Wisconsin, USA	1,000	100	–
StormGeo Holding Inc.		Houston, Texas, USA	100	100	–
StormGeo Inc		Houston, Texas, USA	1,000	100	–
StormGeo Corp. Inc		Sunnyvale, California, USA	542,554	100	–
Alfa Laval IC Disc Inc.		Richmond, Virginia, USA	1,000	100	–
Alfa Laval Ltda		Sao Paulo, Brazil	2	0	–
Tranter Indùstria e Comércio de Equipamentos Ltda		Sao Paulo, Brazil	1	0	–
Alfa Laval Benelux NV/SA		Brussels, Belgium	2	0	–
Alfa Laval SpA		Monza, Italy	20,124	1	–
Alfa Laval Iberia SA		Madrid, Spain	1	0.001	–
Alfa Laval Ukraine		Kiev, Ukraine		100	–
Alfa Laval India Pvt Ltd		Pune, India	1	0	–
Alfa Laval Vietnam LLC		Ho Chi Minh City, Vietnam	0	100	–
Alfa Laval KK		Tokyo, Japan	1,200,000	100	208
Total					**4,669**

Specification of shares in joint ventures

Company name	Registration number	Domicile	Number of shares	Share of capital %	Book value SEK millions
Alfa Laval Holding AB					
Alfdex AB	556647-7278	Landskrona, Sweden	1,000	50	116
Alfdex Kunshan Co Ltd		Kunshan, China		100	6
Alfa Laval Corporate AB					
AlfaWall AB	556723-6715	Botkyrka, Sweden	500	50	12
AlfaWall Oceanbird AB	559333-0003	Botkyrka, Sweden	500	50	48
PHE Holding AS					
Stadion Laks AS		Norheimsund, Norway	17,630	50	23
Alfa Laval Ltd					
Rolls Laval Heat Exchangers Ltd		Wolverhampton, UK	5,000	50	0
Total					**205**

Specification of shares in other companies

Company name	Domicile	Number of shares	Share of capital %	Book value SEK thousands
Alfa Laval US Holding Inc.				
Malta Inc	USA	17,700,000	18.3	185,167
Alfa Laval Inc.				
AMI Global LLC	USA		20	36,615
Alfa Laval Aalborg Indústria e Comércio Ltda				
Tractebel	Brazil	1,268		85
Elektrobras	Brazil	7,107		115
Alfa Laval Philippines Inc.				
Philippine Long Distance Telephone	Philippines	820		0
Alfa Laval Nordic OY				
As Oy Koivulantie XA	Finland	1		346
Helsinki Halli	Finland	4		156
Alfa Laval NV				
Marine Performance Systems	Netherlands	1,976	16.5	27,880
Framo Nederland BV				
Triangle (Air) Freight Forwarders BV	Netherlands	12	33	2,230
Framo Flatøy AS				
Glöde AS	Norway	8,960	5.4	30
Alfa Laval Technologies AB				
Smedhälsan Ekonomisk Förening	Sweden			61
Alfa Laval Corporate AB				
European Development Capital Corporation (EDCC) NV	Curacao	36,129		0
Multiprogress	Hungary	100	3	0
Kurose Chemical Equipment Ltd	Japan	180,000	11	0
Liquid Wind AB	Sweden	555,245	5.2	17,713
Poljopriveda	former Yugoslavia			0
Tecnica Argo-Industrial S.A.	Mexico	490	49	0
Adela Investment Co S.A. (preference)	Luxembourg	1,911	0	0
Adela Investment Co S.A.	Luxembourg	1,911	0	0
Mas Dairies Ltd	Pakistan	125,000	5	0
Total				**270,398**

None of these other companies with a share of capital of 20 percent or more are accounted for as associates since they are dormant or have very limited activities and Alfa Laval does not have a significant influence according to IAS 28 item 6.

Note 21. Inventories

Type of inventory

Consolidated

SEK millions	2022	2021
Raw materials and consumables	4,833	3,677
Work in progress	3,679	2,342
Finished goods & goods for resale, new sales	3,577	2,923
Finished goods & goods for resale, spare parts	2,112	1,232
Advance payments to suppliers	574	351
Total	**14,775**	**10,525**

A considerable part of the inventory for spare parts is carried at net realisable value.

Obsolescence related to inventories amounts to and has changed as follows:

Obsolescence

Consolidated

SEK millions	January 1	Translation difference	Acquired	Write down	Reversal of previous write down	December 31
Year:						
2021	1,275	65	1	251	-262	1,330
2022	1,330	101	27	664	-413	1,709

The Group's inventories have been accounted for after deduction for inter-company gains in inventory due to internal sales within the Group. The inter-company profit reserve at the end of 2022 amounts to SEK 761 (564) million.

Note 22. Accounts receivable

Accounts receivable with a maturity exceeding one year of SEK 78 (127) million have not been accounted for as non-current assets as they are not intended for permanent use.

Accounts receivable are reported net of provisions for bad debts. The provision for bad debts amounts to and has changed as follows:

Bad Debts

Consolidated

SEK millions	January 1	Translation difference	Acquired	New provisions and increase of existing provisions	Amounts used	Unused amounts reversed	Change due to discounting	December 31
Year:								
2021	319	18	2	91	-41	-73	0	316
2022	316	35	64	198	-36	-82	0	495

The amount of accounts receivable being overdue is an indication of the risk the company runs for ending up in bad debts. The percentage is in relation to the total amount of accounts receivable.

Accounts receivable - overdue

Consolidated

SEK millions	2022	%	2021	%
Overdue:				
Maximum 30 days	949	9.7	591	8.8
More than 30 days but maximum 90 days	580	6.0	435	6.4
More than 90 days	671	6.9	497	7.4
Total	**2,200**	**22.6**	**1,523**	**22.6**

Provision for lifetime expected credit losses

Consolidated

	Relating to		Provision							
	Accounts and notes receivables / Other receivables		Recorded at inception		For credit risks that have increased significantly since initial recognition		Related to objective evidence of impairment		Total	
SEK millions	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021
Accounts and notes receivable										
Undue	8,388	5,966	7	7	9	5	57	35	73	47
Overdue 1-30 days	949	591	2	4	13	1	–	–	15	5
Overdue 31-60 days	433	331	–	–	7	6	4	–	11	6
Overdue 61-90 days	147	104	–	–	5	1	4	2	9	3
Overdue 91-365 days	418	328	–	–	109	46	26	55	135	101
Overdue >365 days	253	169	–	–	117	71	76	62	193	133
Total	**10,588**	**7,489**	**9**	**11**	**260**	**130**	**167**	**154**	**436**	**295**
Other receivables										
Contract assets	2,613	1,660	15	14	24	2	8	2	47	18
Financial lessor receivable	1	3	2	1	–	–	10	2	12	3
Total	**2,614**	**1,663**	**17**	**15**	**24**	**2**	**18**	**4**	**59**	**21**

Note 23. Other short-term receivables

Split on type and maturity		
Consolidated		
SEK millions	2022	2021
Notes receivable	435	456
Financial lessor receivable	1	3
Revenue recognition ahead of progress invoicing	2,566	1,642
Other receivables	2,336	1,345
Total	**5,338**	**3,446**
Of which, not due within one year:		
Notes receivable	0	0
Other receivables	32	41
Total	**32**	**41**

Other receivables relate to a wide range of other receivables, including balanced invoicing relating to satisfied performance obligations that have not yet been invoiced (where the revenue recognition is ahead of the progress invoicing), VAT receivables, receivables on governments for export incitements, receivables on personnel, rent receivables etc.

Note 24. Prepaid expenses and accrued income

Split on type		
Consolidated		
SEK millions	2022	2021
Prepaid expenses	450	335
Accrued income	45	92
Total	**495**	**427**

Note 25. Other current deposits

Split on type and maturity		
Consolidated		
SEK millions	2022	2021
Deposits with banks	187	163
Bonds and other securities	117	122
Other deposits	7	6
Total	**311**	**291**
Of which, not due within one year:		
Deposits with banks	41	7
Other deposits	0	0
Total	**41**	**7**

Note 26. Cash and cash equivalents

The item cash and cash equivalents in the statement on financial position and in the cash flow statement is relating to bank deposits and liquid deposits.

Note 27. Defined benefit obligations

The Group has defined benefit commitments to employees and former employees and their survivors. The benefits are referring to old age pension, survivor's pension, disability pension, health care and severance pay.

The defined benefit plans are in place in Austria, Belgium, France, Germany, India, Indonesia, Italy, Japan, Mexico, the Netherlands, Norway, Philippines, South Africa, Sweden, Switzerland, Taiwan, the United Kingdom and the United States. Most plans have been closed for new participants and replaced by defined contribution plans for new employees.

Risks

The cost for defined benefit obligations is impacted by several factors that are outside the control of the company, such as the discount rate, the return on plan assets, future salary increases, the development of the average length of life and the claim rates under medical plans. The size of and the development of these costs are therefore difficult to predict. According to the IAS 19 all of these remeasurements are reported in other comprehensive income.

The following table presents how the net defined benefit liability is arrived at out of the present values of the different defined benefit plans, less the fair value of the plan assets.

Net defined benefit liability

Consolidated

SEK millions	2022	2021
Present value of defined benefit obligation, unfunded	-1,042	-1,155
Present value of defined benefit obligation, funded	-4,390	-5,607
Present value of defined benefit obligation at year end	-5,432	-6,762
Fair value of plan assets	4,486	4,925
Net defined benefit liability	-946	-1,837
Less disallowed assets due to asset ceiling	-45	–
(-) liability/(+) asset at December 31	**-991**	**-1,837**

The net plan cost for the defined benefit plans describes the different cost elements of the plans. The net plan cost is reported in the consolidated comprehensive income statement on the lines where personnel costs are reported. The interest cost/income is not part of the financial net, but instead just a way to categorize the components of the net plan cost. All remeasurements are reported in other comprehensive income and will never be reclassified to net income.

