

Energy efficiency improvements for PCTC vessels, present and future

Abstract

Wallenius shipping, together with our partner Wilhelm Willhelmsen is one of the larger owners within the car and truck (PCTC) carrying shipping segment. It is estimated, that about 160 vessels, fully owned or owned by subsidiaries and part owned companies, are under Wallenius/Wilhelmsen control. Within the group, Wallenius has had technical responsibility for 56 newbuilding and major ship conversions since 2006.

Wallenius Shipping has always had a high environmental focus. A good environmental focus is, of course most often closely connected to energy efficiency. Our efforts on energy efficiency ships became even more important in 2008 with the financial breakdown and following tough times for us ship owners.

Two major initiatives were then launched within the group and are in focus in this presentation.

The first was the Performance Monitoring Analysis (PMA) project where more than 6000 man-hours was spent on the development on an on-line performance monitoring system in order to identify and provide data for analysis on both operational optimization and technical improvements

The second was to establish a “road map” for energy efficiency towards the emission free PCTC vessel (called the ZERO project). It was identified that it would be possible to operate emission free already today, but with implications on the operational scenario, thus speed. One of our conclusions is thus that emission free propulsion systems, in a foreseeable future, will also need some kind of back-up with fossil/biofuel engines. The “lowest hanging fruit” is possibly being LNG as fuel with the reciprocating Diesel/Otto engine being the energy converter.