“AT THE THRESHOLD OF A NEW ERA IN SHIPPING”

JAAKKO ESKOLA
GROUP VICE PRESIDENT, SHIP POWER
We are the leading provider of ship power solutions. We command a strong position in all main marine segments as the supplier of highly rated ship machinery and systems.
We will

- **Maintain our leading position** and generate profitable growth in all business segments
- **Broaden and develop** the range of system integration and design, installation and engineering services
- **Strengthen competences**, capabilities and presence in key markets
- **Continuously explore possibilities** to extend our product portfolio and services via acquisitions and partnerships
OUR WORLD NEEDS SHIPPING

Shipping is the enabler of globalisation
Shipping is the most efficient way of transporting goods and is working to become more efficient
Our offering covers all key shipping segments
Ship Power market - vessel order development

Source data: Clarkson Research Services
The market has already changed

**Shipbuilding**

- Contracting activity has peaked and is currently on very low levels:
  - Contracting during 2009 was the lowest registered since 1998
  - Contracting activity is expected to start improving during 2010 but not to levels seen during in the boom years

- Shipyards’ order books have also peaked but are still very high in historical terms:
  - Over 500 million DWT still to be delivered → watch out for cancellations
  - Current order book is 3.5 time bigger than the average between 1996-2007

*Source: Clarkson Research Services

*2010’s contracting activity as per 8th of March 2010
Supply/demand imbalances are evident

Contracting and Deliveries

- New contracting has stalled after September 2008
- Shipbuilding capacity—as demonstrated by deliveries—has grown, 2009 could prove to be the peak year on deliveries
- Overcapacity is felt, correction will be painful and will take long time especially in Merchant vessels

Source: Clarkson Research Services
Customer drivers

Wärtsilä

“Design, build and support innovative high quality lifecycle solutions”

Shipowner/Operator

“uninterrupted operations with lowest possible operating costs”

Shipbuilder

“build vessels which meet the requirements with lowest possible cost”

- Price
- Quality
- Availability
- Design

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- Innovativeness (energy, efficiency, economy)
- Lifecycle support 24/7
- Design support
- Asset optimisation
Change in bargaining power

- Raw materials ruled the market regarding price, availability and quality
- Demand was higher than supply

- End customers getting stronger control of their purchases regarding price, quality and availability
- Supply is higher than demand

Stronger emphasis on
- Price
- Quality
- Availability
Why do our customers choose us?

**Customer needs:**
- **Customer management**
  - Easy to work with
  - Competent personnel
  - Response time
- **Trustworthy partner**
  - Has good references
  - Reliable
  - Takes responsibility
- **Customer understanding**
  - Understands customers business and needs
  - Matching offering that suits the needs
- **Efficient systems**
  - High quality
  - Innovative

**Wärtsilä:**
- Continuously responsive to customer needs, competent and reliable
- Integrated system supplier, total solution provider
- Provide high-quality life-cycle power solutions, maintenance and service suitable to customers
- Enhancing customers’ business through superior energy, operational and environmental efficiency
Why customers choose Wärtsilä in the marine market:

Strategy

• Be a trusted partner throughout the life-cycle
• Focus on seamless integration of ship systems
• Create value by understanding customers’ needs
• Broaden expertise and capabilities
• Strengthen position in emerging markets

Competitive edge: now and tomorrow

• A highly diversified customer base
• Strong, wide and continuously improving product portfolio
• Close collaboration with services (SAM)
• Excellence in project management and engineering
• Total efficiency approach → no trade off between environment and economy

New opportunities

• Shipping is already the most efficient way of transporting goods and is working to become more efficient
• Efficiency is on focus through various metrics (EEDI, EEOI and SEMP)
• A new base of ship owners and business models is emerging
• New ship types, i.e.: wind turbine installation vessels
Why customers choose Wärtsilä in the marine market:

Well positioned for long term growth
# Legislation changes

## Air emission limitation

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<td>EU SO(_x) regulation</td>
<td>1.5 % sulphur in fuel</td>
<td>passenger ships in EU + all ships in SECA</td>
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<td>Differentiated tonnage tax</td>
<td>NO(_x)</td>
<td>Norway</td>
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<td>Differentiated fairway &amp; harbour fee</td>
<td>NO(_x), SO(_x)</td>
<td>Sweden / Finland</td>
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<td>EU SO(_x) regulation</td>
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<td>EU ports + all inland waterways</td>
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<tr>
<td>IMO SO(_x) regulation</td>
<td>Sulphur in fuel</td>
<td>SECA 2010 &amp; 2015, globally 2020</td>
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<td>Marine CO(_2) cap</td>
<td>IMO Energy Efficiency Operational Index</td>
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<td>US-EPA Tier III &amp; IV</td>
<td>NO(_x), PM, THC</td>
<td>US flagged, eng&lt;30 l/cyl</td>
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<td>IMO Tier III on NO(_x)</td>
<td>/ new ships in NECA</td>
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- Foreseen, not yet in place
Energy
- Dual-Fuel engines
- Fuel Cells
- Hybrid machinery systems
- Electric propulsion

Economy (efficiency)
- Ship design
- Engine technology
- Propulsion technology
- Automation and power management systems
- Condition Based Maintenance, CBM

Environment
- Exhaust gas scrubbers
- Exhaust gas catalysts
- Emission monitoring
- Sealing systems
- Waste water treatment
CUSTOMER SCENARIOS
Customer scenario one
LNG fuelled cruise ship

- Passenger select cruising because of low total CO₂ footprint compared to other holidays
- Ship is allowed to berth down town – attractive itineraries
- No operating costs from emission reduction equipment
- Lower maintenance costs for LNG operation
Customer scenario two
Ultra large container vessel with Wärtsilä environmental technology

- The vessels operate on low cost HFO, that has become significantly cheaper than distillate fuel
- Ships have low port fees, as they do not need shore connection but still offer very low emissions, owing to the gas operation in ports
Customer scenario three
Offshore support vessel with Wärtsilä design and technology

- Vessels have high availability and are designed to highest DP and redundancy class
- Vessels get selected for the best paying charters
The future is in our hands:

- The world needs shipping - we have the solutions.

- Customer needs are changing from optimised ships to optimising the fleet - we have the solutions.

- Focus on increased total efficiency and environmental friendliness of shipping – we have the solutions

- As the market is normalising - we are ready.