

29.03.2023



Technology Collaboration Programme on
Advanced Motor Fuels

Advanced Motor Fuels Technology Collaboration Programme



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Swiss Federal Office of Energy

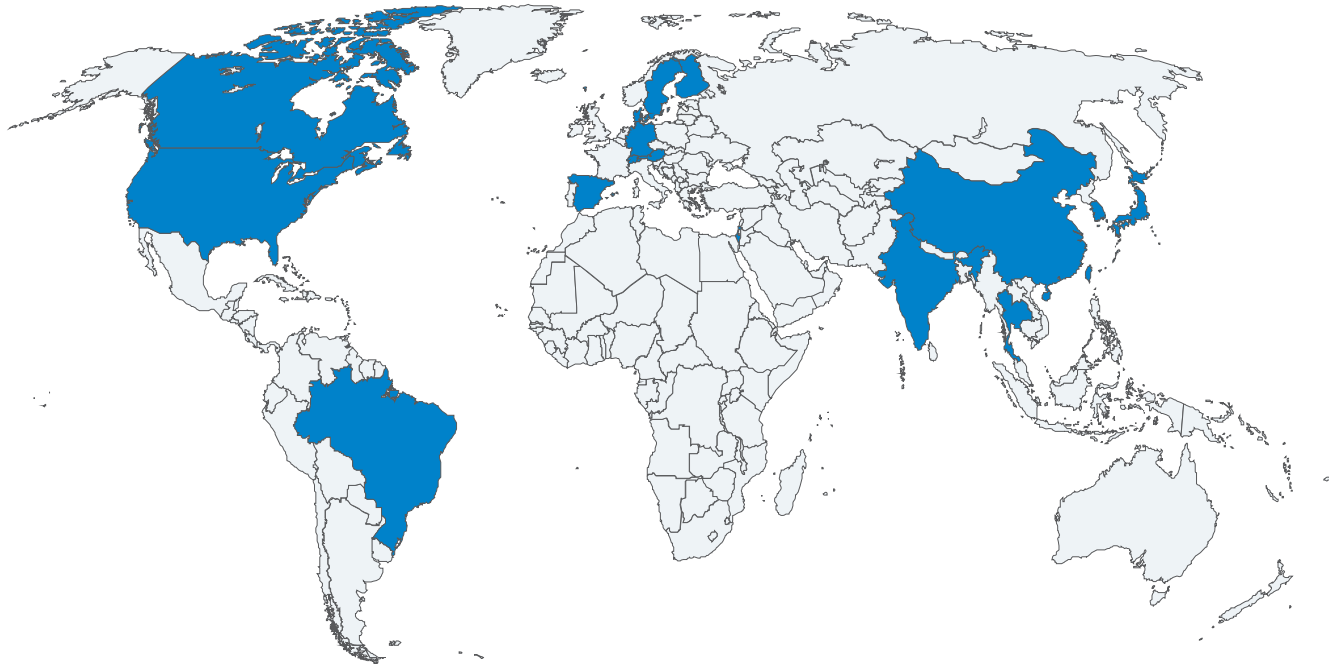
AMF Vision and Mission

Advanced motor fuels, applicable to all modes of transport, significantly contribute to a sustainable society around the globe.

The mission of AMF is to advance the understanding and appreciation of the potential of advanced motor fuels towards transport sustainability. We provide sound scientific information and technology assessments facilitating informed and science-based decisions regarding advanced motor fuels on all levels of decision-making.



AMF Membership

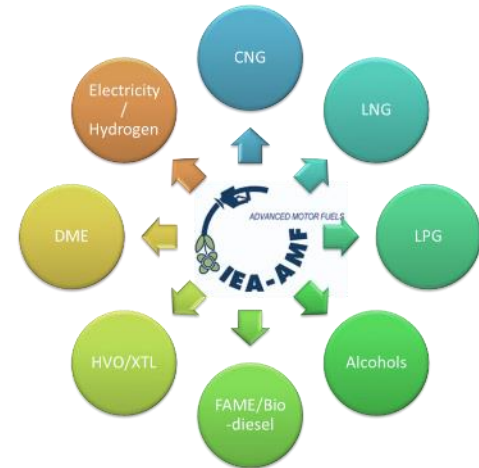


MEMBER COUNTRIES

Austria	India
Brazil	Japan
Canada	South Korea
China	Spain
Denmark	Sweden
Finland	Switzerland
Germany	USA