Total plan cost

Consolidated

SEK millions	2022	2021
Net plan cost		
Current service cost	-25	-100
Net interest cost/income	-31	-31
Past service cost/income from plan amendments and curtailments and gains and losses on settlements	15	8
Net plan (-) cost/(+) income	**-41**	**-123**
Remeasurements		
Actuarial losses/gains arising from changes in demographic assumptions	14	6
Actuarial losses/gains arising from changes in financial assumptions	1,705	455
Actuarial losses/gains arising from changes in experience	-77	43
Return on plan assets less interest on plan assets	-1,269	64
Change in disallowed assets due to asset ceiling	-45	–
Other comprehensive income (OCI)	**328**	**568**
Total plan cost	**287**	**445**

The following table presents how the present value of the defined benefit liability has changed during the year and lists the different components of the change.

Present value of defined benefit liability

Consolidated

SEK millions	2022	2021
Present value of defined benefit liability at January 1	-6,762	-6,864
Acquired businesses	-154	-8
Translation difference	-297	-461
Current service cost	-25	-100
Interest cost	-124	-83
Employee contributions	-4	-3
Actuarial losses/gains arising from changes in demographic assumptions	14	6
Actuarial losses/gains arising from changes in financial assumptions	1,705	455
Actuarial losses/gains arising from changes in experience	-77	43
Past service cost/income from plan amendments and curtailments and gains and losses on settlements	15	8
Benefit payments	263	245
Settlement payments	14	0
(-) liability at December 31	**-5,432**	**-6,762**

The liability has the following duration and maturity:

Duration and maturity

Consolidated

	2022	2021
Weighted average duration of the defined benefit obligation (years)	7	9
Maturity analysis of benefit payments (non-discounted amounts) SEK millions		
maturity ≤ 1 year	263	240
maturity > 1 ≤ 5 years	1,015	1,016
maturity > 5 ≤ 10 years	1,574	1,521
maturity > 10 ≤ 20 years	3,057	2,920
maturity > 20 years	3,933	3,668

The following table presents how the fair value of the plan assets has developed during the year and lists the components of the change.

Fair value of plan assets

Consolidated

SEK millions	2022	2021
Fair value of plan assets at January 1	4,925	4,440
Acquired businesses	118	–
Translation difference	177	311
Employer contributions	652	313
Employee contributions	4	3
Interest on plan assets	93	52
Return on plan assets less interest on plan assets	-1,269	64
Benefit payments	-202	-193
Settlement payments	-12	0
Other	0	-65
(+) asset at December 31	**4,486**	**4,925**

The plan assets are split on the following types of assets:

Split of plan assets

Consolidated

SEK millions	2022	2021
Cash and cash equivalents	612	530
Equity instruments	782	935
Debt instruments	1,976	2,151
Real estate	111	94
Investment funds	1,005	1,215
Fair value at December 31	**4,486**	**4,925**

The plan assets are in all essentials valued at quoted market prices in active markets.

The table below presents how the net defined benefit liability has changed and the factors affecting the change.

Net defined benefit liability/asset

Consolidated

SEK millions	2022	2021
Defined benefit liability/asset at January 1	-1,837	-2,424
Acquired businesses	-36	-8
Translation difference	-120	-150
Net plan cost	-41	-123
Employer contributions	652	313
Remeasurements (other comprehensive income)	328	568
Benefit payments, unfunded plans	61	52
Settlement payments, unfunded plans	2	0
Other	–	-65
(-) liability/(+) asset at December 31	**-991**	**-1,837**

The gross plan assets and gross defined benefit liabilities of each plan are to be reported as a net amount. The following table shows how the net asset and the net liability are calculated.

Gross defined benefit liability/asset

Consolidated

SEK millions	2022	2021
Assets		
Fair value of plan assets	4,486	4,925
Less disallowed assets due to asset ceiling	-45	–
	4,441	4,925
Netting	-4,240	-4,855
Assets in statement on financial position	**201**	**70**
Liabilities		
Present value of defined benefit obligation at year end	-5,432	-6,762
Netting	4,240	4,855
Provision in statement on financial position	**-1,192**	**-1,907**

The weighted averages for the more significant actuarial assumptions that have been used at the year-end are:

Actuarial assumptions

Consolidated

	2022	2021
Discount rate (%)	3.95	1.69
Expected average retirement age (years)	64	64
Life expectancy for a 45-year-old male (years)	81	81
Life expectancy for a 45-year-old female (years)	85	85
Claim rates under medical plans (%)	5	5
Expected rate of salary/wage increase (%)	3	3
Change in health care costs (%)	5	5
Index for future compensation increases (%)	2	2

Future contributions

Consolidated

SEK millions	2023
Expected employer contributions to the plan for the next calendar year	-225
Expected employer contributions for the next calendar year to multi-employer plans reported as defined contribution plans	-10

The following table presents how the defined benefit pension schemes are distributed on different countries.

Regional split

Consolidated

SEK millions, unless otherwise stated	United States	United Kingdom	Nether-lands	Germany	Norway	Italy	Belgium	Other	**Total**
Net defined benefit liability									
Present value of the defined benefit obligation, unfunded	-505	–	–	-167	-10	-15	–	-345	**-1,042**
Present value of the defined benefit obligation, funded	–	-2,469	-549	–	-868	–	-188	-316	**-4,390**
Present value of the defined benefit obligation at year end	-505	-2,469	-549	-167	-878	-15	-188	-661	**-5,432**
Fair value of plan assets	–	2,517	550	–	947	–	184	288	**4,486**
Net defined benefit liability	-505	48	1	-167	69	-15	-4	-373	**-946**
Less disallowed assets due to asset ceiling	–	-44	-1	–	–	–	–	–	**-45**
(-) liability/(+) asset	-505	4	0	-167	69	-15	-4	-373	**-991**
Net plan cost	**-31**	**-35**	**0**	**-2**	**-6**	**-1**	**-10**	**44**	**-41**
Remeasurements (OCI)	**130**	**152**	**-1**	**30**	**-17**	**-**	**21**	**13**	**328**
Sensitivity analysis*									
Discount rate decreased by 1% point	-42	-359	-93	-15	-59	–	-9	-102	**-679**
Life expectancy increased by 1 year	-15	-95	-18	-9	-36	–	0	-11	**-184**
Expected average retirement age decreased by 1 year	-7	–	–	0	0	–	0	-5	**-12**
Claim rates under medical plans increased by 1 % point	-3	–	–	–	–	–	–	–	**-3**
Expected rate of salary increases increased by 1% point	–	-40	–	–	-10	–	-16	-38	**-104**
Medical costs increased by 1% point	-22	–	–	–	–	–	–	0	**-22**
Index for future compensation increases increased by 1% point	–	-45	-32	-14	-106	–	–	-2	**-199**
Cost for actuarial services	**-2**	**-2**	**0**	**0**	**0**	**0**	**0**	**-1**	**-5**
Number of participants in the plans at December 31									
Current employees (active members)	946	70	13	6	60	–	140	3,089	**4,324**
Current employees (only vested value for closed plans)	–	–	24	3	–	98	–	7	**132**
Former employees that are not yet pensioners	–	303	310	3	–	–	154	–	**770**
Pensioners	695	663	117	202	420	–	–	69	**2,166**
Total	**1,641**	**1,036**	**464**	**214**	**480**	**98**	**294**	**3,165**	**7,392**
Remaining service period									
Average remaining service period for active members (years)	9	8	10	5	3	–	16	12	**12**

* How much would the present value of the defined benefit obligation at December 31 increase if the (all other things being equal):

Note 28. Other provisions

Movement schedule

Consolidated

SEK millions	January 1	Translation difference	Acquired	New provisions and increase of existing provisions	Amounts used	Unused amounts reversed	December 31
2021							
Claims & warranty	1,257	29	–	629	-519	-134	1,262
Deferred costs	166	6	–	95	-68	-29	170
Restructuring	383	4	–	97	-324	-17	143
Onerous contracts	49	0	–	37	-16	–	70
Environmental	50	–	–	–	–	–	50
Litigations	206	0	–	61	-83	0	184
Other	327	19	–	193	-181	-14	344
Total	**2,438**	**58**	**–**	**1,112**	**-1,191**	**-194**	**2,223**
Of which:							
current	1,757						1,811
non-current	681						412
2022							
Claims & warranty	1,262	66	62	598	-757	-113	1,118
Deferred costs	170	11	–	119	-105	-13	182
Restructuring	143	6	–	597	-97	-23	626
Onerous contracts	70	5	–	90	-58	-11	96
Environmental	50	–	–	–	–	–	50
Litigations	184	3	–	59	-38	0	208
Other	344	40	–	197	-196	-51	334
Total	**2,223**	**131**	**62**	**1,660**	**-1,251**	**-211**	**2,614**
Of which:							
current	1,811						2,164
non-current	412						450

Unused amounts reversed refer to, among other items, changed classifications and reversals of provisions made in prior years that have not been used.

Each type of provision entails everything from a few up to a large number of different items. It is therefore not practicable or particularly meaningful to specify the provisions item by item. As indicated above a clear majority of the provisions will result in disbursements within the next year.

Claims & warranty refers to claims from customers according to the conditions in issued warranties. The claims concern technical problems with the delivered goods or that promised performance has not been achieved.

Deferred costs are partly costs that are known but not yet debited at the time of invoicing, partly costs that are unknown but expected at the time of invoicing. The provision for deferred costs is charged to costs of goods sold in order to get a correct phasing of the gross margin.

