SERVICES SOLUTIONS FOR LIFECYCLE EFFICIENCY

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Group Vice President, Services
We create lifecycle services with our customers, enhancing their business – whenever, wherever.
70 countries, 160 locations, 7,500 field service experts

Wärtsilä Services global network
Widest range of offering and expertise

Installed base 180,000 MW
Wide range of expertise

- Engine services
- Propulsion services
- Electrical & Automation services
- Boiler services
- Environmental services
- Service agreements
- Service projects
- Training services
Five key market drivers

- Growth of gas as fuel in power generation and in shipping
- Stricter environmental regulations
- Increased focus on total cost of ownership
- Accelerating technological development
- High demand for expertise
Growth of gas as fuel

- Gas represents roughly 20% of the global energy demand
- Global gas demand is expected to rapidly increase due to higher gas production (including shale gas) – price will be competitive
- Gas is the primary fuel for smart power generation
- Due to stringent emissions regulation in shipping, owners will opt for LNG as their marine fuel

What are the implications for Wärtsilä?
- Wärtsilä’s leading edge dual-fuel and gas engines are at the core of the “gas boom”
- Wärtsilä is also strengthening its market position in gas handling systems
- The number of gas fuelled power plants, LNG carriers and LNG fuelled vessels will increase
- The demand for high quality, tailored O&M services will increase
- Gas conversions will increase both in the power and in the marine sector
Case: Unique gas conversion

Bit Viking, the first:

- Gas conversion
- Diesel mechanical gas engine
- Dual-fuel “single main engine” approval
- Wärtsilä gas handling system
- LNG fuelled vessel to be classified by Germanischer Lloyd

Benefits:

- Improved propulsion efficiency
- Reduced fuel consumption
- Compliance with IMO emission regulations
Stricter environmental regulations

- Global and local environmental challenges inevitable
- The environmental impact of shipping will have to be mitigated
  - Reduction of greenhouse gases
  - Reduction of regional pollutants (SO$_x$, NO$_x$)
  - Protection of local ecosystems
- Shipping will face an increase in investments and operational costs

What does Wärtsilä offer?
- Improved efficiency and hence decreased GHG emissions
- Products (e.g. scrubbers and BWT) with lowest possible impact on total cost of ownership
- Provide our customers with world-class project management, engineering, installation and 24/7 support capabilities for installations and conversions
Increased focus on total cost of ownership

- Companies are evaluating whether or not certain activities are at the core of their business – e.g. maintenance management, service
- 40 year OPEX overrides initial CAPEX in evaluation

What is Wärtsilä doing about it?
- Global lifecycle services value proposition
- An integrated sales approach with Power Plants and Ship Power
- Long-term agreements reduce costs and improve predictability
Case: O&M agreement in Brazil

- Three-year O&M agreement for the 380 MW Suape II power plant
- A fast track, cost efficient solution enabling the customer to accurately predict the plant’s lifecycle costs
- On-site operation and maintenance optimises the availability of the plant
- Training in regulatory procedures enables adaptation in scheduling of maintenance planning
- Wärtsilä’s O&M agreements cover over 1.8 GW of installed power generation capacity in Brazil
Accelerating technological development

- Equipment becomes more technologically advanced
- Ship Power and Power Plants selling more advanced integrated systems
- Multiple opportunities to increase business value-add through technological expertise

What effects does this have on Wärtsilä?
- More training needed – better understanding of systems
- More opportunities to efficiently modularise and differentiate our service offering
- Big Data – continuous utilisation of installation data for gaining competitive edge
High demand for expertise

• Increasing demand for the right talent and expertise
• The technical requirements on crews and operators become tougher
• The future talent is needed in geographically new and untraditional areas both in Power and Marine

How is Wärtsilä responding?
• Opportunity to help bridge the knowledge gap
• Further development of global footprint
Services continues adaptation to the markets

- **Projects** will involve performance enhancements, gas conversions on land and sea as well as environmental solutions
- **Resource development** will focus on gas and environmental competence, contract engineering and project management
- **Growth** is actualised within existing customer segments
- **Sales mix to evolve** from today’s dependence on parts towards contracts and projects
- **We will optimise the way we serve our customers** and reduce our cost to serve
Growth in power plant services

Net sales distribution

2008

- Power: 32%
- Offshore: 14%
- Merchant: 24%
- Marine Other: 20%

2011

- Power: 39%
- Offshore: 13%
- Merchant: 25%
- Marine Other: 17%
Growth in Americas

Net sales by geographical areas

2008

- Middle-East and Asia: 33%
- Northern Europe: 29%
- Southern Europe and Africa: 21%
- Americas: 17%

2011

- Middle-East and Asia: 29%
- Northern Europe: 22%
- Southern Europe and Africa: 21%
- Americas: 27%
Resilient business

Net sales development

MEUR

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