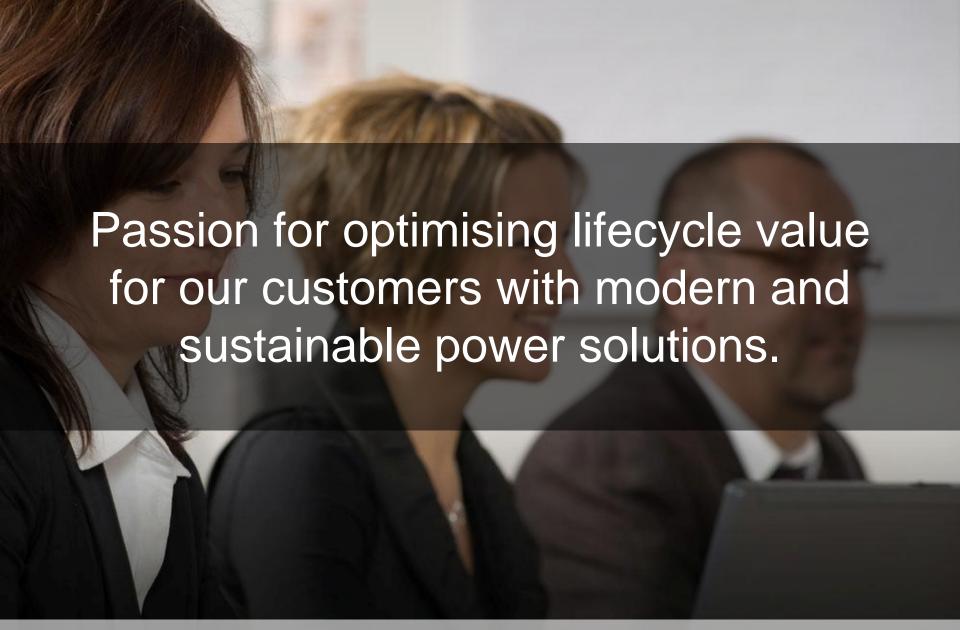


# WÄRTSILÄ CORPORATION

**CORPORATE PRESENTATION 2014** 



# Today we are much more than an engine company



# Our mission, vision, and values

### **MISSION**

We provide lifecycle power solutions to enhance our customers' business, whilst creating better technologies that benefit both the customers and the environment.

### **VISION**

We will be each of our customers' most valued business partner.