Provisions for restructuring are usually relating to closure of plants or closure or move of production lines, businesses, functions etc. or reduction of the number of employees in connection with a downturn in the business climate. The provisions for restructuring are affecting approximately 500 (45) employees.

The provision for onerous contracts is relating to orders where a negative gross margin is expected. Provisions are made as soon as a final loss on the order can be expected. This can in exceptional cases happen already at the time when the order is taken. Normally this provision is relating to larger and complex orders where the final margin is more uncertain.

The provision for litigations refers to ongoing or expected legal disputes. The provision covers expected legal costs and expected amounts for damages or settlements.

Other refers to miscellaneous provisions that do not fall within any of the above categories.

Note 29. Borrowings and net debt

Net debt

Consolidated

SEK millions	2022	2021
Credit institutions	829	69
Swedish Export Credit	2,227	-
Handelsbanken	1,114	-
Commercial papers	892	-
Corporate bonds	10,000	8,175
Borrowings *	15,062	8,244
Lease liabilities **	2,671	2,427
Total debt	17,733	10,671
Cash and cash equivalents and current deposits	-4,663	-3,647
Net debt * **	**13,070**	**7,024**

* Equals the sum of the non-current and current liabilities to credit institutions etc in the statement of consolidated financial position, which is also displayed in the below table “Maturity of loans by currency”.

** Equals the sum of the non-current and current lease liabilities in the statement of consolidated financial position.

*** Alternative performance measure.

The changes in the loans during the year are explained by the following table:

Loans

Consolidated

SEK millions	January 1	Cash flows	Exchange rate effects	December 31
Year:				
2021	9,168	-1,431	507	8,244
2022	8,244	5,971	847	15,062

The loans are distributed among currencies as follows:

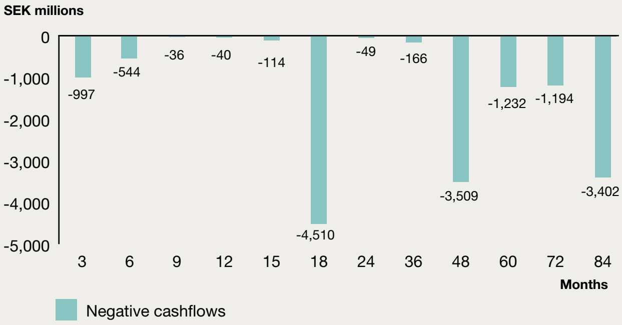
Maturity of loans by currency

Consolidated

	Current		Non-current		Total	
SEK millions	2022	2021	2022	2021	2022	2021
Currency:						
BRL	22	5	–	–	22	5
CAD	1	1	–	–	1	1
EUR	159	5,145	13,362	3,045	13,521	8,190
GBP	5	–	–	–	5	–
INR	2	9	–	–	2	9
NOK	3	25	–	14	3	39
PLN	116	–	–	–	116	–
SEK	1,392	–	–	–	1,392	–
Total	**1,700**	**5,185**	**13,362**	**3,059**	**15,062**	**8,244**
Of which, not due within five years:			4,461	–	4,461	–

The maturity structure of the loans is presented in the bar chart in the section “Liquidity risk and refinancing risk” under Financial risks.

Maturity analysis for loans



Loans with floating interest rate

Bilateral term loans with other lenders

Alfa Laval has two loans of EUR 100 million from Svensk Exportkredit that mature in 2027 and 2028 that accrue interest at a floating interest rate based on EURIBOR plus a margin.

Alfa Laval also has one loan of EUR 100 million from Svenska Handelsbanken that matures in 2024, with a possibility to extend it for another year that accrue interest at a floating interest rate based on EURIBOR plus a margin.

The average interest rate for the loans with floating interest rate was 2.21 percent at the end of 2022.

Loans with fixed rate

Loan from credit institutions

Alfa Laval has a revolving credit facility of EUR 700 million corresponding to SEK 7,806 million on December 31, 2022 with a banking syndicate. The facility has a maturity of five years from April 2022 with a possibility to extend it for another year and it includes a possibility to increase by EUR 200 million. When utilised, the interest is fixed based on STIBOR plus a mark-up that depends on Alfa Laval’s credit rating.

At December 31, 2022 SEK 500 million of the facility was utilised with a fixed interest of 3.129 percent.

At year end the commitment fee on the un-utilised facility was 14.0 (14.0) basis points.

Corporate bonds

Alfa Laval has a Euro Medium Term Note (EMTN) programme of EUR 2,000 million. Under the programme, three tranches of corporate bonds totalling EUR 900 million have been issued in June 2019 and February 2022. The corporate bonds are listed on the Irish stock exchange and consist of one tranche of EUR 300 million, with a fixed interest of 0.308 percent based on a coupon of 0.250 percent that matures in June 2024, one tranche of EUR 300 million, with a fixed interest of 0.969 percent based on a coupon of 0.875 percent that matures in February, 2026 and one tranche of EUR 300 million, with a fixed interest of 1.388 percent based on a coupon of 1.375 percent that matures in February, 2029.The average interest coupon and fixed interest rate for the three tranches is 0.83 percent and 0.89 percent respectively.

Commercial papers

The company’s commercial paper programme is SEK 4,000 million with a duration of 1-12 months. It was utilised with SEK 900 million at December 31, 2022. When commercial papers are issued, the interest rate is fixed at inception based on current interest level.

The average interest rate for the commercial papers is 2.17 percent.

Transaction costs

The transaction costs in connection with raising the loans or issuing the bonds have been capitalised and are being amortised over the maturity of the loans. At the end of the year the capitalised amount was SEK 47 (31) million. The current year’s cost for the fee amortisation is SEK -14 (-16) million.

Average interest and currency duration

The average interest and currency duration for all loans including derivatives is 29.1 (16.6) months at the end of 2022.

Financial covenants

The corporate bonds, the commercial papers and the loans from Svensk Exportkredit, Handelsbanken and the banking syndicate are not linked to any financial covenants that must be fulfilled throughout the life of the loans.

Note 30. Other current liabilities

Split by type

Consolidated

SEK millions	2022	2021
VAT liabilities, employee withholding taxes	222	259
Progress invoicing ahead of revenue recognition	2,076	852
Other non-interest bearing liabilities	2,971	2,446
Total	**5,269**	**3,557**

Note 31. Accrued costs and prepaid income

Split by type and maturity

Consolidated

SEK millions	2022	2021
Accruals for social security	382	357
Reserve for severance pay	264	175
Accrued interest expenses	91	25
Other accrued expenses	2,016	1,602
Prepaid income	17	12
Total	**2,770**	**2,171**
Of which, not due within one year:		
Accruals for social security	66	42
Reserve for severance pay	195	123
Other accrued expenses	146	107
Total	**407**	**272**

Note 32. Pledged assets and contingent liabilities

Split by type

Consolidated

SEK millions	2022	2021
Pledged assets		
Other pledges and similar commitments	9	7
Total	**9**	**7**
Contingent liabilities		
Discounted bills	15	12
Performance guarantees	1,606	1,483
Other contingent liabilities	1,407	1,535
Total	**3,028**	**3,030**

As of December 31, 2022, the Group had sold receivables with recourse totalling SEK 15 (12) million. These are disclosed as discounted bills above.

Other contingent liabilities are among other items referring to bid guarantees, payment guarantees to suppliers and retention money guarantees.

Note 33. Transactions with related party

Tetra Pak within the Tetra Laval Group is Alfa Laval's single largest customer with 4.0 (4.7) percent of net sales. In June 1999, Tetra Pak entered into a purchasing agreement with Alfa Laval that governs the distribution, research and development, market and sales information, use of trademarks and intellectual property. The following areas shall be agreed upon from time to time between representatives of the parties: products that are subject to the agreement, prices and discounts of such products, geographical markets and product areas where Tetra Pak is Alfa Laval's preferred distributor, the right of Tetra Pak to affix its trademarks to Alfa Laval products, sales goals for Tetra Pak in defined geographical markets, products and technologies that are the focus of joint research and development and the ownership rights of the research and development result and use of market and sales information. The agreement aims at the applications within liquid food where Tetra Pak has a natural market presence through the deliveries of packaging equipment and packaging material.

The agreement has a 12-month period of notice. The prices Tetra Pak receives are not lower than the prices Alfa Laval would obtain when selling to a comparable third party. The prices are fixed on a calendar year basis.

The Board of Directors for Alfa Laval AB (publ) has two representatives from Tetra Laval - Jörn Rausing and Finn Rausing.

At year-end, Alfa Laval has the following balance items against companies within the Tetra Laval group (Tetra Pak and DeLaval).

Receivables on/payables to related parties

Consolidated

SEK millions	2022	2021
Receivables:		
Accounts receivable	162	205
Liabilities:		
Other liabilities	–	24

Alfa Laval has had the following transactions with companies within the Tetra Laval group (Tetra Pak and DeLaval).

Revenues/expenses from related parties

Consolidated

SEK millions	2022	2021
Net sales	2,072	1,940

Note 34. Interests in joint ventures

Alfa Laval owns 50 percent in five different joint ventures: Rolls Laval Heat Exchangers Ltd with Rolls Royce as partner, Alfdex AB with Concentric as partner, Stadion Laks AS with Lingalaks AS partner and AlfaWall AB and AlfaWall Oceanbird AB with Wallenius as partner. Alfdex AB has a fully owned subsidiary Alfdex Kunshan Co Ltd. None of these joint ventures are of material importance and for that reason no disclosures are made of each individual joint venture. Instead, disclosures in aggregate are made on the carrying amount of Alfa Laval's interests in these individually immaterial joint ventures. See the below tables.

Since joint ventures as from 2014 are consolidated according to the equity method in IFRS 11 "Joint arrangements", the amounts in the following two tables are no longer part of Alfa Laval's statements over consolidated comprehensive income and consolidated financial position.

