LNG RoPax ferry Viking Grace

Implementation of low emission technologies, Innovative vehicles, vessels and equipment, Innovative operational solutions, Environmental standards and policy, Interoperability and standardisation: vehicles, equipment, loading units, infrastructure

Viking Grace is a combined passenger / RoRo ferry. With its Liquefied Natural Gas powered engines, hydro-dynamically optimized hull design and new soundproofing technology, M/S Viking Grace is the greenest and quietest ferry in the world. Viking Grace is 218 metres long and 31.8 metres wide vessel.

- Increased quality as the ship contains newest technology
- Image as a forerunner
- Increased competitiveness
- Environmental benefits
- Reduced emissions; Fulfils the EU sulphur regulation
- Limited climate change

Viking Grace meets new sulphur requirements because LNG is used, the sulphur is not emitted in practice at all
The ship’s nitrogen exhausts and particles are decreased by 85% and greenhouse gases by 15 %

The driver for the implementation was the IMO sulphur directive. From 1st of January 2015, marine fuel sulphur content must be in Northern Europe less than 0.1 per cent. Viking Grace uses LNG where sulphur emissions are almost zero. The ship’s nitrogen exhausts and particles are decreased by 85% and greenhouse gases by 15 %.

The common practice before the implementation was to use heavy fuel oil (HFO) driven diesel engines

The purpose and the sustainability objective of this case was to reduce sulphur emissions in the Baltic Sea.

Besides the environmentally friendly fuel, the hydrodynamic hull minimises wave formation and decreases fuel consumption. Due to the new noise reduction technique, the ship is very quiet while on the move and in the harbour.

Viking Line collaborates with Swedish railways and southern shipping lines. Viking offers to customers piggyback transport to various destinations in Nordic Countries, Germany and the UK.
The following table shows the changes in energy consumption. Isabella is conventional heavy fuel oil (HFO) driven diesel engine ferry and Grace LNG driven. Annual consumption per volume has dropped from Isabella 100% to Grace 52%.