ENVIRONMENTAL REGULATIONS FOR EXISTING VESSELS

In the effort of minimizing the environmental impact caused by shipping various regulations have been recently adopted, or will soon be ratified.

The most evident of those approaching are the IMO Marpol Annex VI focusing on SOx emissions, and the IMO Global Ballast Water Convention. Several ship owners will therefore require safe and reliable installations of efficient, environmental technologies onboard existing vessels.

VALUE ADDED SERVICE THROUGH EXPERT RETROFIT CAPABILITIES

Wärtsilä supports customers throughout the lifecycle of a retrofit project by providing excellent engineering capabilities, low risk appliance, minimised downtime, reduced customer project management costs - in addition to regulatory compliant, environmentally sound solutions.

As a professional project organization we are capable of managing all kind of retrofit projects wherever you are in the world, including EPC (Engineering Procurement and Construction), class and statutory approvals, commissioning, and crew training. After completion of a retrofit project, Wärtsilä’s global services network supports customers throughout the lifecycle of the ship.

Key advantages for a ship owner:

• Wärtsilä is flexible: depending on customer’s needs our retrofit project scope can vary from a simple equipment delivery to a complete turnkey project.

• As a total solution provider; Wärtsilä are able to manage the entire retrofit project in its turnkey delivery - from the selection and configuration of the equipment - to class and flag approvals – to engineering the installation and supervising the construction.

• We deliver high quality installation; minimised downtime and risk; performance guarantees and regulatory compliance.

• By choosing Wärtsilä ship-owners have a single point of contact reducing project management costs in coordinating with equipment providers, yards, engineering companies and class / flag societies.
WAY OF WORKING

Wärtsilä develops tailored retrofit solutions in close cooperation with the customer - from the very first enquiry - until the system is successfully delivered and the project complete. The main phases of a retrofit projects are:
• Initial phase
• Feasibility / concept engineering
• Basic engineering; project planning; contractors’ selection
• Detailed engineering and procurement
• Construction and installation
• Approvals and commissioning

We work very closely with our customers to establish their needs and to validate the solutions at the conclusion of each phase of the project.

CORE COMPETENCES
• Product knowledge
• Regulatory and class requirement expertise
• Skilled engineering resources
• Project management
• Procurement
• Site management and supervision
• Commissioning
• Crew training
• Lifecycle support

Wärtsilä’s own engineering and ship design resources are employed in all retrofit projects.

Installation works are performed by Wärtsilä Field Services and contractors.

ESTABLISHED REFERENCES

Wärtsilä NOx Reducer installations on board Arctia Offshore’s MSV Nordica and MSV Fennica:
Wärtsilä delivered a turnkey project for the Finnish icebreakers including the prefabrication and construction of a new funnel structure containing the catalysts. The ships can now operate in environmental sensitive areas with the lowest possible air emissions.

LNG conversion of Tarbit Bit Viking:
Wärtsilä performed the entire conversion of the chemical tanker; the project consisted of the conversion of the diesel engines to Dual Fuel; the installation of the entire LNG storage and handling system including the automation modifications. Tarbit Bit Viking is now sailing with very low NOx, CO₂ and zero SOx and PM emissions.