Assets/liabilities

Joint ventures

SEK millions	2022	2021
Current assets	331	299
Non-current assets	115	104
Current liabilities	148	161
Non-current liabilities	17	21
Contingent liabilities	–	38

Revenues/expenses

Joint ventures

SEK millions	2022	2021
Net sales	326	409
Cost of goods sold	-204	-257
Other operating income	95	99
Other operating costs	-156	-146
Financial net	1	-1
Result before tax	62	104
Taxes	-13	-27
Net income	49	77
Other comprehensive income	-1	-1
Comprehensive income	**48**	**76**

Instead, the application of the equity method means that the net income in the joint ventures is booked into one line in the operating income. The counter entry is an increase or decrease of the value of shares in joint ventures. Received dividends reduce the value of the shares in joint ventures.

Interests in joint ventures

Consolidated

SEK millions	2022	2021
Opening balance	165	85
Acquisition/capital contribution	40	49
Comprehensive income	48	76
Received dividends	-48	-45
Shares in joint ventures	**205**	**165**

The effect on comprehensive income is the same as the net income.

Note 35. Leasing

Leasing disclosures		
Consolidated		
SEK millions	2022	2021
Lessee		
Financial position		
Right-of-use assets	2,529	2,324
Lease liabilities	2,671	2,427
New or adjusted leases	513	483
Income statement		
Depreciation	-470	-399
Interest cost on lease liabilities	-87	-74
Expenses		
Expense for not capitalised short-term leases	78	64
Expense for not capitalised leases of low-value assets not included in above line	5	3
Expense for not capitalised leases of low-value assets according to Alfa Laval's higher materiality thresholds not included in above lines	14	14
Expense for variable lease payments not included in lease liabilities	5	2
Cash flow		
Total cash outflow for all leases, including leases that are not capitalised, excluding non-lease components	678	584
Lessor		
Financial position		
Financial lessor receivable	1	3
Income statement		
Finance income	5	0
Income from subleasing	0	1
Income from variable lease payments not included in financial lessor receivable	–	0
Lease income from operating leases	16	15
- out of which variable lease payments not dependent on an index or a rate	–	0

The leasing periods are between 1 and 25 years. The latter figure relates to a very limited number of properties. Normally the maximum leasing period is 10 years for buildings and 3-5 years for all other assets.

The weighted average incremental borrowing rate used to discount the value of the lease liabilities during 2022 is 3.77 (3.50) percent.

Maturity analysis of lease liabilities and receivables						
Consolidated						
	Lease payments by the lessee		Finance lease payments received by the lessor		Operating lease payments received by the lessor	
SEK millions	2022	2021	2022	2021	2022	2021
Maturity in year:						
2022	N/A	481	N/A	2	N/A	0
2023	569	475	1	1	0	0
2024	512	372	–	–	0	0
2025	441	327	–	–	–	–
2026	353	257	–	–	–	–
2027	269	N/A	–	N/A	–	N/A
Later	1,038	955	–	–	–	–
Total	**3,182**	**2,867**	**1**	**3**	**0**	**0**
Unearned finance income			–	0		
Discounted unguaranteed residual value			1	3		

Note 36. Revenue recognition from contracts with customer

Revenue recognition from contracts with customers

Consolidated

SEK millions	2022	2021
Income statement		
Net sales from:		
Contracts with customers	51,963	40,876
Leasing	172	35
Total net sales	52,135	40,911
Net sales from contracts with customers with a contract duration of:		
≤ 1 year	44,720	36,319
> 1 year	7,243	4,557
	51,963	40,876
Performance obligations towards customers satisfied:		
at a point in time	43,399	34,945
over time	8,564	5,931
	51,963	40,876
Additional information:		
Net sales:		
included in contract liability at January 1	3,905	837
from performance obligations satisfied or partially satisfied in previous periods	471	51
Amortisation of capitalised costs to obtain or fulfil contracts with external customers	–	–
Impairment losses	–	–
Assets		
Accounts and notes receivables, contracts with external customers	10,126	7,174
Accounts and notes receivables, external, other	26	20
Contract assets	2,566	1,642
Capitalised costs to obtain a contract with a customer	8	4
Capitalised costs to fulfil a contract with a customer	–	–
Liabilities		
Contract liabilities	8,710	5,676

Net sales per Business Division, per geography and per product is shown in Note 1, 2 and 3. Since contracts with customers account for 99.7 percent of net sales and leasing only 0.3 percent the figures are shown for total net sales in these notes and not separately for contracts with customers.

A contract asset is Alfa Laval's right to consideration in exchange for goods or services that Alfa Laval has transferred to a customer when that right is conditioned on something other than the passage of time (for example, Alfa Laval's future performance). It could be balanced invoicing relating to satisfied performance obligations that have not yet been invoiced (where the revenue recognition is ahead of the progress invoicing) and inventory linked to revenue recognised over time (like work in progress).

A contract liability is Alfa Laval's obligation to transfer goods or services to a customer for which Alfa Laval has received consideration (or the amount is due) from the customer. It could be advance payments and balanced invoicing relating to unsatisfied performance obligations that have been invoiced (where the progress invoicing is ahead of the revenue recognition).

Note 37. Remuneration policy for executive officers

The executive officers, i.e. the CEO and other members of Group Management reporting to the CEO, fall within the provisions of this policy. The policy must be adopted by the annual general meeting once every four years or when changed. The policy is forward-looking, i.e. applicable to remuneration agreed, and amendments to remuneration already agreed, after adoption of the policy by the annual general meeting. This policy does not apply to any remuneration decided or approved by the general meeting. The below policy was adopted by the annual general meeting 2021.

A prerequisite for the successful implementation of the company's business strategy and safeguarding of its long-term interests, including its sustainability, is that the company is able to recruit and retain qualified personnel, consequently it is necessary that the company offers market competitive remuneration.

For information regarding Alfa Laval's business strategy, please visit https://www.alfalaval.com/investors/in-brief/#xaa

This policy enables the company to offer the executive officers a competitive total remuneration. The remuneration shall be on market terms and may consist of the following components: fixed base salary, variable cash remuneration (including STI and LTIP), pension benefits and other benefits. The components, their purpose and link to the company's business strategy are described below.

The decision-making process to determine, review and implement the policy

The Board of Directors has established a Committee within the Board (the Remuneration Committee), with the tasks of preparing, within the Board of Directors, the policy for remuneration for executive officers. The Board of Directors shall propose a revised policy at least every fourth year and submit it to the general meeting. The policy shall be in force until a new policy is adopted by the general meeting.

Unless otherwise stated herein, the Board of Directors shall resolve on matters regarding remuneration and employment provisions for all other executive officers. The Committee shall continuously report to the Board of Directors. The CEO and the other executive officers shall not be present when their respective remuneration terms are decided.

Additionally, the general meeting may – irrespective of this policy– resolve on, among other things, share-related or share price-related remuneration.

Fixed Base Salary

Purpose and link to strategy	Supports the attraction and retention of the best talents. Ensures competitiveness while controlling fixed costs to maximise efficiency.
Operational Details	– Normally reviewed annually and increases will usually be effective from 1 January or following a change in responsibilities. – The Remuneration Committee will consider, among other things, the following parameters when reviewing fixed base salary: – Economic and salary conditions and trends. – The individual's performance and responsibilities. – Base salaries and total remuneration at other companies that operate in the same markets, typically benchmarked against similar roles.

Variable Cash Remuneration

A portion of the total remuneration for the executive officers is linked to business performance so that total remuneration will increase or decrease in line with performance, thus promoting the company's business strategy and long-term interests.

Annual Short-Term Incentive (STI)

Purpose and link to strategy	To incentivise and create focus on the delivery of annual financial and strategic criteria.
Operational Details	– The performance criteria, weighting and targets are to be proposed by the Remuneration Committee annually and approved by the Board of Directors. Targets shall be set by reference to the company's operating plan and historical and projected performance. – The outcome of criteria for awarding STI is to be measured over a period of one year and depend on the degree of fulfilment of predetermined targets. – The Board of Directors shall have the possibility, under applicable law or contractual provisions, subject to the restrictions that may apply under law or contract, to reclaim in whole or in part STI paid on incorrect grounds (so-called claw-back).
Opportunity Levels	The maximum opportunity for STI can amount up to 50 percent of fixed base salary. For the CEO the maximum opportunity can amount up to 60 percent of fixed base salary. The Remuneration Committee shall have the possibility to review the opportunity levels in order to ensure market competitiveness.
Performance criteria	The STI plan awards shall be based on mainly financial criteria. The criteria shall be designed so as to contribute to the company's business strategy and long-term interests.

Long-Term Incentive Plan (LTIP)

Purpose and link to strategy	Give extra focus on the long-term value creation for the shareholders.
Operational Details	– An annual grant of the LTIP, with a three-year performance period, can be decided by the Board of Directors each year. – Payment to the participants of the program is made after year three, provided, that they are still employed at the date of payment. – The Board of Directors shall have the possibility, under applicable law or contractual provisions, subject to the restrictions that may apply under law or contract, to reclaim in whole or in part LTIP paid on incorrect grounds (so-called claw-back). – In the event of a restructuring of the Company or any other extraordinary event which the Remuneration Committee considers will affect the value of an award, the method of calculating the proportion of the maximum value of the award which will be paid to a Participant on vesting may be adjusted in such manner as the Remuneration Committee shall determine to be fair and reasonable.
Opportunity Levels	For executive officers the maximum opportunity for LTIP can amount up to 40 percent of fixed base salary for each three-year performance period. For the CEO the maximum opportunity can amount up to 50 percent of fixed base salary for each three-year performance period.
Performance Criteria	The performance criteria of the LTIP are to be related to financial targets over a business cycle, including but not necessarily limited to, Operating margin (adjusted EBITA margin) and Net invoicing growth. Maximum outcome is awarded when the externally communicated long-term financial targets are clearly exceeded.