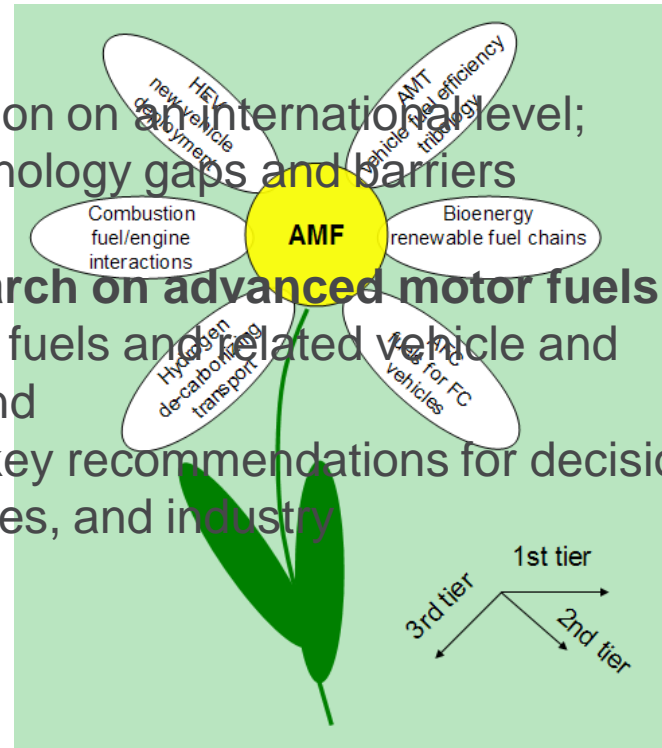
Scope of the AMF TCP

- AMF works on the entire spectrum of fuels from feedstock, through fuel processing, distribution, and, finally, end use in vehicles.
- AMF works closely with other related Technology Collaboration Programmes either through the End Use Working Party or by way of direct interaction.
- Advanced motor fuels are fuels that fulfill one or more of the following criteria:
 - Reduces GHG emissions
 - Improves life-cycle efficiency
 - Has high energy efficiency
 - Has low toxic emissions
 - Enables fuels for new propulsion systems
 - Contributes to security of supply



AMF Activities

- Pooling resources and information on an international level;
- Identifying and addressing technology gaps and barriers to deployment;
- **Performing cooperative research on advanced motor fuels;**
- Demonstrating advanced motor fuels and related vehicle and after-treatment technologies; and
- Aggregating data and deriving key recommendations for decision makers within governments, municipalities, and industry



Cooperative R&D

58 tasks (projects) completed, 6 tasks currently active

- Task 28: Information Service & AMF Website (AMFI)
- Task 60: The Progress of Advanced Marine Fuels
- Task 61: Remote Emission Sensing
- Task 62: Wear in Engines using Alternative Fuels
- Task 63: Sustainable Aviation Fuels
- Task 64: E-Fuels and End-Use Perspectives



AMF Task 58 / IEA Bioenergy Task 41 Project 10

The role of renewable transport fuels in decarbonizing road transport

- Bringing the GHG emissions of the road transport sector down to zero by **2050 cannot be achieved by one measure alone.**
- Countries that deploy a **set of different measures** such as reducing transport demand, improving vehicle efficiency, and adding renewable energy carriers such as biofuels, e-fuels, renewable electricity and renewable hydrogen have the best chances to meet ambitious decarbonization goals.

https://www.iea-amf.org/content/projects/map_projects/58

Lessons Learned from Alternative Fuel Experiences

- Lessons can be learned from various attempts, some with limited success, to introduce alternative fuels and vehicles to the market and give recommendations for the successful implementation of renewable energy sources in the transport sector.
- Consistent policies and integration of all stakeholders are both necessary to overcome barriers for a successful market implementation of alternative fuels and propulsion systems.
- There is the need for long-term and comprehensive policies, on national and international level, which include markets, stakeholders and different technologies to gain benefits for all types of stakeholders along the value chain of the transportation system.

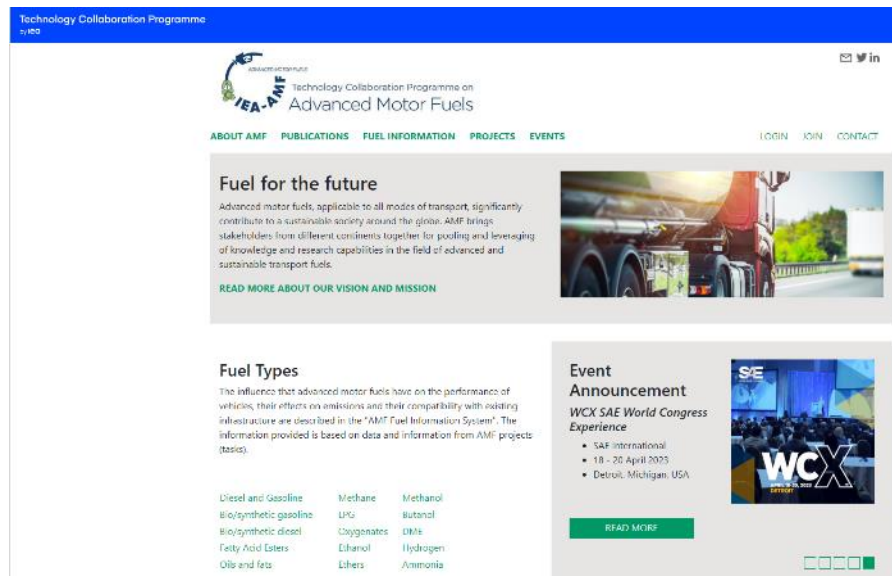
https://www.iea-amf.org/content/projects/map_projects/59

