Marine & Diesel Division

Peter Leifland
Executive Vice President
Alfa Laval Group
Industry mix and growth drivers
- Distribution of orders LTM September 2015

<table>
<thead>
<tr>
<th>Driver</th>
<th>Share</th>
<th>Driver</th>
<th>Share</th>
<th>Driver</th>
<th>Share</th>
<th>Driver</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ship building</td>
<td></td>
<td>Marine Environ., Gas &amp; Energy</td>
<td></td>
<td>Offshore</td>
<td></td>
<td>Diesel power</td>
<td></td>
</tr>
<tr>
<td>World trade &amp; Fleet capacity</td>
<td>46%</td>
<td>Legislation and fuel cost</td>
<td>11%</td>
<td>Energy needs</td>
<td>11%</td>
<td>Electrical power needs</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>World trade</td>
<td>29%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

www.alfalaval.com
Offshore market outlook
- Number of FPU orders on a global level

**Number of orders 2010 - 2014**
- FPSO: 75
- FSO: 29
- FLNG: 7
- FSRU: 20

Total market = 25 FPU’s per year

**Forecasted number of orders 2015 - 2019**
- FPSO: 63
- FSO: 35
- FLNG: 13
- FSRU: 17

Total market ≈ 25 FPU’s per year

- Market size for the next five years estimated at same level as last five years, but at a lower pace in 2016
- Floating Liquefied Natural Gas (FLNG) estimated to double

Source: Energy Maritime Associates
Order value opportunity; Offshore

FPSO
5-50 MEUR

FLNG
15-90 MEUR
Yard contracting and deliveries
- October 2015, including all ships above 2,000 Dwt

Source: Clarkson Research Services Limited

www.alfalaval.com
Shipmix
- 2014 vs. estimated 2015, number of vessels

2014 = 2,077 vessels
E 2015 = 1,213 vessels

*) Alfa Laval “sweet spot”: Crude tankers, Products & chemical tankers, Gas carriers and Container vessels

**) Other vessels: General cargo & MPP, Reefer, Ro-ro & vehicle carriers, Cruise, Offshore and miscellaneous

Source: Clarkson, 1st October 2015
World fleet per shiptype
- Number of ships above 2000 Dwt, 1st September 2015

Total number of ships: 50,801

<table>
<thead>
<tr>
<th>Ship type</th>
<th>L10Y CAGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tankers</td>
<td>3.9%</td>
</tr>
<tr>
<td>Bulk carrier</td>
<td>5.6%</td>
</tr>
<tr>
<td>Gas carrier</td>
<td>3.9%</td>
</tr>
<tr>
<td>Containerships</td>
<td>3.6%</td>
</tr>
<tr>
<td>Offshore*</td>
<td>5.2%</td>
</tr>
<tr>
<td>Others</td>
<td>0.3%</td>
</tr>
<tr>
<td>Grand total</td>
<td>3.2%</td>
</tr>
</tbody>
</table>

*) Offshore excluding FPSO

Source: Clarkson Research Services Limited

www.alfalaval.com
Order value opportunity; Marine

The order value opportunities:

- Crude tankers: 0.9 – 2.2 MEUR
- Product & chemical tankers: 1.5 – 6.0 MEUR
- Gas carriers: 0.5 – 3.0 MEUR
- Container vessels: 0.5 – 2.0 MEUR
- Bulkers: 0.3 – 1.2 MEUR

1.5 – 2.5 MEUR more per vessel in case of LNG propulsion
World seaborne oil products trade

Source: Clarksons

<table>
<thead>
<tr>
<th>CAGR</th>
<th>Trade</th>
<th>Tonne-Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984-14</td>
<td>2.91%</td>
<td>3.09%</td>
</tr>
<tr>
<td>1994-14</td>
<td>4.22%</td>
<td>4.36%</td>
</tr>
<tr>
<td>2004-14</td>
<td>4.18%</td>
<td>4.68%</td>
</tr>
</tbody>
</table>
Alfa Laval on board
- Product, system & application leadership

17 product groups

- Steam and heat generation
- Thermal fluid heating
- Cooling and heating
- Waste heat recovery
- Scrubber water cleaning
- Exhaust gas cleaning
- Crankcase gas cleaning
- Oily waste treatment
- Fuel conditioning
- Filtration
- Oil treatment
- Tank cleaning
- Cargo pumping
- Gas combustion
- Desalination
- Ballast water treatment
- Inert gas systems

www.alfalaval.com
Additional opportunity
- Products & systems for LNG propulsion

- Multi fuel conditioning modules
- Heat exchangers
- Multi fuel boilers & burners

Order opportunity 1.5-2.5 MEUR
LNG fuelled fleet

- Development 2015~2030

Other Shiptype includes: Container, Bulk carrier/General cargo, Tanker(Crude) and Tanker(Product/Chemical).

Source: Clarkson, LR Marine Fuel Trends 2030 report and DNV
Marine growth areas
- Orders received in MEUR

CAGR 44.1%

2011 2012 2013 2014 LTM 2015-09

New fuels
Energy
Environmental
In conclusion…
- Marine & Diesel Division

* For merchant vessels; tankers, gas carriers and containers are the most important ship segments for Alfa Laval.

* For offshore vessels; the expected soft market for FPSO’s the next 5 years will be counterbalanced by a stronger FLNG market, which has high order value opportunities for Alfa Laval.

* Growth opportunities in environmental, energy-saving and new fuel products gives a higher order value opportunity per ship.