For retention or recruitment purposes or extraordinary performance beyond the individual's ordinary tasks the Remuneration Committee based on proposal of CEO, may decide on a specific cash remuneration. Such remuneration may not exceed an annual amount corresponding to 40 percent of fixed annual cash salary and may not be paid more than once each year per individual.

Pension Benefits

Purpose and link to strategy	Provide competitive and cost-effective pension benefits.
Operational Details	– Pension benefits shall be defined contribution (premium defined) unless the individual concerned is subject to defined benefit pension under mandatory collective agreement provisions. – Variable cash remuneration shall not qualify for pension benefits unless the executive officer is part of mandatory collective agreed provisions where this is stipulated. – Early retirement may be offered selectively and only after a special decision by the Remuneration Committee, with a defined contribution early retirement scheme. – For executive officers governed by rules other than Swedish, pension benefits may be duly adjusted for compliance with mandatory rules or established local practice, taking into account, to the extent possible, the overall purpose of this policy.
Opportunity Levels	The pension premiums for defined contribution pension shall amount to not more than 50 percent of the pensionable salary (for the CEO fixed annual base salary).

Other Benefits

Purpose and link to strategy	Provide competitive and cost-effective benefits.
Operational Details	– Other benefits may include but is not limited to life insurance, disability insurance and health care insurance and a company car or car allowance. – For executive officers governed by rules other than Swedish, benefits may be duly adjusted for compliance with mandatory rules or established local practice, taking into account, to the extent possible, the overall purpose of this policy. – Executive officers who are international assignees (for example expatriates) to or from Sweden may receive additional remuneration and other benefits to the extent reasonable in light of the special circumstances associated with the international assignment arrangement, taking into account, to the extent possible, the overall purpose of this policy.
Opportunity Levels	Other benefits may amount to not more than 5 percent of the fixed annual cash salary and shall be set at a level which the Remuneration Committee considers to: – provide the relevant level of benefit depending on role and the individual circumstances, – be in line with comparable roles in companies with similar size and complexity in the local market, and – be appropriate compared to the benefits offered to the wider workforce in the local market.

Termination of employment

Details	– If notice of termination of employment is made by the company:
	   – The notice period may not exceed twelve months.
	   – Fixed cash salary during the period of notice and severance pay may together not exceed an amount equivalent to the fixed cash salary for two years.
	– When termination is made by the executive officer the period of notice may not to exceed six months without any right to severance pay.
	– Appropriate so-called good leaver/bad leaver principles are to be applied for STI and LTIP.
	– Repatriation – If the executive officer is an international assignee the company may reimburse reasonable cost for the repatriation of good leavers, taking into account, to the extent possible, the overall purpose of this policy.
	For executive officers governed by rules other than Swedish, payments in connection with termination may be duly adjusted for compliance with mandatory rules or established local practice, taking into account, to the extent possible, the overall purpose of this policy.

Salary and employment conditions for employees
In the preparation of the Board of Directors' proposal for this remuneration policy, salary and employment conditions for employees of the company have been taken into account by including information on the employees' total income, the components of the remuneration and increase and growth rate over time. The development of the difference between the remuneration to executive officers and remuneration to other employees will be disclosed in the remuneration report.

Derogation from the policy
The Board of Directors may temporarily resolve to derogate from the policy, in whole or in part, if in a specific case there is special cause for the derogation and a derogation is necessary to serve the company's long-term interests, including its sustainability, or to ensure the company's financial viability. As set out above, the Remuneration Committee's tasks include preparing the Board of Directors' resolutions in remuneration-related matters. This includes any resolutions to derogate from the policy.

Note 38. Government grants

In 2022 Alfa Laval has received SEK 9 (27) million in government grants. These have mainly been received to cover the costs for various working hour reduction schemes linked to COVID-19 in different countries. In addition, SEK - (47) million has been reported in the P&L concerning support for reduced working hours in Sweden that was received in 2020, but that was not reported in the P&L then but instead was balanced due to the uncertainty around the conditions for the support.

Note 39. Events after the closing date

The statements on financial position and the comprehensive income statements will be adopted at the Annual General Meeting of shareholders on April 25, 2023.

Note 40. Proposed disposition of earnings

The unrestricted equity in Alfa Laval AB (publ) is SEK:	
Profit brought forward	6,227,587,910
Repurchase of shares	-660,730,499
Repaid dividend	25,216
Net income 2022	940,541,971
	6,507,424,598

The Board of Directors propose a dividend of SEK 6.00 (6.00) per share corresponding to SEK 2,479,957,890 (2,479,957,890) and that the remaining income of SEK 4,027,466,708 (6,227,587,910) be carried forward.

The Board of Directors are of the opinion that the proposed dividend is in line with the requirements that the type and size of operations, the associated risks, the capital needs, liquidity and financial position put on the company.

True and fair view
The undersigned certify that the annual report for the Group and the Parent company has been prepared in accordance with International Financial Reporting Standards (IFRS), as adopted for use in the European Union, and generally accepted accounting principles respectively, and gives a true and fair view of the financial positions and results of the Group and the Parent company, and that the Board of Directors' report gives a fair review of the development of the operations, financial positions and results of the Group and the Parent company and describes substantial risks and uncertainties that the Group companies face.

Lund, March 17, 2023

Dennis Jönsson *Chairman*	Lilian Fossum Biner *Director*	Maria Moræus Hanssen *Director*
Henrik Lange *Director*	Bror García Lantz *Employee representative*	Ray Mauritsson *Director*
Henrik Nielsen *Employee representative*	Johan Ranhög *Employee representative*	Finn Rausing *Director*
Jörn Rausing *Director*	Ulf Wiinberg *Director*	Tom Erixon *President and CEO*

Our Auditors' Report concerning this Annual Report has been issued on March 27, 2023.

Staffan Landén *Authorised Public Accountant*	Karoline Tedevall *Authorised Public Accountant*

THIS IS A TRANSLATION FROM THE SWEDISH ORIGINAL

Auditor's report

To the general meeting of the shareholders of Alfa Laval AB (publ), corporate identity number 556587-8054

Report on the annual accounts and consolidated accounts

Opinions

We have audited the annual accounts and consolidated accounts of Alfa Laval AB (publ) for the year 2022. The annual accounts and consolidated accounts of the company are included on pages 107–191 and 196–198 in this document.

In our opinion, the annual accounts have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of the parent company as of 31 December 2022 and its financial performance and cash flow for the year then ended in accordance with the Annual Accounts Act. The consolidated accounts have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of the group as of 31 December 2022 and their financial performance and cash flow for the year then ended in accordance with International Financial Reporting Standards (IFRS), as adopted by the EU, and the Annual Accounts Act. The statutory administration report is consistent with the other parts of the annual accounts and consolidated accounts.

We therefore recommend that the general meeting of shareholders adopts the consolidated financial position and parent company income and financial position for the parent company and the group.

Our opinions in this report on the annual accounts and consolidated accounts are consistent with the content of the additional report that has been submitted to the parent company's audit committee in accordance with the Audit Regulation (537/2014) Article 11.

Basis for Opinions

We conducted our audit in accordance with International Standards on Auditing (ISA) and generally accepted auditing standards in Sweden. Our responsibilities under those standards are further described in the Auditor's Responsibilities section. We are independent of the parent company and the group in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements. This includes that, based on the best of our knowledge and belief, no prohibited services referred to in the Audit Regulation (537/2014) Article 5.1 have been provided to the audited company or, where applicable, its parent company or its controlled companies within the EU.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinions.

Key Audit Matters

Key audit matters of the audit are those matters that, in our professional judgment, were of most significance in our audit of the annual accounts and consolidated accounts of the current period. These matters were addressed in the context of our audit of, and in forming our opinion thereon, the annual accounts and consolidated accounts as a whole, but we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the Auditor's responsibilities for the audit of the financial statements section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying financial statements.

Valuation of intangible assets

Description

Book value of goodwill amounts to SEK 26 258 million per 31 December 2022 which corresponds to 32% of the group's total assets. The company evaluates whether the book value of goodwill exceeds its recoverable amount on an annual basis or upon indications of declining value. The recoverable amount is determined for each cash-generating unit through means of a calculation of net present value of future cash flows. Future cash flows are based on management's business plans and forecasts and includes various assumptions such as development in earnings, growth, investment needs and discount rates. If a decision is made to wind-up or dispose a business a separate impairment test is performed and a write down is recorded if the recoverable amount is lower than the recorded value for the business.

Changes to the assumptions could have a major impact on the calculation of the recoverable amount and the assumptions applied by the company are thus important to the assessment as to whether an impairment is present. We have thus determined valuation of goodwill to represent a key audit matter for the group.

A description of goodwill and the impairment tests is included in note 17.

How our audit addressed this key audit matter

During our audit we have evaluated and tested the company's process for the impairment test, for example by evaluating historic growth and current forecasts. We have also benchmarked with peer companies in order to evaluate the reasonableness of the valuation and, through support of our valuation specialists, evaluated the chosen discount rate and assumptions on long-term growth. We have also evaluated the company's model and method for executing the impairment test and made sensitivity analyses.

In our audit we have also examined whether the disclosures in the annual report are appropriate and in accordance with the assumptions applied by group management.

Other provisions

Description

Book value of other provisions in the group amounts SEK 2 614 million per 31 December 2022. The provisions amongst other relates to provision for expected expenses for warranties, litigation, restructuring and onerous contracts, as expressed in note 28 Other provisions.

The provisions include assumptions about future outcome, primarily as it relates to amount, timing and magnitude of the final settlement. Provisions for this type of expenses are uncertain and are based on various assumptions made by the company. Changes to the assumptions upon which the provisions are based could have a major impact on the reported earnings.

