IEA-Advanced Motor Fuels
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Annex 60

Technology Collaboration Programme
by IEA

Annex 60: The Progress of Advanced Marine Fuels

Project Duration	November 2019 – November 2022
Participants **Task sharing** **Cost sharing**	 Canada, Denmark, Finland, Korea, Sweden, Switzerland and USA Methanol Institute
Total Budget	€1.79 million, ($1.9 million US)
Operating Agent	Kim Winther, Danish Technological Institute, kwi@dti.dk

Purpose, Objectives and Key Question

This annex is established to create an assessment of fuel options that have emerged or significantly developed since the 2013 report (AMF Annex 41). The outcome that participants wish to achieve is a better understanding of the potential and limitations of new marine fuel options. The key question that we wish to address is: "How can the new forms of advanced marine fuels contribute to carbon neutral shipping in the future?"

Activities

Activities will include surveys and assessments as well as experiments with methanol engines.

- New IMO 2020 fuel specifications and the problem of standardizing biofuels
- Engines for LNG/Liquefied Petroeum Gas (LPG) mixtures
- Engines for methane/low carbon gas mixtures
- Engines for ammonia and ammonia/hydrogen blends
- Engines and vessels for methanol
- Experiences with biofuels based on organic waste
- After treatment systems for advanced marine fuel engines

Key Findings

Work in this annex has just started and thus no results are available yet. However, we expect to find significant technological development in the use of alternative fuels in ship engines.