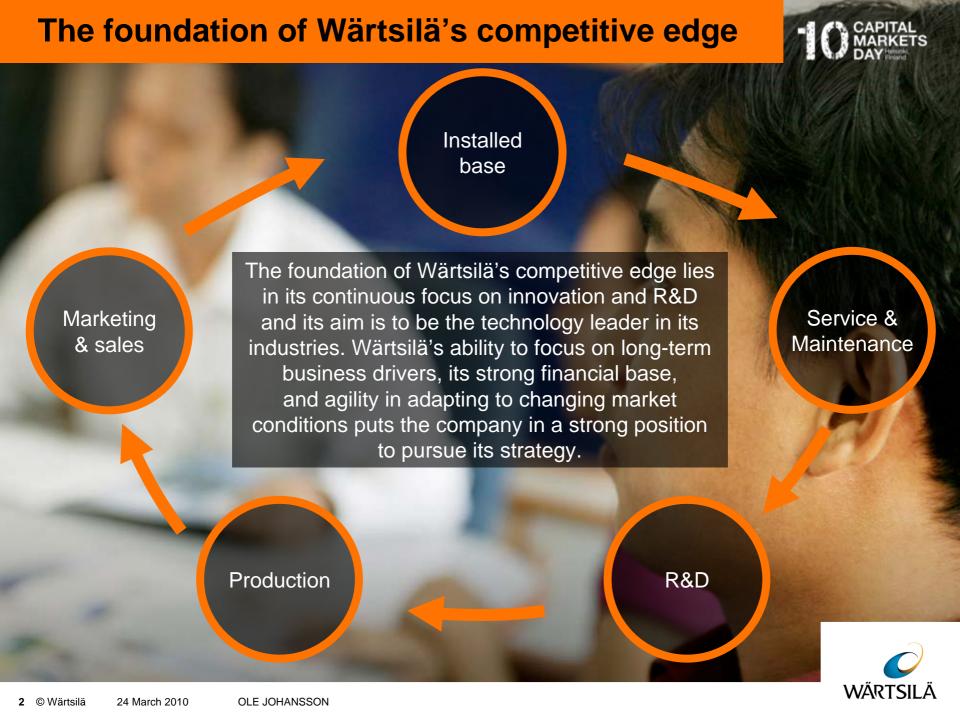
# WÄRTSILÄ 2010 AND BEYOND

**OLE JOHANSSON, PRESIDENT & CEO** 





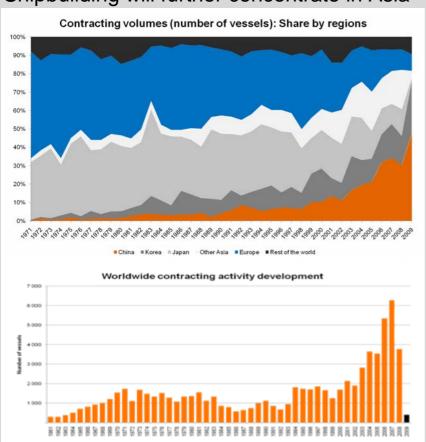


## **Current global markets**



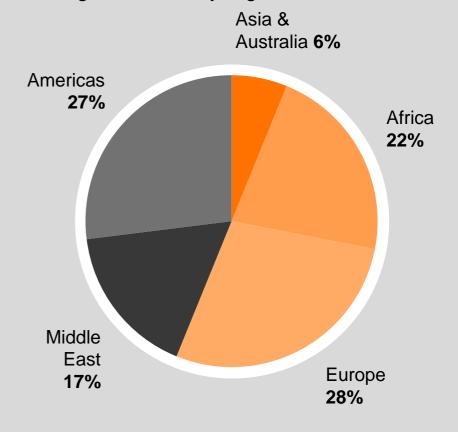
**Marine** 

Shipbuilding will further concentrate in Asia



#### **Power Plants**

Average net sales by region 2007-2009

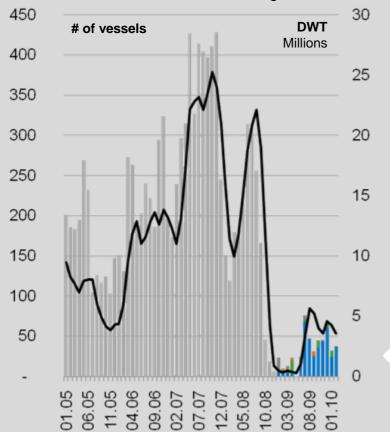


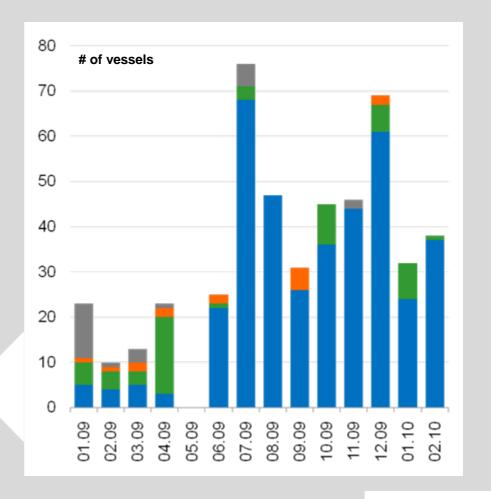


## **Ship Power market - vessel order development**



- All vessels
- Merchant
- Offshore
- Cruise and Ferry
- Special vessels 3 months moving average in DWT





Source data: Clarkson Research Services



## **Ship Power demand drivers**



#### The one certainty:

#### 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

#### **Drivers for growth in shipping:**

- Population growth means increased need for energy, commodities, food and water → increased need for transportation
- Decoupling of emerging economies
  - Strong GDP growth
  - Increased living standards
  - Infrastructure development
  - Further industrialisation
- Environment



## **Ship Power demand drivers**



#### **Key requirements for new ships**

- From optimised ships to optimising fleet → and allowing ship owners to grow their business
- Minimised operating and voyage costs
- Efficiency: no trade off between environment and economy
- Reliability
