Wärtsilä Capital Markets Day

Strategy and future plans

Ole Johansson, President & CEO

Trieste, Italy, 31 May 2005
We are in business to power your business

Our offering

SHIP SERVICES
OEM SERVICES
POWER PLANTS
ENGINES
PROPULSORS
SHIP POWER SYSTEMS
O&M
COMPETITORS’ ENGINES
Our offering

...and we are seeking growth beyond the organic growth

- COMPETITORS’ ENGINES
- PROPULSORS
- SHIP POWER SYSTEMS
- O&M
- POWER PLANTS
- OEM SERVICES
- SHIP SERVICES

Non engine related services
Additional products
Additional engine brands
Total Energy Consumption of the World

Source: ExxonMobil

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Status of fuel versatility - Wärtsilä engines

- Diesel Oil
- Heavy Fuel
- Natural Gas
- Crude Oil
- Orimulsion®
- Bottom Oils
- Bio Oils

Years:
- 1970
- 1980
- 1990
- 2000
- 2010
Transportation demand shapes the oil barrel

Source: ExxonMobil
Comparison of emission reduction requirements

Year 2007
Inland waterways 2004/26/EC and US-EPA

Year 2005
IMO MARPOL 73/78

US 2010
PM (g/kWh)

Euro 3
Euro 5

Euro 4

NOx (g/kWh)

Automotive
Gas Engine Features

**High electrical efficiency**
- Wärtsilä gas engines (4…20 MW) 43…46 %
- Single cycle gas turbines (1…60 MW) 25…40 %
- Combined cycle gas turbines (> 50 MW) 50…57 %

**Flexible operation characteristics**
- Fast starting/stopping and loading
- High efficiency on part loads
- Low output reduction (derating) on high altitudes and temperatures

**Competitive emissions**
- Primary NOx levels below most norms without secondary equipment

**Multi fuel options**
- LFO & HFO and even crude oil possible. Gas turbines are not suitable for HFO
- Switching between fuels possible also during operation
Gas engine business potential

Power Plants
- Large scale load management plants (peak shaving) in strong grids. The benefits of gas engines have recently been demonstrated in USA
- Distributed power production where gas engines have a market to capture from gas turbines
- Fuel conversion of existing plants from HFO to gas

Ship Power
- LNG carriers
- Floating LNG Storage & Regasification Units (FSRUs)
- Floating Production, Storage & Offloading Units (FPSOs)
Forecasted geographical distribution of shipbuilding

Figure 3.10 Market Shares of Major Yard Countries/Areas

Sources: MSR-Consult, Clarkson Research Studies, Lloyd’s Register-Fairplay

Percent of CGT


Eastern Europe
Western Europe
China
South Korea
Japan
Other World
Developing the service business – major trade routes

Six acquired and four Wärtsilä established CISERV companies since 2001

Ciserv concept will be further developed to ports where ships sail
Developing the service business

15 major ports worldwide

Los Angeles
Long Beach
New York/New Jersey
Hamburg
Rotterdam
Antwerpen
Dubai
Busan
Qingdao
Shanghai
Shenzhen
Hong Kong
Kaohsiung
Port Kelang
Singapore

Source: ISL Shipping Statistics Yearbook 2004
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Container port development 1999-2004

Note: figures are based on ship capacity, not actual container throughput
Source: Clarkson Research Studies
Major lines’ TEU fleet capacities 1993-2004

Source: Clarkson Research Studies
Volatile ship power and power plant markets

Engine power installed (propulsion) and orders (diesel, dual fuel, and gas)

GW

17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0


Peak levels 2001

-30%

Diesel, Dual-Fuel and Gas Engine orders

-30%

2003 levels

Installed propulsion engine power

Source: Lloyds register of ships (installed marine power); Diesel & Gas Turbine Worldwide, Oct 2004
(Diesel, dual-fuel and gas engine orders)
Market share development

- **Power generation** (HFO)
- **Medium speed (4-stroke)**
- **Low speed (2-stroke)**
- **Power generation** (gas)
- **Auxiliary engine**
- **Power generation** (LFO)

*Share of MW. Total market from Diesel & Gas Turbine, Wärtsilä sales from public reports
**Share of MW: From Wärtsilä 2-stroke reporting
Source: Wärtsilä; Diesel & Gas Turbine (Power generation & Auxiliary engines)
Ship Power business intelligence (2-stroke & 4-stroke engines)
Outlook

- 2005 net sales to grow approx. 15%
- Profitability for the whole year 2005 around 8%
- 2006 net sales up approx. 10% and profitability slightly better than 2005