### **VALUES**

### **ENERGY**

Capture opportunities and make things happen

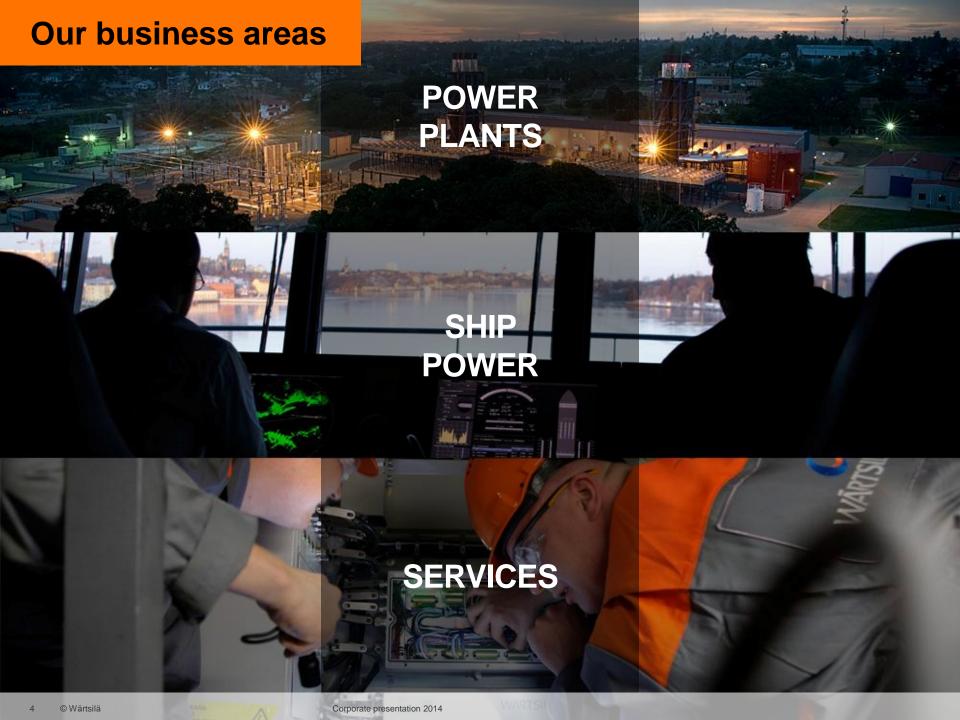
### **EXCELLENCE**

Do things better than anyone else in our industry

### **EXCITEMENT**

Foster openness, respect and trust to create excitement







# A comprehensive product portfolio



Automation



Ballast water management



Compressors



Engines & generating sets



Exhaust gas cleaning



Gas systems



Gears



Inert gas



Oil separation



Power electric systems



**Propulsors** 



Pumps & valves



Seals, bearings & stern tubes



Waste & fresh water management



Ship design services



# **Production and R&D globally**





# Positioned for growth even in challenging markets



# Smart Power Generation

The transition to sustainable and modern energy systems drives the demand for smart power generation.







# **Financial highlights**

MEUR	2013	2012	2011 <sup>2</sup>	2010 <sup>2</sup>	2009 <sup>2</sup>
Order intake	4 872	4 940	4 516	4 005	3 291
Order book at the end of the period	4 426	4 492	4 007	3 795	4 491
Net sales	4 654	4 725	4 209	4 553	5 260
Operating result <sup>1</sup>	<b>520</b>	515	469	487	638
% of net sales 1	11.2	10.9	11.1	10.7	12.1
Earnings/share, EUR	1.98	1.72	1.44	1.96	1.97

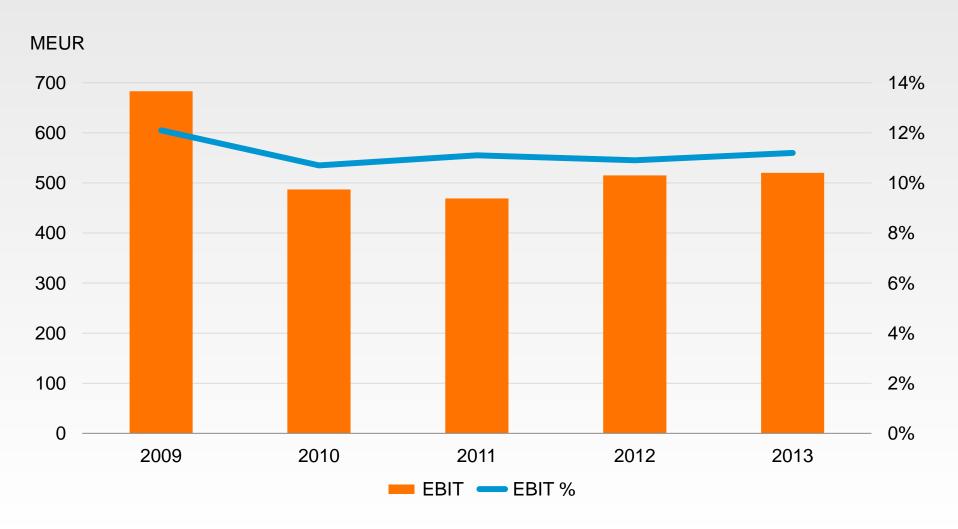


11

<sup>1)</sup> Figures exclude non-recurring items

<sup>2)</sup> The figures in the comparison years 2009–2011 have not been restated according to the revised IAS 19

# **Solid profitability**



Figures shown before nonrecurring restructuring items



12

## **Power Plants**



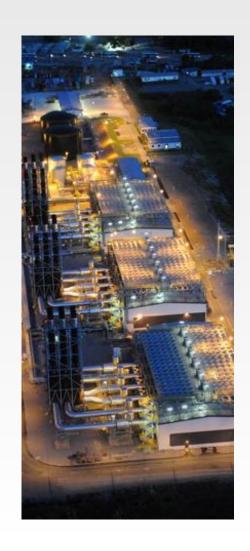
We provide superior value to our customers with our distributed, flexible, efficient and environmentally advanced energy solutions, which enable a transition to a more sustainable and modern energy infrastructure.