- Safety
- Flexibility for load conditions, speed, fuel, navigation



#### **Power Plants demand drivers**



- Long term increase in electricity demand need for ENERGY
  - Electricity demand is increasing faster than primary energy demand
  - Growth in emerging countries industrialisation
  - Consumer electronics entertainment, air conditioning etc.
  - Electric vehicles better overall efficiency, saves primary energy
  - Heat pumps better overall efficiency, saves primary energy
- Changes in generation mix as well as consumer behaviour lead to bigger variations in power - need for CAPACITY
  - Wind and Solar are uncontrollable and largely unpredictable and require significant regulating capacity to support their operation
  - Nuclear and biomass are baseload capacity and cannot be used in capacity management



#### **Power Plants demand drivers**

# Tightening environmental regulations – especially in western countries

- Greenhouse gas emissions are in focus, and this favors carbon neutral, low carbon intensity generation (natural gas) and high efficiency generation
- Local emission requirements lead to further use of secondary cleaning equipment (ECOTECH)

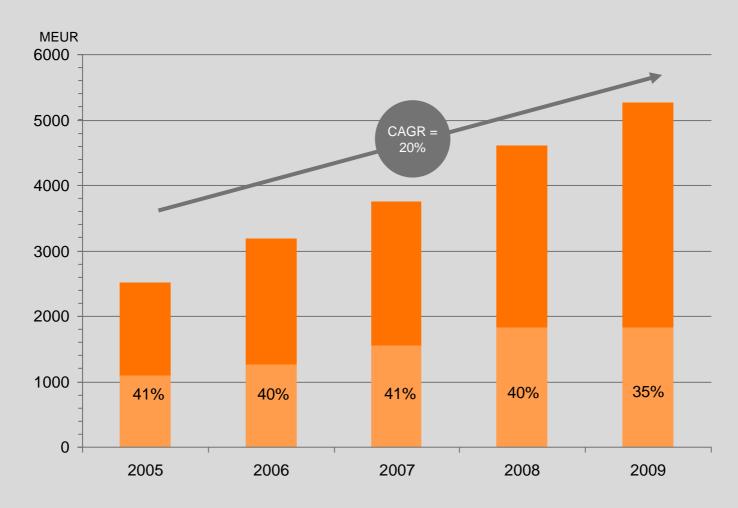
#### Energy security

- Domestic fuels receive priority in energy decisions
- Favors wider fuel mix and renewable generation
- Independence from oil



