





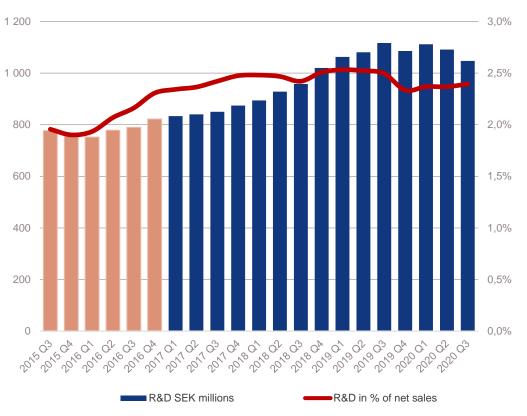
The next steps...

Tom Erixon President and CEO

### Technology leadership



#### R&D development (MSEK R12)



R&D expenses expected to remain at 2.5% of sales

**Newness trend 2022:** 



Product launches 2019-2021:

60-80 / Y

**Key improvements:** 

- Energy efficiency
- Serviceability / connectivity
- Range expansion

## Technology leadership: Heat transfer solutions





### Brazed & Fusion Bonded HEX

- 8 new product launches and 8 product updates in 2020, with common sustainability aspects:
  - Compliant with new high energy efficiency standards, through asymmetry
  - Optimized for new environmentally friendly refrigerants
  - New AlfaNovaTW, tap water range





### Gasketed Plate HEX

- 3 new product launches in 2020:
  - Energy Efficiency
  - Serviceability
  - Reliability

## Technology leadership: Separation solutions





#### **Decanters**

- 12 new launches in 2020:
  - VecFlow for water applications
  - Lower energy consumption
  - Polymer saving
  - Reduced waste disposal



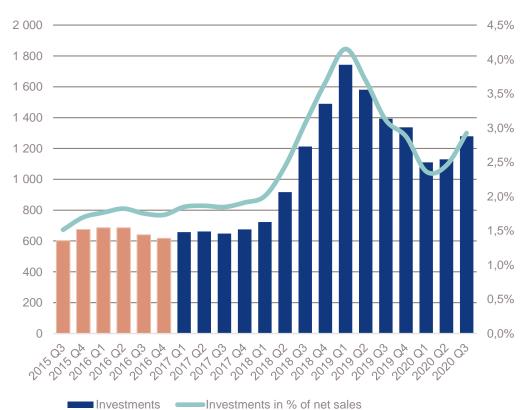
High speed separators

- 30 new launches in 2020:
  - Lower energy consumption
  - Increased hygienic standard
  - Increased yield in customer processes

## Significant development of the supply chain



#### Capex development (MSEK R12)





Qingdao, China

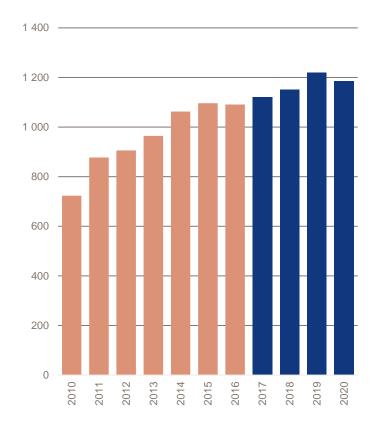
# Building a service driven company





Alfa Laval Remote Guidance, + 9,750 hours of remote guidance compared with prior Covid-19

#### Service development\* (M€, fixed rate)



\*) Year 2020 = LTM September 2020

## Digital service transformation



Connected assets 1,072 machines (+289%) Remote guidance + 9,750 hours (zero in 2019) Al troubleshooting 876 sessions (+456%)



## People drive change





Implementation of delegated business responsibility



A diverse team



A new connectivity team
A new center for 3D printing
A stronger e-commerce team

# A stronger competitive position



### **Energy Division**









Gasketed Plate HEX

Welded HEX

**Energy Separation** 

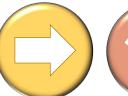
Food & Water Division







Bonded HEX





Decanters

Hygienic Fluid Handling

High Speed Separators

Food Heat Transfer

Food Systems

Marine Division









Separation & Heat Transfer Euip.

