# IEA-Advanced Motor Fuels
## ANNUAL REPORT 2023

## TASK 62

Technology Collaboration Programme
by iea

## Task 62: Wear in Engines Using Alternative Fuels

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| **Project Duration** | January 2022–June 2024 |
| **Participants**<br>**Task sharing**<br><br>**Cost sharing** | China, Denmark, Finland, Germany |
| **Total Budget** | In-kind contributions corresponding to > EUR 150,000 (USD 162,620) |
| **Task Manager** | Jesper Schramm<br>DTU – Technical University of Denmark<br>Email: jessc@dtu.dk |
| **Website** | https://iea-amf.org/content/projects/map_projects/62 |

### *Purpose, Objectives, and Key Question*

Alternative fuels have been intensively introduced in transportation sectors in recent years. While some of the wear caused by these fuels can be seen initially, the problems really become clear after years of application. The goal of this task is to identify and present an overview of potential wear issues to prevent major surprises in the future.

**We will** evaluate excess wear in **internal combustion** engines caused by **the use** of alternative fuels. The objectives are to review ongoing related projects in the member countries and conduct a general literature review to evaluate which engine wear problem that can be foreseen with future application of alternative fuels.

The key questions to be addressed are as follows:

- How severe are the problems associated with use of alternative fuels?
- What is the expected increase in engine wear caused by these fuels?
- What can be done to solve these problems?

### *Activities*

#### General literature review

We will complete a general literature review for alternative fuels, focusing on those relevant to ongoing studies related to engine applications in the countries involved in the task: methanol, ammonia, and bio-oils, among others.

In the literature review, we will compile the available information and report it in a structured way that supports future application of alternative fuels.

#### On-line seminars

Activities related to engine wear are ongoing in the involved AMF countries. These studies will be communicated through presentations from the responsible “activity” persons (or other designated people) at frequent seminars. The results from the seminars will provide a background for the literature review report.

### *Key Findings*

The results will be published in a report that will be delivered at the end of the project period. In addition, the results will be published at international conferences and journals.

### *Main Conclusions*

The project results will identify and add to the understanding of the high degrees of wear caused by use of alternative fuels in engines used in the transportation sector.

### *Publications*

None so far.