# **Net sales development**Services share of net sales



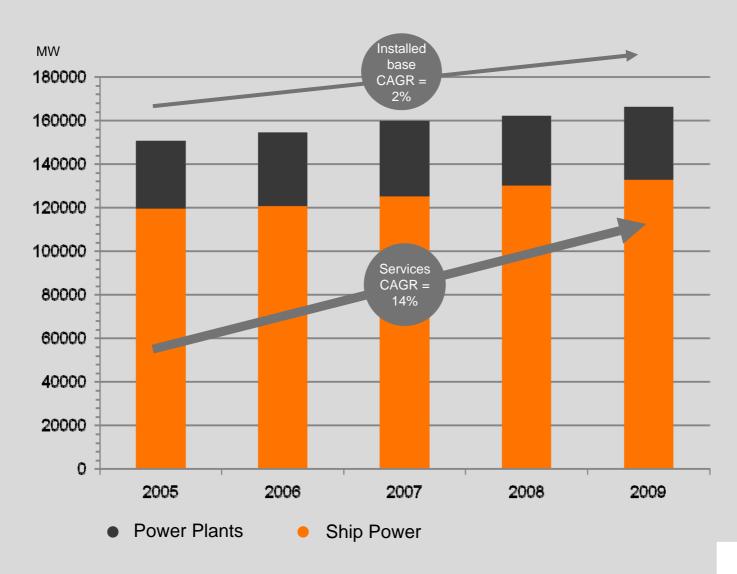


Services share of net sales



## Wärtsilä's installed engine base







## **Services product lines**



Customers

Solutions

Management

WÄRTSILÄ **Engine Services** 

WÄRTSILÄ **Electrical & Automation** 

WÄRTSILÄ **Propulsion Services** 

WÄRTSILÄ **Boiler Services** 

WÄRTSILÄ **Environmental Services** 

WÄRTSILÄ **Operations & Management** 

WÄRTSILÄ **Training Services** 





**OLE JOHANSSON** 

## Offering adapted to customer's needs



Solution Complexity

We have experience in assembling the appropriate products and services in customised solutions.



## **Packages**

**OLE JOHANSSON** 

- Service Products
- Standard Packages



- Advanced Packages
- Project & Contracting
- Service Agreements



- 'Trend setter'
- Integration into customers' value chain



Technical Services

**Basic Products** 

and Services

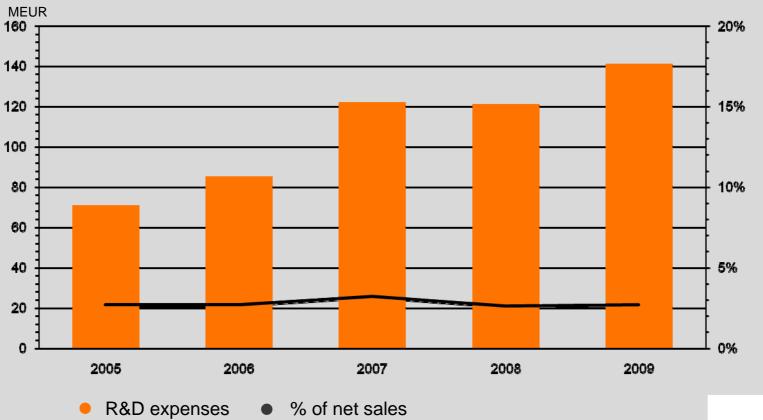
Spare Parts

Field Services

#### **Drivers of Wärtsilä R&D**



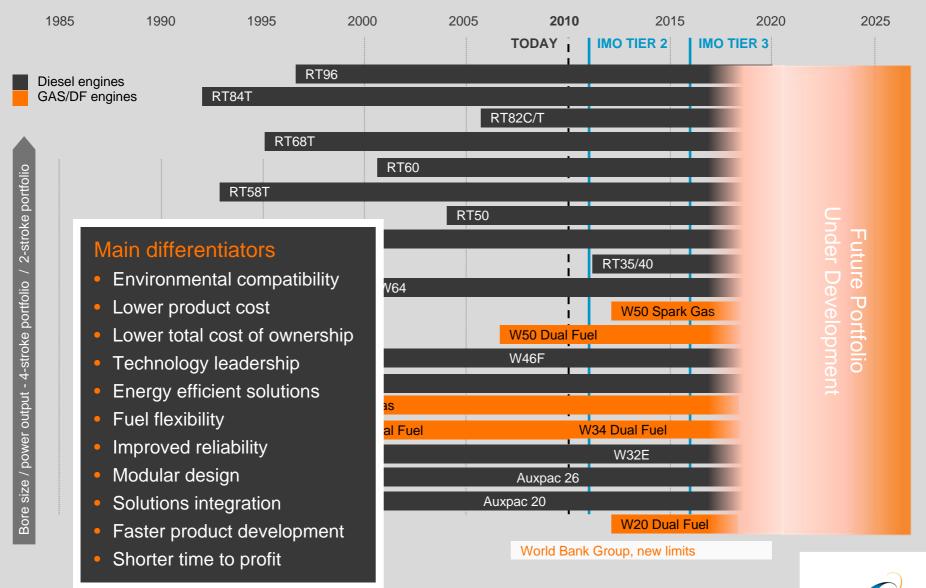






## Wärtsilä engine portfolio & focus areas





## **Technology highlights for Power Plants**



#### More competitiveness in large gas plants

- 20V34SG with higher output was introduced in 2009
- 18V50SG, new pure gas engine for large gas plants coming to market introduction in 2010
- Optimised large gas power plant solutions both for simple cycle and combined cycle applications
- Grid stability optimisation further operational flexibility