Boiler Systems

## The importance of Asia



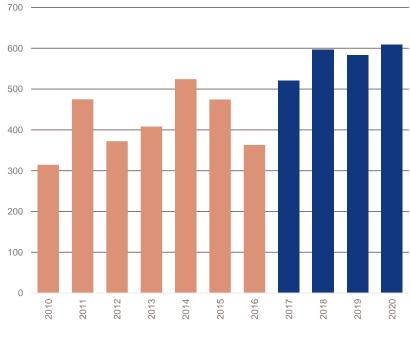
Blue Sky Action Plan



Beijing, China



#### China, orders received\* (M€, fixed rate)



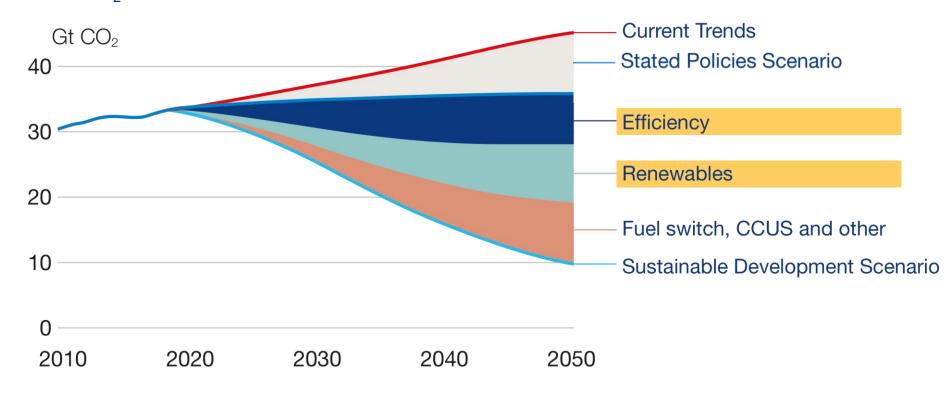
Order received Jan-Sep 2020

\*) Year 2020 = LTM September 2020

### Enable lower carbon emissions



#### Global CO<sub>2</sub> emissions, 2010-2050



Source: IEA Energy Outlook 2019

## Energy efficiency applications in practice



Waste heat recovery; Process industry



Waste heat recovery; Data center



# Biofuels and Green Hydrogen core applications





By 2024, global renewable diesel capacity will triple to more than 20 million tons



The hydrogen market is expected to be 24% of the world's energy demand by 2050

Source: Bloomberg New Energy Finance.