How our audit addressed this key audit matter

We have obtained the group's documentation of the provisions. We have evaluated the provisions recorded and discussed the assumptions and risk assessments made by the company for each major provision in order to establish that the provisions are in compliance with applicable accounting standards. We have also followed up the provisions with legal assessments, documented decisions and historic outcome.

In our audit we have also examined whether the disclosures in the annual report are appropriate.

Other Information than the annual accounts and consolidated accounts

This document also contains other information than the annual accounts and consolidated accounts and is found on pages 1–106. The remuneration report for the financial year 2022 also constitutes other information. The Board of Directors and the Managing Director are responsible for this other information.

Our opinion on the annual accounts and consolidated accounts does not cover this other information and we do not express any form of assurance conclusion regarding this other information.

In connection with our audit of the annual accounts and consolidated accounts, our responsibility is to read the information identified above and consider whether the information is materially inconsistent with the annual accounts and consolidated accounts. In this procedure we also take into account our knowledge otherwise obtained in the audit and assess whether the information otherwise appears to be materially misstated.

If we, based on the work performed concerning this information, conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Board of Directors and the Managing Director

The Board of Directors and the Managing Director are responsible for the preparation of the annual accounts and consolidated accounts and that they give a fair presentation in accordance with the Annual Accounts Act and, concerning the consolidated accounts, in accordance with IFRS as adopted by the EU. The Board of Directors and the Managing Director are also responsible for such internal control as they determine is necessary to enable the preparation of annual accounts and consolidated accounts that are free from material misstatement, whether due to fraud or error.

In preparing the annual accounts and consolidated accounts, The Board of Directors and the Managing Director are responsible for the assessment of the company's and the group's ability to continue as a going concern. They disclose, as applicable, matters related to going concern and using the going concern basis of accounting. The going concern basis of accounting is however not applied if the Board of Directors and the Managing Director intends to liquidate the company, to cease operations, or has no realistic alternative but to do so.

The Audit Committee shall, without prejudice to the Board of Director's responsibilities and tasks in general, among other things oversee the company's financial reporting process.

Auditor's responsibility

Our objectives are to obtain reasonable assurance about whether the annual accounts and consolidated accounts as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with ISAs and generally accepted auditing standards in Sweden will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these annual accounts and consolidated accounts.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the annual accounts and consolidated accounts, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of the company's internal control relevant to our audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Board of Directors and the Managing Director.
- Conclude on the appropriateness of the Board of Directors' and the Managing Director's use of the going concern basis of accounting in preparing the annual accounts and consolidated accounts. We also draw a conclusion, based on the audit evidence obtained, as to whether any material uncertainty exists related to events or conditions that may cast significant doubt on the company's and the group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the annual accounts and consolidated accounts or, if such disclosures are inadequate, to modify our opinion about the annual accounts and consolidated accounts. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause a company and a group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the annual accounts and consolidated accounts, including the disclosures, and whether the annual accounts and consolidated accounts represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient and appropriate audit evidence regarding the financial information of the entities or business activities within the group to express an opinion on the consolidated accounts. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our opinions.

We must inform the Board of Directors of, among other matters, the planned scope and timing of the audit. We must also inform of significant audit findings during our audit, including any significant deficiencies in internal control that we identified.

We must also provide the Board of Directors with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or related safeguards applied.

From the matters communicated with the Board of Directors, we determine those matters that were of most significance in the audit of the annual accounts and consolidated accounts, including the most important assessed risks for material misstatement, and are therefore the key audit matters. We describe these matters in the auditor's report unless law or regulation precludes disclosure about the matter.

Report on other legal and regulatory requirements

Report on the audit of the administration and the proposed appropriations of the company's profit or loss

Opinions

In addition to our audit of the annual accounts and consolidated accounts, we have also audited the administration of the Board of Directors and the Managing Director of Alfa Laval AB (publ) for the year 2022 and the proposed appropriations of the company's profit or loss.

We recommend to the general meeting of shareholders that the profit be appropriated in accordance with the proposal in the statutory administration report and that the members of the Board of Directors and the Managing Director be discharged from liability for the financial year.

Basis for opinions

We conducted the audit in accordance with generally accepted auditing standards in Sweden. Our responsibilities under those standards are further described in the Auditor's Responsibilities section. We are independent of the parent company and the group in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinions.

Responsibilities of the Board of Directors and the Managing Director

The Board of Directors is responsible for the proposal for appropriations of the company's profit or loss. At the proposal of a dividend, this includes an assessment of whether the dividend is justifiable considering the requirements which the company's and the group's type of operations, size and risks place on the size of the parent company's and the group's equity, consolidation requirements, liquidity and position in general.

The Board of Directors is responsible for the company's organization and the administration of the company's affairs. This includes among other things continuous assessment of the company's and the group's financial situation and ensuring that the company's organization is designed so that the accounting, management of assets and the company's financial affairs otherwise are controlled in a reassuring manner. The Managing Director shall manage the ongoing administration according to the Board of Directors' guidelines and instructions and among other matters take measures that are necessary to fulfill the company's accounting in accordance with law and handle the management of assets in a reassuring manner.

Auditor's responsibility

Our objective concerning the audit of the administration, and thereby our opinion about discharge from liability, is to obtain audit evidence to assess with a reasonable degree of assurance whether any member of the Board of Directors or the Managing Director in any material respect:

– has undertaken any action or been guilty of any omission which can give rise to liability to the company, or

– in any other way has acted in contravention of the Companies Act, the Annual Accounts Act or the Articles of Association.

Our objective concerning the audit of the proposed appropriations of the company's profit or loss, and thereby our opinion about this, is to assess with reasonable degree of assurance whether the proposal is in accordance with the Companies Act.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with generally accepted auditing standards in Sweden will always detect actions or omissions that can give rise to liability to the company, or that the proposed appropriations of the company's profit or loss are not in accordance with the Companies Act.

As part of an audit in accordance with generally accepted auditing standards in Sweden, we exercise professional judgment and maintain professional skepticism throughout the audit. The examination of the administration and the proposed appropriations of the company's profit or loss is based primarily on the audit of the accounts. Additional audit procedures performed are based on our professional judgment with starting point in risk and materiality. This means that we focus the examination on such actions, areas and relationships that are material for the operations and where deviations and violations would have particular importance for the company's situation. We examine and test decisions undertaken, support for decisions, actions taken and other circumstances that are relevant to our opinion concerning discharge from liability. As a basis for our opinion on the Board of Directors' proposed appropriations of the company's profit or loss we examined the Board of Directors' reasoned statement and a selection of supporting evidence in order to be able to assess whether the proposal is in accordance with the Companies Act.

The auditor's examination of the ESEF report

Opinion

In addition to our audit of the annual accounts and consolidated accounts, we have also examined that the Board of Directors and the Managing Director have prepared the annual accounts and consolidated accounts in a format that enables uniform electronic reporting (the Esef report) pursuant to Chapter 16, Section 4(a) of the Swedish Securities Market Act (2007:528) for Alfa Laval AB (publ) for the financial year 2022.

Our examination and our opinion relate only to the statutory requirements.

In our opinion, the ESEF report has been prepared in a format that, in all material respects, enables uniform electronic reporting.

Basis for opinion

We have performed the examination in accordance with FAR's recommendation RevR 18 Examination of the ESEF report. Our responsibility under this recommendation is described in more detail in the Auditors' responsibility section. We are independent of Alfa Laval AB (publ) in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of the Board of Directors and the Managing Director

The Board of Directors and the Managing Director are responsible for the preparation of the Esef report in accordance with Chapter 16, Section 4(a) of the Swedish Securities Market Act (2007:528), and for such internal control that the Board of Directors and the Managing Director determine is necessary to prepare the Esef report without material misstatements, whether due to fraud or error.

Auditor's responsibility

Our responsibility is to obtain reasonable assurance whether the Esef report is in all material respects prepared in a format that meets the requirements of Chapter 16, Section 4(a) of the Swedish Securities Market Act (2007:528), based on the procedures performed.

RevR 18 requires us to plan and execute procedures to achieve reasonable assurance that the Esef report is prepared in a format that meets these requirements.

Reasonable assurance is a high level of assurance, but it is not a guarantee that an engagement carried out according to RevR 18 and generally accepted auditing standards in Sweden will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the Esef report.

The audit firm applies *ISQC 1 Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and other Assurance and Related Services Engagements* and accordingly maintains a comprehensive system of quality control, including documented policies and procedures regarding compliance with professional ethical requirements, professional standards and legal and regulatory requirements.

The examination involves obtaining evidence, through various procedures, that the Esef report has been prepared in a format that enables uniform electronic reporting of the annual and consolidated accounts. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement in the report, whether due to fraud or error. In carrying out this risk assessment, and in order to design audit procedures that are appropriate in the circumstances, the auditor considers those elements of internal control that are relevant to the preparation of the Esef report by the Board of Directors and the Managing Director, but not for the purpose of expressing an opinion on the effectiveness of those internal controls. The examination also includes an evaluation of the appropriateness and reasonableness of assumptions made by the Board of Directors and the Managing Director.

The procedures mainly include a validation of the Esef report, which is prepared in a valid XHTML format and a reconciliation of the Esef report with the audited annual accounts and consolidated accounts.

Furthermore, the procedures also include an assessment of whether financial performance, financial position, changes in equity and cash flow as well as notes in Esef report has if it has been tagged with iXBRL in accordance with the requirements of the EUSF Regulation.

Staffan Landén, Ernst & Young AB, Box 7850, 103 99 Stockholm, was appointed auditor of Alfa Laval AB by the general meeting of the shareholders on the 26th of April 2022 and has been the company's auditor since the 23rd of April 2018.