# **Power Plants offering**

- We are a major supplier of flexible baseload power plants operating on various liquid and gaseous fuels
- We provide unique, dynamic solutions for grid stability, reserve, peaking, load following and intermittent power generation
- We also provide LNG terminals and distribution systems
- Our multi-fuel solutions provide the ability to switch to the most economical or readily available fuel, even during operation
- Our project development and EPC capability provide customers a choice of everything from single point of responsibility to selected services
- All applications are supported with tailored lifetime operation and maintenance services

# **Power Plants strategy**

- Maintain our leading position in HFO & dual-fuel power plants by enhancing our value proposition
- Grow strongly in large utility gas power plants by capturing market share from gas turbines
- Grow in biofuel power plants by enabling a wide fuel range
- Grow in special applications nuclear emergency power, combined heat & power, oil & gas and LNG infrastructure - by introducing our value proposition to the selected customer segments
- → Strong growth focus on large gas plants in broad utility markets





# Our customer segments

### **Utilities**

Integrated utilities, power generation companies and municipalities supplying electricity and/or heat to power markets or to end users



**South Texas Electric Cooperative**, USA



**Azerenerji**, Azerbaijan

### **IPPs**

Financial investors investing in power plants and selling power to utilities



**NEPCO**, Jordan



**Cakmaktepe Energy**, Turkey

### **Industrial Customers**

Industries such as mining, cement and oil & gas investing in captive power plants



**Barrick Gold Corporation**, Canada



Sasol New Energy Holdings, South Africa



# LNG enables the transition to gas infrastructure

- Wärtsilä is a one-stop shop **EPC** supplier for medium-sized LNG terminals and power plants
- In 2014 Wärtsilä signed an EPC contract to supply the new LNG receiving terminal in Tornio, **Finland**



LNG=liquified natural gas

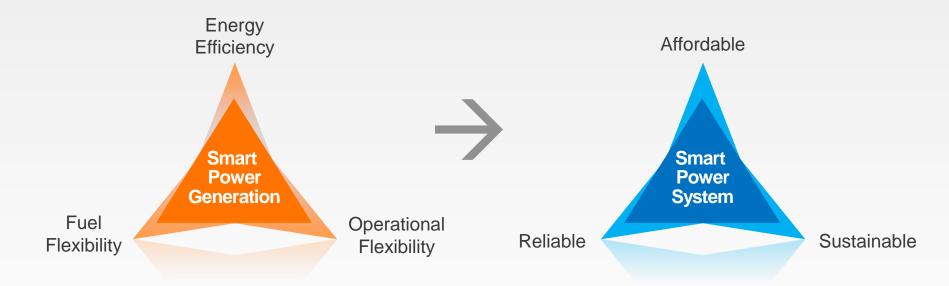


# **Market trends and drivers** The growth of electricity demand is strongly connected to GDP development, electrification and increasing standard of living Demand for sustainability and focus on climate change Rapid growth of intermittent renewable generation, combined with escalating daily, weekly and seasonal demand fluctuation, increases the need for flexibility Increasing role of gas, especially as a balancing fuel Aging installed capacity drives investments in new technologies The world needs affordable, clean, flexible and reliable power.

# **Smart Power Generation optimises energy systems**

A unique all-in-one combination of valuable features that....