# Biotech becoming more important





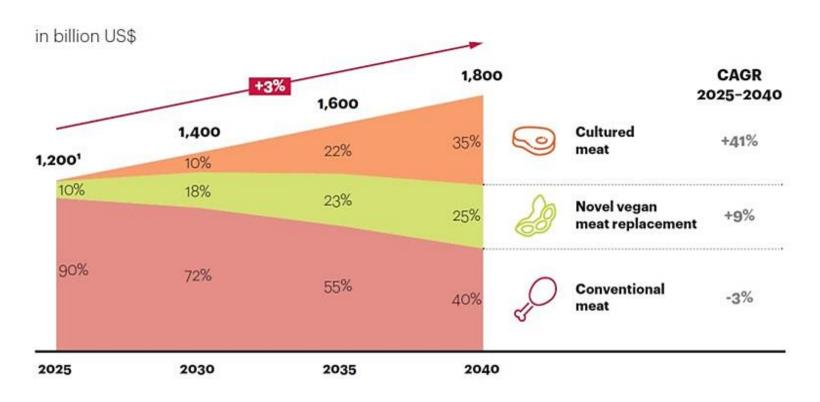






# Enabling the change of protein sources



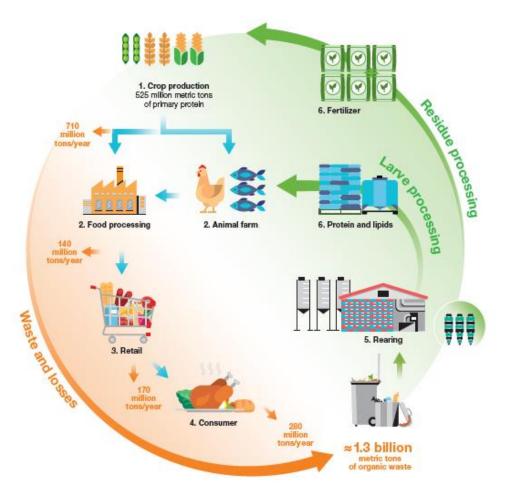


<sup>1</sup> Numbers are rounded to hundred billions.

Sources: United Nations, World Bank, Expert interviews; A.T. Kearney analysis

## Multiple protein developments under way



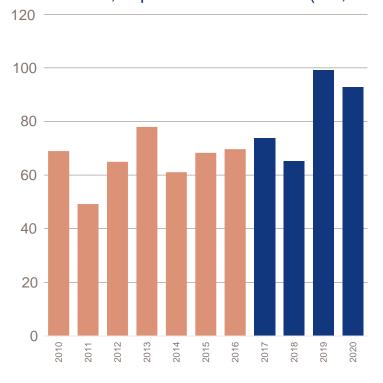




# Water scarcity driving many applications



Wastewater, capital sales OI L10Y\* (M€, fixed rate)



Alfa Laval ThinkTop



\*) Year 2020 = LTM September 2020

# Water purification technologies growing in importance





#### **Alfa Laval PureBallast**

- 1500 m<sup>3</sup>/h larger UV reactor
- Global 24/7 service to support compliance

#### **Industrial wastewater evaporation**

Designed for

- Wastewater reduction
- Water recovery
- Product recovery

#### Alfa Laval G3 VecFlow™

- 10% less polymers
- 20% lower energy consumption



# Test and Training Centre in Aalborg





## LNG as fuel







Dual fuel boilers



Heat exchangers



Gas Combustion



Inert gas system



## Alfa Laval PureCool for methane slip





#### **PureCool system**



Reduction of energy consumption in gas mode by 3%



Reduction of methane slip up to 50%



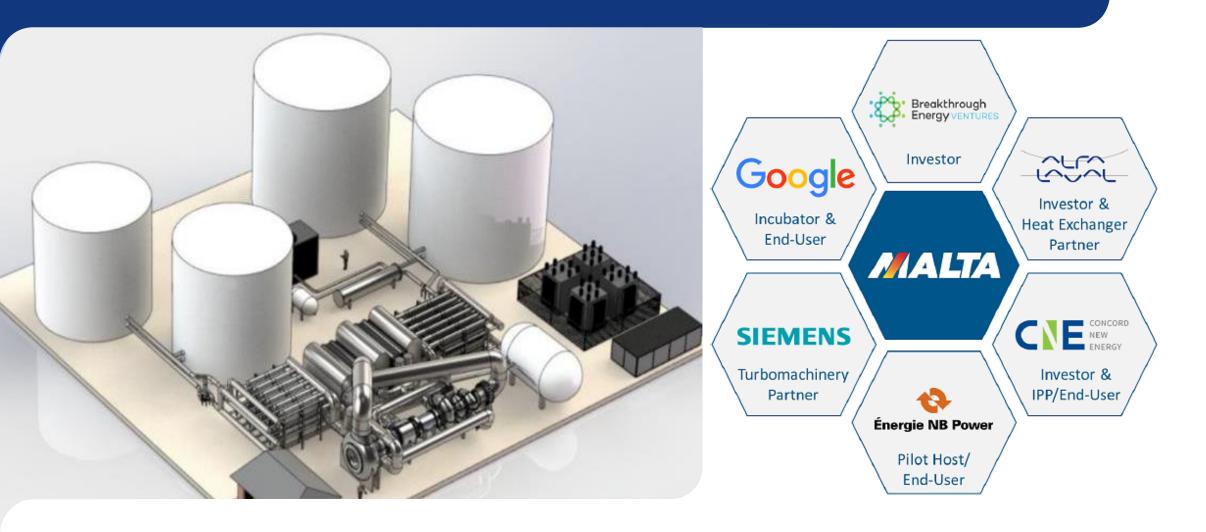
Reduction of fuel consumption in diesel mode by up to 5%