Information dissemination

AMF web site: www.iea-amf.org

Newsletters

Three issues per year, cover Europe, Asia, North America and several fuels



Technology Collaboration Programme
IEA-AMF

Technology Collaboration Programme on
Advanced Motor Fuels


ABOUT AMF | PUBLICATIONS | FUEL INFORMATION | PROJECTS | EVENTS

LOGIN | JOIN | CONTACT

Fuel for the future

Advanced motor fuels, applicable to all modes of transport, significantly contribute to a sustainable society around the globe. AMF brings stakeholders from different continents together for pooling and leveraging of knowledge and research capabilities in the field of advanced and sustainable transport fuels.

READ MORE ABOUT OUR VISION AND MISSION



Fuel Types

The influence that advanced motor fuels have on the performance of vehicles, their effects on emissions and their compatibility with existing infrastructure are described in the "AMF Fuel Information System". The information provided is based on data and information from AMF projects (basis).

Diesel and Gasoline	Methane	Methanol
Bio-synthetic gasoline	LPG	Butanol
Bio-synthetic diesel	Oxygenates	DME
Fatty Acid Esters	Ethanol	Hydrogen
Oils and fats	Ethers	Ammonia

Event Announcement

WCX SAE World Congress Experience

- SAE International
- 18 - 20 April 2023
- Detroit, Michigan, USA

READ MORE



Technology Collaboration Programme
IEA-AMF

July 2022, ISSUE NO. 1/2022

Advanced Motor Fuels News

Energy security has come into focus again and (e-fuels) are now a hot topic.

Read more...

CONTENTS

BEYOND ICE: THE WHEWITZER OIL TANKERS
 - 20% reduction in CO₂ emissions
 - New CO₂ capture production plans
 - Shipyard production of clean oil fuels
 - Fuel tested
 - Reduced carbon footprint
 - Plans for 2023 production
 - Fuel production in 2023
 - Oil and e-fuels production
 - Deployment in 2023
 - Growth for 2023
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SPOTLIGHT

Renewable energy
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Research reports

Annual Report

Available through the website www.iea-amf.org

AMF Annex 22.2
EPA Research Task 41: HVOs 2.0
& Report into the Advanced Motor
Fuels TCF and EA Blending TCF



The Role of Renewable Transport Fuels in Decarbonizing Road Transport Summary Report

Multi-author
AMF Annex 22.2
EPA Research Task 41: HVOs 2.0
& Report into the Advanced Motor Fuels TCF and EA Blending TCF

Lead author
AMF Annex 22.2
EPA Research Task 41: HVOs 2.0
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Co-authors
AMF Annex 22.2
EPA Research Task 41: HVOs 2.0
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Annex 97
A Report from the
Advanced Motor Fuels Technology Collaboration Programme



Heavy-Duty Vehicles Performance Evaluation

Lead author
AMF Annex 97
A Report from the
Advanced Motor Fuels Technology Collaboration Programme

Co-authors
AMF Annex 97
A Report from the
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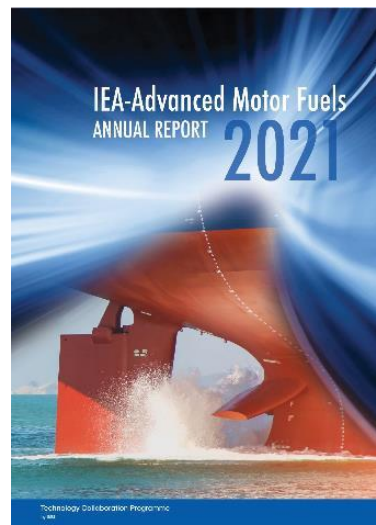
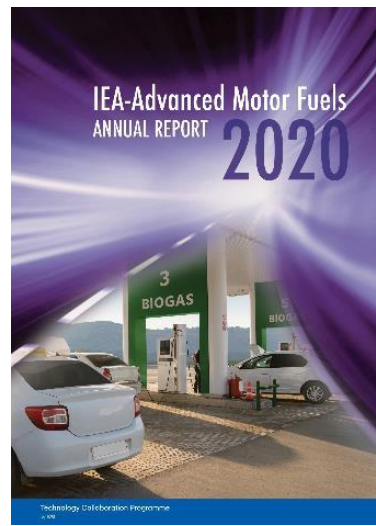
Annex 33
A Report from the
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Lessons Learned from Alternative Fuels Experience

Lead author
AMF Annex 33
A Report from the
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www.iea-amf.org
including the AMF newsletter