SERVICES SOLUTIONS FOR LIFECYCLE EFFICIENCY

CHRISTOPH VITZTHUM

Group Vice President, Services

12 Capital Markets Day HELSINKI FINLAND

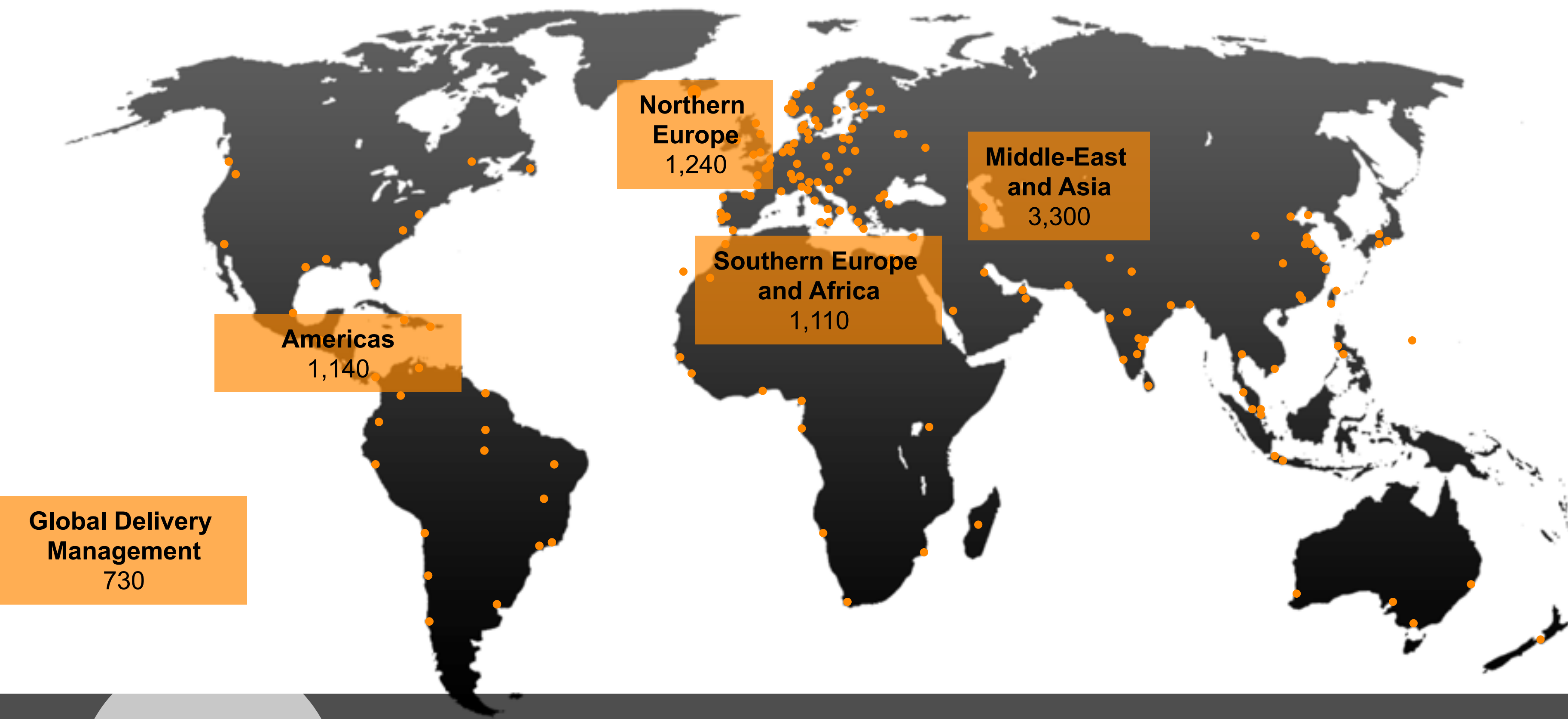
WÄRTSILÄ

Lifecycle partner

We create lifecycle services with our customers, enhancing their business – whenever, wherever.