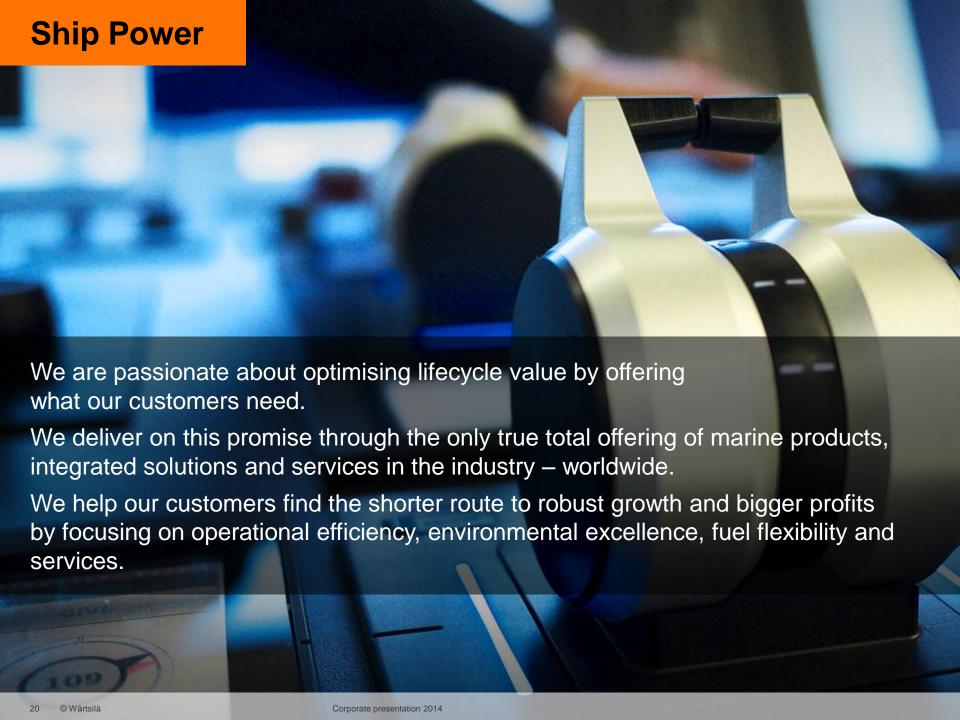
...enables the transition to a modern and sustainable power system.





Smart Power Generation enables an existing power system to operate at maximum efficiency by effectively absorbing current and future system load variations, providing significant savings. It optimises the integration of wind and solar power and provides power system reserve capacity that does not consume fuel or generate emissions.





## **Market trends and drivers**

Development of the global economy drives marine trade and transportation growth

Development of oil & gas prices stimulates investments in exploration and production of offshore oil & gas

Environmental regulations drive demand for environmental solutions and gas as a marine fuel

Increasing focus on energy efficiency and environmental performance





The development of efficient vessels, environmental solutions and gas technology will be our priority in meeting the evolving needs of our customers.

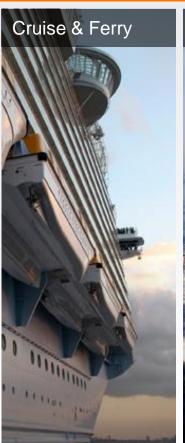
# Our offering covers all market segments



Shipping









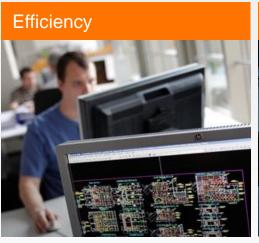




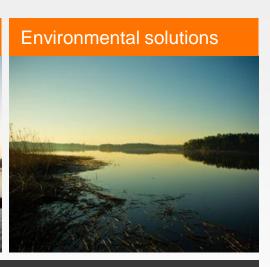
# Ship Power's strategic goal

To be recognised as the leading provider of innovative products and integrated solutions in the marine and oil & gas industry.

Leader in







Through offering

- Lifecycle solutions for ship owners and operators
- Integrated solutions for the shipbuilding industry, owners and operators
- The most competitive products and delivery process for the marine industry



### This is what we bring to the market • Environmental technologies • Engines and gensets • Propulsion equipment • Power electric systems Automation & control Water management systems Project services Pumps and valves and support during Comprehensive · LNG handling, liquefaction project development product portfolio and regasification and execution Marine lifecycle services Ship design and naval architecture Financial services Integration engineering Project transport & logistics Project management · Site management and supervision Commissioning Maintenance and spare parts Lifecycle services Technical support and support during Operations support asset operation Upgrades and retrofits Service agreements Global and local coordination

# The most complete marine offering on earth



# Increasing environmental regulation and alternatives for decreasing emissions

Acid rains Ozone depletion

Tier II (2011) Tier III in ECA\* (2016)

Acid rains

3.5% (2012) ECA 0.1% (2015) Global 0.5% (2020)

Impact on air quality

Along with SO<sub>v</sub> reduction

Global warming

Under evaluation by IMO

Damage to local eco-systems

Global ballast water convention

Wärtsilä offers a multi-solution approach to meet requirements for different owner needs, ship types and operating profiles.