Karoline Tedevall, Ernst & Young AB, Box 7850, 103 99 Stockholm, was appointed auditor of Alfa Laval AB by the general meeting of the shareholders on the 26th of April 2022 and has been the company's auditor since the 23rd of April 2018.

Lund March 27, 2023

Staffan Landén
Authorized Public Accountant

Karoline Tedevall
Authorized Public Accountant

Ten-year overview

Ten-year overview

Consolidated

SEK millions, unless otherwise stated	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013 *
Profit and loss										
Net sales	52,135	40,911	41,468	46,517	40,666	35,314	35,634	39,746	35,067	29,801
Comparison distortion items	-767	-192	-796	189	151	–	-1,500	–	-320	–
Operating income	6,519	6,126	5,580	7,198	5,831	4,589	2,989	5,717	4,667	4,353
Financial net	-340	16	-603	23	65	-218	336	-273	-550	-181
Result after financial items	6,179	6,142	4,977	7,221	5,896	4,371	3,325	5,444	4,117	4,172
Taxes	-1,610	-1,341	-1,397	-1,713	-1,359	-1,383	-1,013	-1,583	-1,149	-1,132
Net income for the year	**4,569**	**4,801**	**3,580**	**5,508**	**4,537**	**2,988**	**2,312**	**3,861**	**2,968**	**3,040**
Financial position										
Goodwill	26,258	22,480	19,080	21,112	20,537	19,775	20,436	19,498	20,408	10,061
Other intangible assets	5,159	3,441	2,204	3,134	3,873	4,692	5,946	6,556	7,898	3,582
Property, plant and equipment	10,710	9,075	8,321	8,943	5,732	4,851	4,940	4,773	5,004	3,785
Other non-current assets	2,666	3,216	3,633	2,081	1,958	1,654	2,100	1,804	2,092	1,447
Inventories	14,775	10,525	9,223	10,077	9,253	8,424	7,831	7,405	7,883	6,312
Current receivables	17,018	11,977	10,631	12,582	11,807	8,808	8,431	8,964	9,791	7,671
Current deposits	311	291	2,618	873	617	1,208	1,075	1,021	697	605
Cash and cash equivalents	4,352	3,356	5,150	5,594	4,295	3,137	2,619	1,876	2,013	1,446
TOTAL ASSETS	**81,249**	**64,361**	**60,860**	**64,396**	**58,072**	**52,549**	**53,378**	**51,897**	**55,786**	**34,909**
Equity	35,704	32,344	29,071	27,747	23,599	20,500	20,276	18,423	17,202	16,162
Provisions for pensions etc.	1,192	1,907	2,494	2,321	2,118	2,297	2,425	1,931	2,221	1,494
Provisions for taxes	2,293	1,838	1,553	1,662	1,945	2,100	2,722	2,925	3,074	1,758
Other non-current liabilities	2,139	1,928	2,259	2,571	802	677	636	521	660	423
Non-current loans	13,362	3,059	8,043	10,600	8,540	11,092	12,169	12,484	16,454	3,529
Current liabilities	26,559	23,285	17,440	19,495	21,068	15,883	15,150	15,613	16,175	11,543
TOTAL EQUITY & LIABILITIES	**81,249**	**64,361**	**60,860**	**64,396**	**58,072**	**52,549**	**53,378**	**51,897**	**55,786**	**34,909**

* Restated to IFRS 11.

** Lease liabilities have increased by SEK 2,766 million as per January 1, 2019 due to the initial application of IFRS 16 Leases, which affects the net debt at December 31, 2019.

Changes in accounting standards

A reader of the ten-year overview should observe that accounting standards have changed repeatedly over this period of time. The major changes are the following.

During 2019 IFRS 16 ”Leases” was implemented, which meant that right-of use assets and lease liabilities increased by SEK 2,766 million as per January 1, 2019 in connection with the initial application.

In 2014 IFRS 11 ”Joint arrangements” was implemented as per January 1, 2013, which meant a restatement of the comparison figures for 2013.

Ten-year overview

Consolidated

SEK millions, unless otherwise stated	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013 *
Key ratios										
Orders received	58,645	45,718	39,833	44,119	45,005	36,628	32,060	37,098	36,660	30,202
Order backlog at year end	37,020	22,954	18,969	21,551	23,168	18,289	16,870	20,578	22,293	14,568
EBITA	7,462	6,922	6,435	8,178	6,869	5,610	4,680	6,811	5,571	4,914
EBITDA	8,911	8,113	7,569	9,251	7,495	6,239	5,323	7,478	6,136	5,360
EBITA-margin %	14.3%	16.9%	15.5%	17.6%	16.9%	15.9%	13.1%	17.1%	15.9%	16.5%
EBITDA-margin %	17.1%	19.8%	18.3%	19.9%	18.4%	17.7%	14.9%	18.8%	17.5%	18.0%
Adjusted EBITA	8,229	7,114	7,231	7,989	6,718	5,610	5,553	6,811	5,891	4,914
Adjusted EBITDA	9,678	8,305	8,365	9,062	7,344	6,239	6,196	7,478	6,456	5,360
Adjusted EBITA-margin %	15.8%	17.4%	17.4%	17.2%	16.5%	15.9%	15.6%	17.1%	16.8%	16.5%
Adjusted EBITDA-margin %	18.6%	20.3%	20.2%	19.5%	18.1%	17.7%	17.4%	18.8%	18.4%	18.0%
Profit margin %	11.9%	15.0%	12.0%	15.5%	14.5%	12.4%	9.3%	13.7%	11.7%	14.0%
Excl. goodwill and step-up values:										
Capital turnover rate, times	3.5	3.8	3.9	4.4	7.4	5.7	8.6	10.6	7.9	6.4
Capital employed	15,087	10,839	10,751	10,649	5,474	6,201	4,146	3,734	4,447	4,657
Return on capital employed %	49.5%	63.9%	59.9%	76.8%	125.5%	90.5%	112.9%	182.4%	125.3%	105.5%
Incl. goodwill and step-up values:										
Capital turnover rate, times	1.2	1.2	1.2	1.3	1.3	1.1	1.2	1.3	1.3	1.6
Capital employed	43,060	34,677	33,678	35,550	30,729	31,698	30,663	31,512	27,259	18,598
Return on capital employed %	17.3%	20.0%	19.1%	23.0%	22.4%	17.7%	15.3%	21.6%	20.4%	26.4%
Return on equity %	13.5%	15.8%	12.7%	21.3%	20.3%	13.9%	11.8%	21.7%	17.6%	17.9%
Solidity %	43.9%	50.3%	47.8%	43.1%	40.6%	39.0%	38.0%	35.5%	30.8%	46.3%
Net debt **	13,070	7,024	3,635	8,175	6,985	8,200	9,619	11,688	15,068	2,611
Net debt to EBITDA, times **	1.47	0.87	0.48	0.88	0.93	1.31	1.81	1.56	2.46	0.49
Debt ratio, times **	0.37	0.22	0.13	0.29	0.30	0.40	0.47	0.63	0.88	0.16
Interest coverage ratio, times	27.9	38.4	27.3	32.8	39.3	28.4	24.5	22.3	18.2	22.1
Cash flow from:										
operating activities	3,291	5,264	7,723	5,223	4,883	4,463	4,979	5,850	5,123	4,233
investing activities	-5,518	-5,025	-1,058	-1,027	-1,293	-721	-795	-710	-14,970	-951
financing activities	3,093	-2,081	-6,917	-2,945	-2,445	-3,159	-3,566	-5,229	10,250	-3,191
Investments	1,853	1,229	1,232	1,337	1,490	675	617	674	603	492
Average number of employees	19,002	17,419	17,160	17,387	16,785	16,521	17,305	17,486	17,109	16,238
Earnings per share, SEK	10.89	11.38	8.47	13.08	10.77	7.09	5.46	9.15	7.02	7.22
Free cash flow per share, SEK	-5.38	0.57	15.89	10.00	8.56	8.92	9.97	12.25	-23.48	7.82

* Restated to IFRS 11.

** Lease liabilities have increased by SEK 2,766 million as per January 1, 2019 due to the initial application of IFRS 16 Leases, which affects the net debt at December 31, 2019.

Observe that certain financial measures above constitute alternative performance measures.

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Alternative performance measures and definitions

Alternative performance measures

An alternative performance measure is a financial measure of historical financial performance, financial position or cash flows, other than a financial measure defined or specified in the financial reporting framework.

In the annual report, the following alternative performance measures have been used (all of these alternative performance measures relate to actual historical figures and never to expected performance in future periods):

Measures to achieve full comparability over time

All of these concern the comparison distorting impact from above all amortisation of step-up values both over time and compared to external companies. For the same reasons adjustments are also made for comparison distortion items. How they are calculated is exhibited in the Income analysis table on page 127, except for the last one.