WÄRTSILÄ

70 countries, 160 locations, 7,500 field service experts



Installed base
180,000 MW

Wärtsilä Services global network

Widest range of offering and expertise

Wide range of expertise


Engine services


Propulsion services


Electrical & Automation services


Boiler services


Environmental services


Service agreements


Service projects


Training services

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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

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Growth of gas as fuel

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- 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

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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

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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

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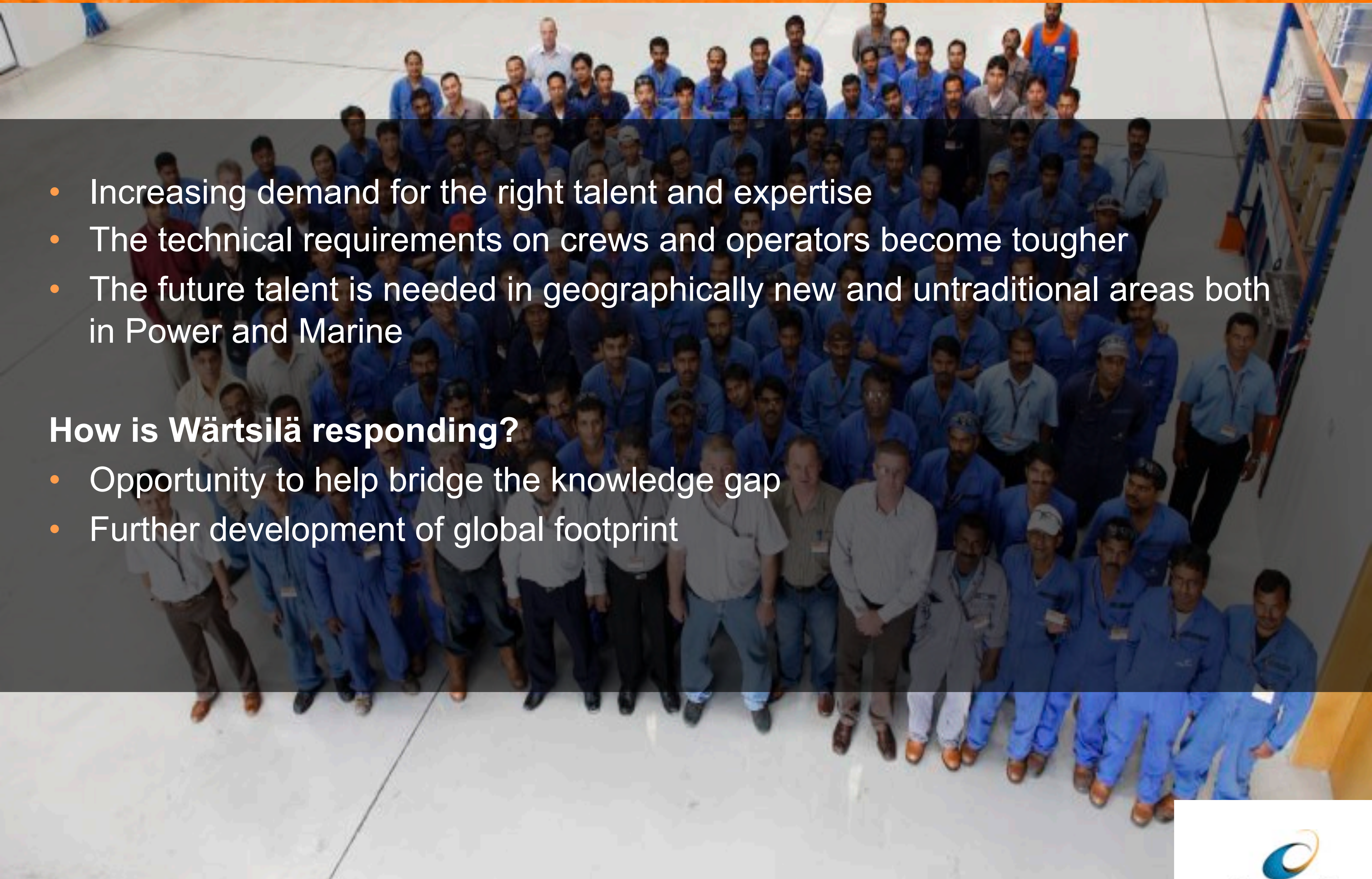
High demand for expertise