Increase of on-board steam production

## Energy storage key for volatile renewables





## High level of activity



- EU Hydrogen strategy, Germany, Netherlands, France and Denmark as part of recovery plans



Leading Danish companies join forces on an ambitious sustainable fuel project

26.05.2020 07:00



Copenhagen Airports, A.P. Moller - Maersk, DSV Panalpina, DFDS, SAS and Ørsted have formed the first partnership of its kind to develop an industrial-scale production facility to produce sustainable fuels for road, maritime and air transport in the Copenhagen area. The partnership brings together the demand and supply side of sustainable fuels with a vision to realise what could become one of the world's largest electrolyser and sustainable fuel production facilities. The project can spearhead the maturation of sustainable fuels while creating jobs and new value chains to reinforce Denmark's role as a green energy leader.

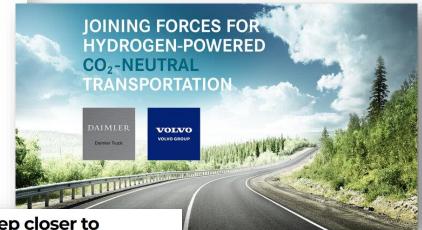




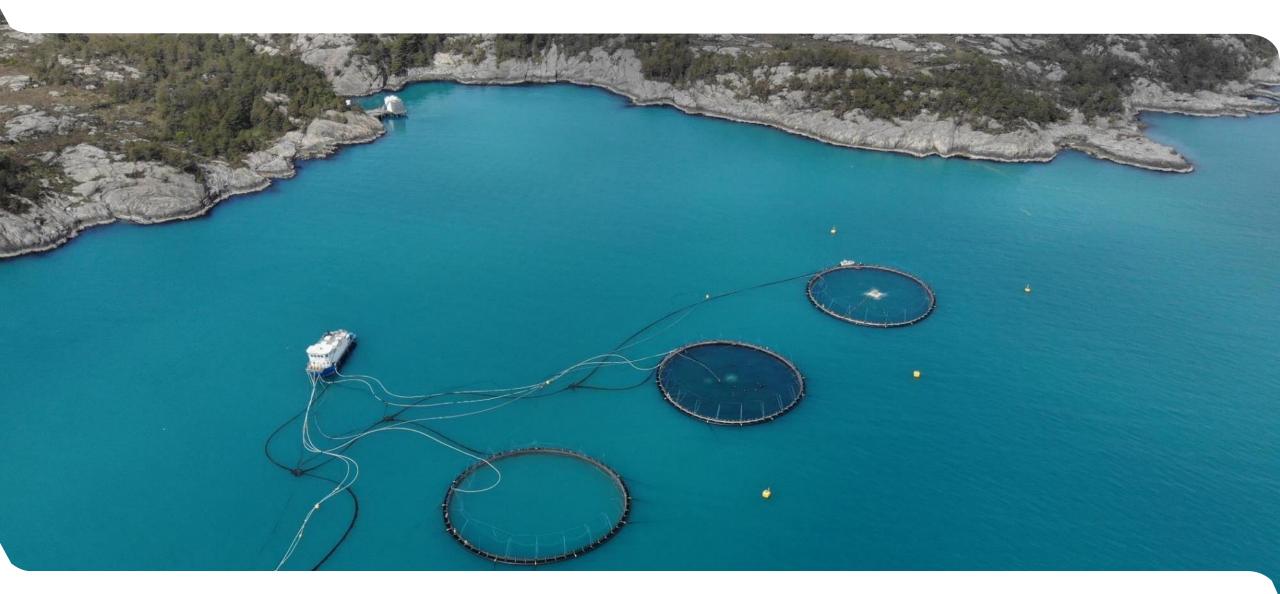


ABB moves step closer to megawatt-scale fuel cells for ships



# Sustainable fish farming





# Acquisitions will play a part in future growth