- **EBITA** or Earnings Before Interests, Taxes and Amortisation is defined as operating income before amortisation of step-up values. This measure of result is fully comparable over time independent of the financing costs and the amortisation of step-up values that from time to time burden the Group.
- **EBITA margin (%)** is defined as EBITA in relation to net sales and expressed in percent.
- **EBITDA** or Earnings Before Interest, Taxes, Depreciation and Amortisation is defined as operating income before depreciation and amortisation of step-up values. This measure of result is fully comparable over time independent of the financing costs, the depreciation and the amortisation of step-up values that from time to time burden the Group.
- **EBITDA margin (%)** is defined as EBITDA in relation to net sales and expressed in percent.
- **Adjusted EBITA** or Adjusted Earnings Before Interests, Taxes and Amortisation is defined as operating income before amortisation of step-up values, adjusted for comparison distortion items. This measure of result is fully comparable over time independent of the comparison distortion items, the financing costs and the amortisation of step-up values that from time to time burden the Group.
- **Adjusted EBITA margin (%)** is defined as Adjusted EBITA in relation to net sales and expressed in percent.
- **Adjusted EBITDA** or Adjusted Earnings Before Interest, Taxes, Depreciation and Amortisation is defined as operating income before depreciation and amortisation of step-up values, adjusted for comparison distortion items. This measure of result is fully comparable over time independent of the comparison distortion items, the financing costs, the depreciation and the amortisation of step-up values that from time to time burden the Group.
- **Adjusted EBITDA margin (%)** is defined as Adjusted EBITDA in relation to net sales and expressed in percent.
- **Adjusted gross profit** is defined as gross profit excluding amortisation of step-up values. This measure of result is fully comparable over time independent of the amortisation of step-up values that from time to time burden the Group.
- **Adjusted gross margin (%)** is defined as Adjusted gross profit in relation to net sales and expressed in percent.
- **Earnings per share, excluding amortisation of step-up values and the corresponding tax** is defined as net income attributable to the owners of the parent, excluding amortisation of step-up values and the corresponding tax divided by the average number of shares. The net income attributable to the owners of the parent is presented in the consolidated comprehensive income statement and the amortisation of step-up values is exhibited in the Income analysis table on page 127, while the corresponding tax is SEK 159 (131) million. This key figure is fully comparable over time independent of the amortisation of step-up values that from time to time burden the Group.

Measures to show how the Group is funded and manages its capital

- **Return on capital employed (%)** is defined as EBITA in relation to average capital employed, calculated on 12 months' revolving basis and expressed in percent.

  Capital employed is defined as total assets less liquid funds, other long-term securities, accrued interest income, operating liabilities and other non-interest-bearing liabilities, including tax and deferred tax, but excluding accrued interest costs. The measure shows how well the capital that is used in the operations is managed.
- **Net debt** is defined as interest-bearing liabilities and lease liabilities less cash and cash equivalents and current deposits. The calculation of net debt is exhibited in the Net debt table in Note 29. The measure shows the net financial indebtedness.
- **Net debt to EBITDA, times** is defined as Net debt in relation to EBITDA, calculated on 12 months' revolving basis and expressed as a multiple of EBITDA. This is one of the covenants of Alfa Laval's loans and an important key figure when reviewing the proposed dividend. EBITDA or Earnings Before Interest, Taxes, Depreciation and Amortisation is defined as operating income before depreciation and amortisation of step-up values.
- **Debt ratio, times** is defined as Net debt in relation to equity at the end of the period and expressed as a multiple of the equity. This is another measure of how the Group is funded.
- **Interest coverage ratio, times** is defined as EBITDA plus financial net increased by interest costs in relation to interest costs. Expressed as a multiple of interest costs. Gives an expression for the Group's ability to pay interest. The reason EBITDA is used as the starting point is that this forms the starting point for a cash flow perspective on the ability to pay interest. Financial items classified as comparison distorting are excluded from the calculation.

Definitions of other performance measures

Net sales

Revenues from goods sold and services performed that are part of the ordinary operations of the Group, after deduction for given discounts, value added tax and other tax directly linked to the sales.

Comparison distortion items

Items that do not have any link to the normal operations of the Group or that are of a non-recurring nature, where a reporting together with other items in the consolidated comprehensive income statement would have given a comparison distortion effect that would have made it difficult to judge the development of the ordinary operations for an outside viewer.

Orders received

Incoming orders during the year, calculated in the same way as net sales. The orders received give an indication of the current demand for the Group's products and services, that with a varying delay appear in net sales.

Order backlog at year-end

Incoming orders that not yet have been invoiced, translated at the current closing rate. The order backlog at the end of the year is equal to the sum of the order backlog at the beginning of the year plus the orders received during the year less the net sales for the year. It gives an indication of how the net sales can be expected to develop in the future.

Profit margin %

Result after financial items in relation to net sales, expressed in percent.

Capital turnover rate, times

Net sales in relation to average capital employed, expressed as a multiple of capital employed. Shown excluding and including goodwill, step-up values and the corresponding deferred tax liability.

Capital employed

Average total assets less liquid funds, other long-term securities, accrued interest income, operating liabilities and other non-interest-bearing liabilities, including tax and deferred tax, but excluding accrued interest costs. Shown excluding and including goodwill and step-up values and the corresponding deferred tax liability. Shows the capital that is used in the operations. The capital employed for the Group differs from the net capital for the operating segments concerning taxes, deferred taxes and pensions.

Return on equity %

Net income for the year in relation to average equity, expressed in percent.

Solidity %

Equity in relation to total assets, expressed in percent.

Cash flow from operating activities

Shows the Group's cash flow from operating activities, that is the cash flow generated in the daily operational activities.

Cash flow from investing activities

Shows the Group's cash flow from investing activities, i.e. the cash flow generated by mainly the Group's investments in fixed assets, divestments and acquisitions of businesses and divestments of real estate.

Cash flow from financing activities

Shows the Group's cash flow from financing activities, that is mainly dividends, increase and amortisation of loans and the cash flow components of the financial net.

Investments

Investments represent an important component in the cash flow for the Group. The level of investments during a couple of years gives a picture of the capacity build up in the Group.

Average number of employees

The number of employees is measured and reported as full time equivalents. The average number of employees is calculated based on the number of employees at the end of the last 5 quarters. The costs that are related to the number of employees represent a large part of the total costs for the Group. The development of the average number of employees over time in relation to the development of the net sales therefore gives an indication of the cost rationalisation that is taking place.

Earnings per share

Net income for the year attributable to the equity holders of the parent divided by the average number of shares.

Free cash flow per share

The sum of cash flows from operating and investing activities for the year divided by the average number of shares. This represents the cash flow available for interest payments, amortisation and dividends to investors.

Financial information

Alfa Laval uses a number of channels to provide information about the company's operations and financial development. The website – **www.alfalaval.com/investors** – is updated continuously with annual reports, quarterly reports, press releases and presentations. Annual reports are also sent to those shareholders who have notified the company that they wish to receive a copy. Conference calls with analysts, investors and the media are arranged by Alfa Laval in conjunction with the publication of the company's quarterly reports. A capital markets day is organized each year, during which representatives from the financial market are offered more in-depth information regarding the company's operations. In addition, representatives of Group management meet with analysts, investors and journalists on an ongoing basis to ensure that they have correct and current information. Pursuant to the company's agreement with Nasdaq Stockholm, information that could have an effect on the share price and that is not yet publicly known is never disclosed in conjunction with these types of meetings or contacts. Alfa Laval employs a so-called silent period of three weeks prior to the publication of a quarterly report. The President and Chief Financial Officer do not meet or speak to representatives from the financial market during this period.

Financial information for fiscal year 2023

Alfa Laval will publish quarterly reports on the following dates in 2023:

First quarter report: April 25, 2023
Second quarter report: July 20, 2023
Third quarter report: October 25, 2023
Year-end report: February 6, 2024

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Annual General Meeting 2022

The Annual General Meeting of Alfa Laval AB (publ) will be held on Tuesday, April 25, 2023, at 4:00 p.m. at Scandic Star Lund, Glimmervägen 5, in Lund. Notice of the Annual General Meeting will be inserted as an announcement in the Swedish Official Gazette and on the company's website not more than six and not less than four weeks prior to the Meeting. An announcement that notification has been issued will be placed in Dagens Nyheter. As a service to existing shareholders, information about the Annual General Meeting can also be sent to them by mail. The following information concerning the Meeting does not constitute legal notice.

Notification of participation

A shareholder who wishes to attend the Annual General Meeting must be recorded as shareholder in the register of shareholders prepared by Euro clear Sweden AB relating the circumstances on April 17, 2023, and notify participation – no later than April 19, 2023 – in accordance with the instructions in the notice. Shareholders may exercise their voting rights at the Annual General Meeting 2023 by voting in advance. A shareholder whose shares are held in the name of a nominee must, in addition to providing notification of participation, register its shares in its own name so that the shareholder is recorded in the share register relating to the circumstances on April 19, 2023. Please see the notice for more information.

Notification of participation shall be made to:

- Alfa Laval AB, Group Staff Legal,
  Box 73, SE-221 00 Lund, Sweden
- E-mail: arsstamma.lund@alfalaval.com
- Website: www.alfalaval.com
- Tel: +46 46 36 74 00 or +46 46 36 65 00.

Shareholders must state their name, personal identity number and telephone number on the notice of participation. If participation is by proxy, a power of attorney or authorization must be submitted to the company prior to the Meeting.

Meeting program

4:00 p.m. Start of Meeting

Dividend

The Board of Directors and the President propose that a dividend of SEK 6.00 per share be distributed to shareholders. The proposed record date for the dividend is Thursday, April 27, 2023. If the Annual General Meeting approves the proposal, the dividend is expected to be distributed by Euroclear Sweden AB on Wednesday, May 3, 2023. The record date and dividend payment date may be postponed due to the technical procedures required for the execution of the payment.

This is Alfa Laval
Alfa Laval is active in the areas of Energy, Marine, and Food & Water, offering its expertise, products, and service to a wide range of industries in some 100 countries. The company is committed to optimizing processes, creating responsible growth, and driving progress – always going the extra mile to support customers in achieving their business goals and sustainability targets.

Alfa Laval's innovative technologies are dedicated to purifying, refining, and reusing materials, promoting more responsible use of natural resources. They contribute to improved energy efficiency and heat recovery, better water treatment, and reduced emissions. Thereby, Alfa Laval is not only accelerating success for its customers, but also for people and the planet. Making the world better, every day. It's all about *Advancing better*™.

How to contact Alfa Laval
Up-to-date Alfa Laval contact details for all countries are always available on our website at www.alfalaval.com