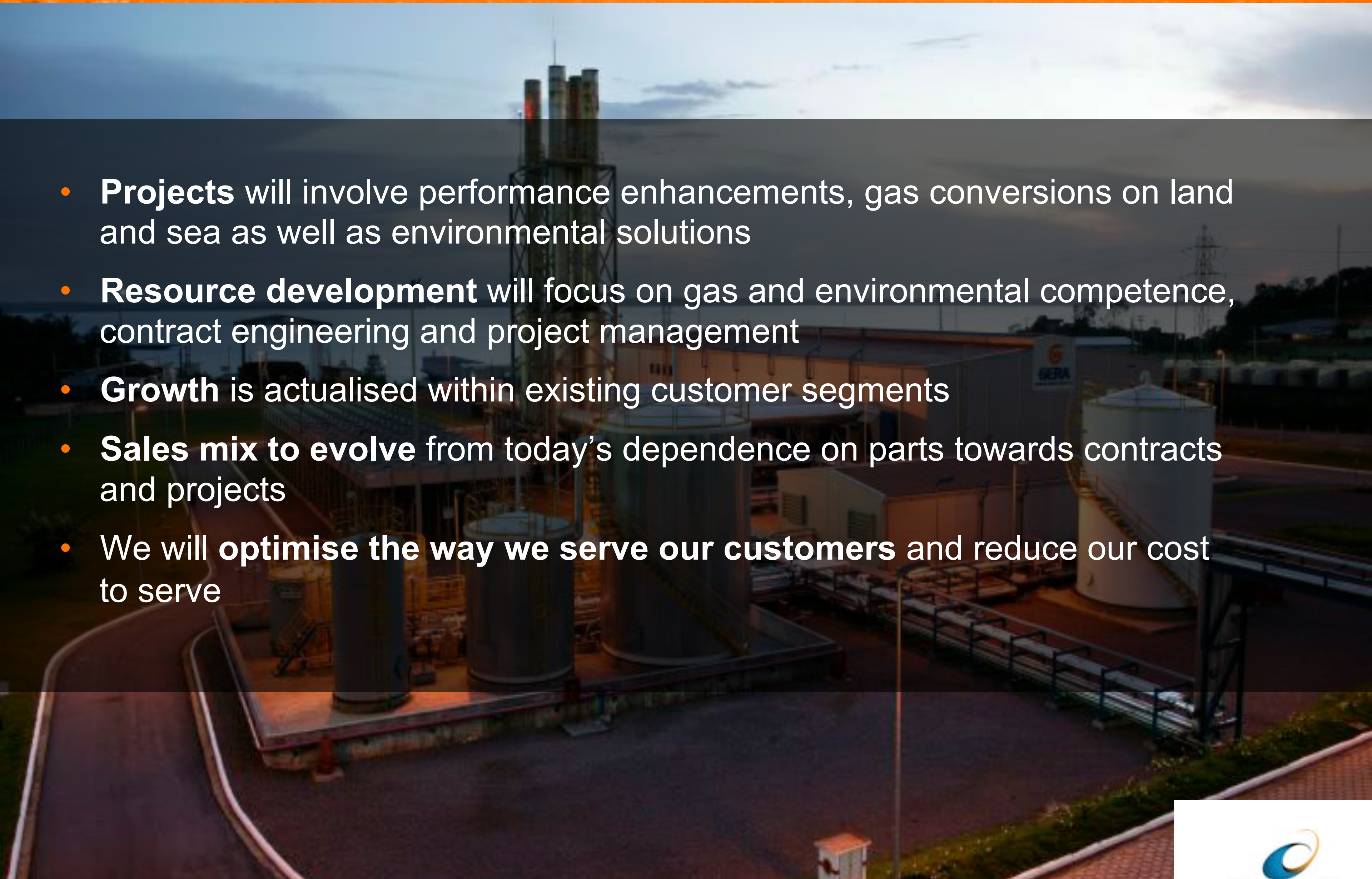
- Increasing demand for the right talent and expertise
- The technical requirements on crews and operators become tougher
- The future talent is needed in geographically new and untraditional areas both in Power and Marine

How is Wärtsilä responding?