#### Fuel flexibility development

- Continued development on HFO and Natural gas products (conversions, lifecycle cost optimisation for multi fuel plants)
- Continue the development of liquid biofuels vegetable oils and food industry process byproducts
- R&D for the use of solid biomass through gasification process



15 © Wärtsilä

## Restructuring manufacturing 1999 – 2004





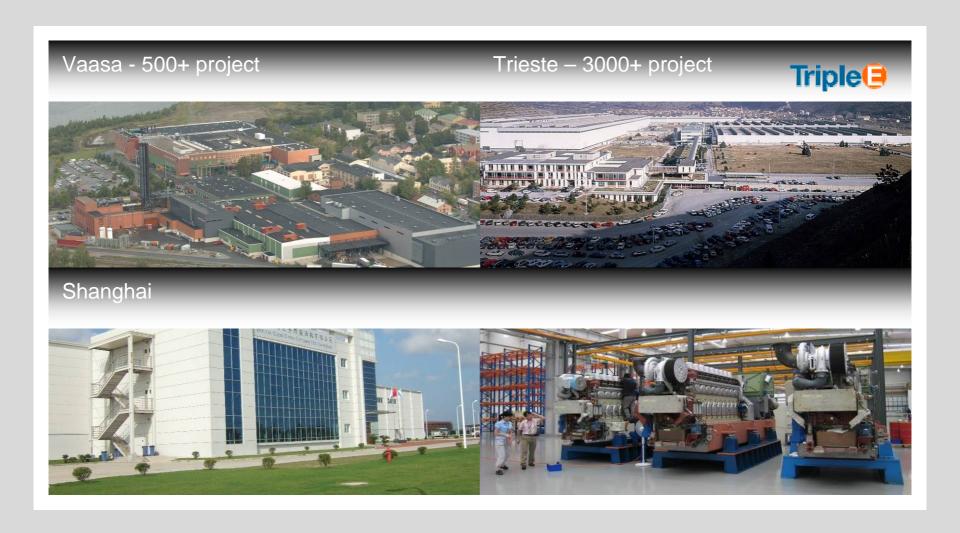
- Decreasing market demand required restructuring
- Task to reduce the capacity but still maintain the possibility to go up to 5000 MW if needed
- Flexibility of production required for remaining factories



<sup>\*)</sup> As part of Wärtsilä-Cummins JV

## From strategy to practise - Examples 1

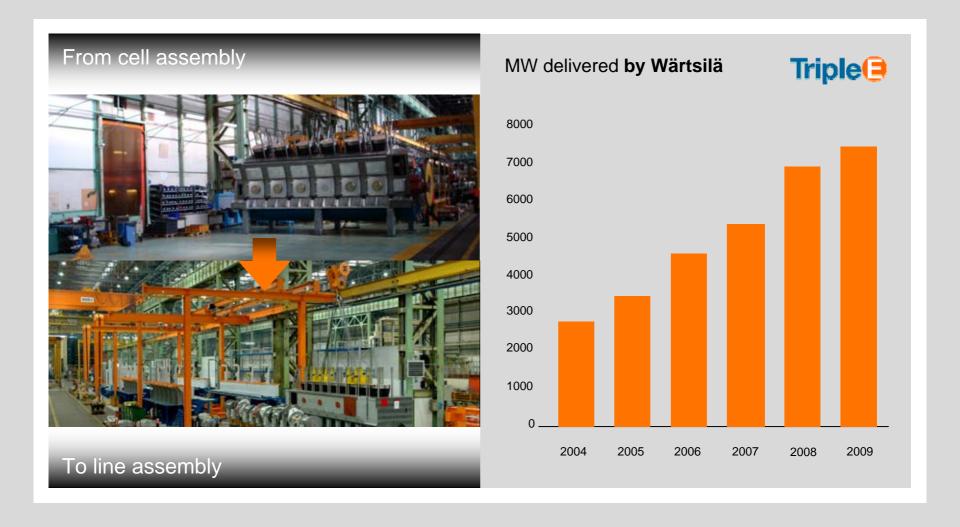






## From strategy to practise - Examples 2







**OLE JOHANSSON** 

## Global presence and broad offering support future growth



#### **Net sales by business**

#### **Net sales by geography**