### LNG

- Simultaneous reduction of GHG / SO, / NO, / PM
- · Market: mainly ships with regular routes and limited autonomy requirements operating in ECAs
- Infrastructure development is needed for larger uptake
- Conversion solution available

### **HFO**

NO<sub>x</sub>: SCR or wet methods SO<sub>x</sub>: Scrubbers Market: mostly merchant ships operating a significant time in ECAs

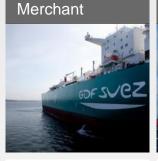
### MGO

- NO<sub>x</sub>: SCR or primary methods
- · Market: ships operating a limited time in ECAs, small ships



# Clear leadership in dual-fuel applications

# **Power Plants**



### Offshore



### Cruise & Ferry



### Others



### **DF** Power plants

- 83 installations
- 375 engines
- Output 4670,7 MW
- Online since 1997

### **LNGC**

- 145 vessels
- 585 engines

### **Multigas Carrier**

- 5 vessels
- 20 engines

### Conversion

- 1 chemical tanker
- 2 engines

### Ro-Ro

- 2 vessels
- 8 engines

### OSV's

- 31 vessels
- 96 engines

### **Production**

- 2 platforms
- 9 FPSO's
- 1 FSO
- 40 engines

### LNG cruise ferry

- 1 vessel
- 4 engines
- · Complete gas train

### LNG ferries

- 5 ferries
- 20 engines
- Complete gas train

### Coastal patrol

DF-propulsion

Navy

 DF main and auxiliary engines

### Tug

- 2 vessels
- 2 engines each
- Mechanical drive

### Guide ship

• 1 vessel/engine

### **IWW**

- 2 vessels
- 3 engines

6 segments  $\rightarrow$  > 1,000 engines  $\rightarrow$  > 10,000,000 running hours





Optimising customer operations whenever, wherever is our shared passion.

We provide the broadest portfolio and the best services in the industry for both shipping and power generation. We offer expertise, proximity and responsiveness for all customers in the most environmentally sound way.



# Improving lifecycle efficiency

### Preventing the unexpected

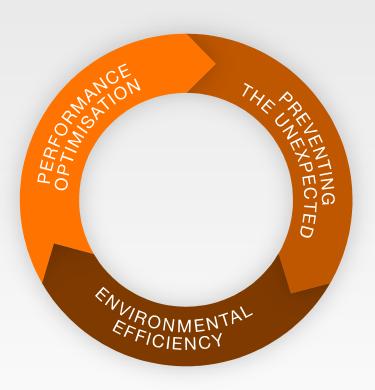
Reliable, continuous performance is essential. Planning operational reliability of installations through access to highest quality of technologies, services and competences ensures smooth operations and managing risk.

### Environmental efficiency

Environmental legislation and energy efficiency are currently major concerns for our customers. Sustainable solution options enable a reduced environmental impact and improved operational efficiency.

### Performance optimisation

Longer term strategies are aimed at improving business efficiency. Optimising performance of installations reduces operational expenses and improves uptime.





# Wide range of expertise and services



**Engine** services



Propulsion services



Electrical and automation services



Boiler services



Seals and bearings services



Environmental services



Service agreements



Service projects



**Training** services





31

# Services strategic goals

- Focus on customer needs in order to constantly develop our offering proposition with value-enhancing solutions
- Support our customers locally through our qualified global field service network
- Grow by providing more service agreements with new Ship Power and Power Plants deliveries
- Support our customers in minimising their environmental footprint
- Foster a customer-focused quality attitude and a safe way of working



To be recognised by customers as their service partner: competent, reliable and easy to deal with.

# 70 countries, 160 locations, 11,000 service professionals





Passion for optimising lifecycle value with modern and sustainable power solutions.



# **Appendix: abbreviations**

- LNG = liquified natural gas
- EPC = engineering, procurement and construction
- HFO = heavy fuel oil
- IPPs = independent power producers
- ECA = emission control area
- IMO = International Maritime Organization
- MGO = marine gas oil
- $NO_x = nitrogen oxdide$
- $SO_x = sulphur oxide$
- GHG = greenhouse gas
- PM = particulate matter
- SCR = selective catalytic reduction
- DF = dual-fuel
- OSV = offshore support/supply vessel
- IWW = inland waterways (vessel)



35