- Opportunity to help bridge the knowledge gap
- Further development of global footprint

Services continues adaptation to the markets

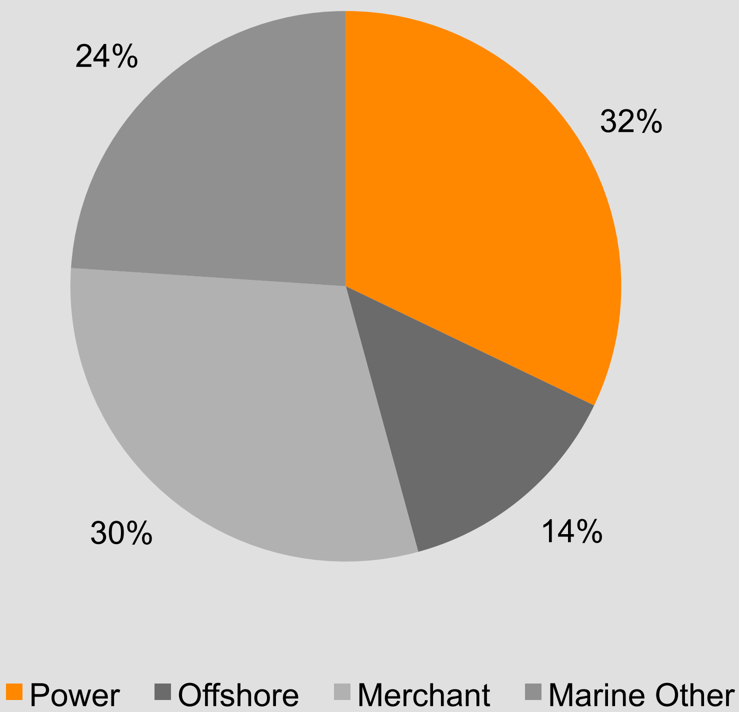
- **Projects** will involve performance enhancements, gas conversions on land and sea as well as environmental solutions
- **Resource development** will focus on gas and environmental competence, contract engineering and project management
- **Growth** is actualised within existing customer segments
- **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



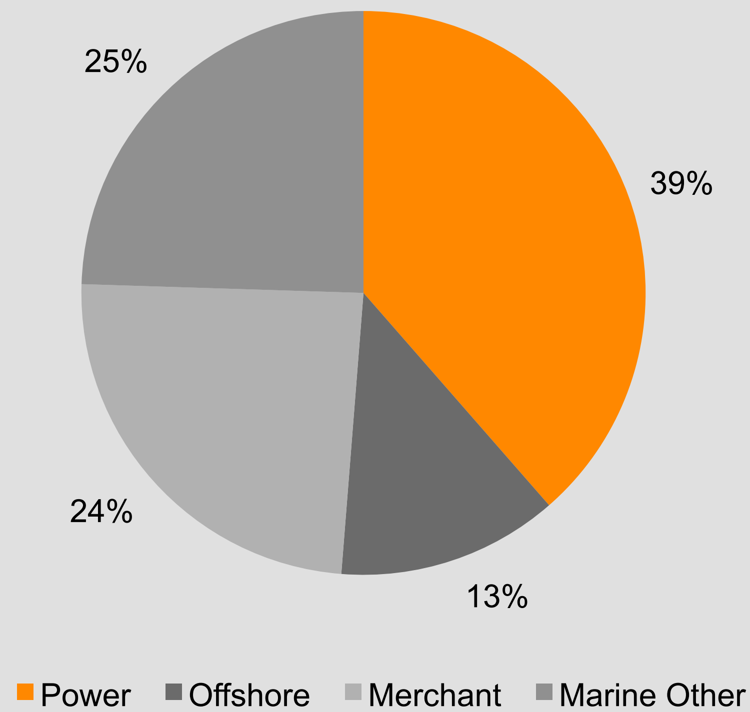
Growth in power plant services

Net sales distribution

2008



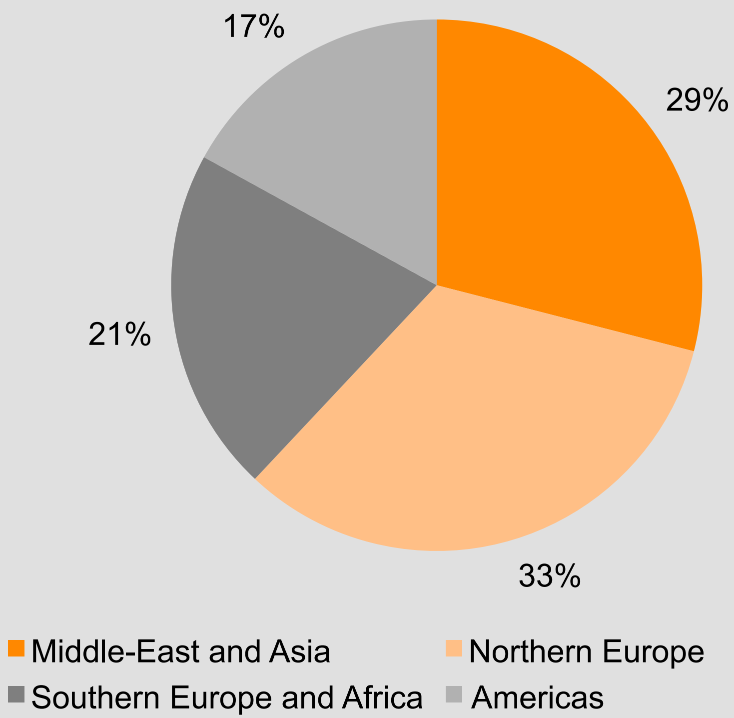
2011



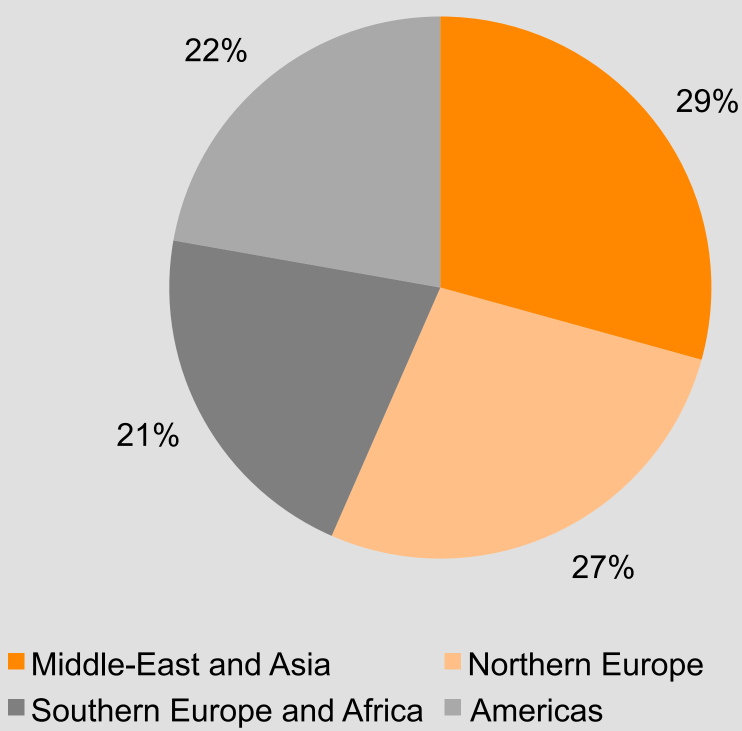
Growth in Americas

Net sales by geographical areas

2008



2011



Resilient business

Net sales development