



*Centro Mario Molina Chile, and the Ministry of Transport and Communications, Chile, have received the 2018 Climate and Clean Air Award for Enabling Policy for their joint efforts to implement policy to reduce diesel air pollution.*

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### EVENTS

## DEMONSTRATION / IMPLEMENTATION / MARKETS

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### **Research on DME engine for PM reduction**

The purpose of a research project supported by the Korean government is to develop engines and related parts using DME and to retrofit and distribute old diesel cars to reduce fine particle emissions. From May 2018 to April 2021, the total of 3.5 billion KRW (~3 million USD) will be invested. Consortium partners are Daehung Gas (DME producer), Bio Friend Incooperation, University of Suwon (both working on fuel supply chains and legal issues), Korea Institute of Energy Research, Korea Automotive Technology Institute, University of Ulsan and Engine-Techwin (all together working on component parts for remodelling vehicles and conducting demonstration projects).

Source: IDA, 8th International DME Conference (DME 8), 10-12 September 2018  
Weblink: <https://www.aboutdme.org/index.asp?bid=478>

### **Heavy-duty LNG truck refuelling infrastructure**

On June 1st 2018, Japan's first LNG refuelling station was launched in Osaka and road demonstrations of Japan's first two heavy-duty LNG trucks were started. These demonstrations are part of a project which aims to develop a heavy-duty LNG truck with a range of at least 1,000 km before refuelling. The development of refuelling infrastructure is essential for promoting the use of LNG vehicles, and this requires the identification of best practices in actual use, plus technologies and infrastructure for LNG vehicle refuelling stations. Thus, besides developing a heavy-duty LNG truck the project will also develop the related refuelling infrastructure and conduct assessments through actual fleet operations using the truck.



Isuzu Motors Limited, Shell Japan Limited and the Organization for the promotion of Low Emission Vehicles (LEVO) have been driving this project since 2016.

Source: Ministry of the Environment, Japan, May 25, 2018  
Weblink: <https://www.env.go.jp/press/105518.html>

### **Demonstration Plant Producing Cellulosic Sugars**

NEDO, Toray Industries, Inc., Mitsui Sugar Co., Ltd., and Mitsui & Co., Ltd. completed the construction of a demonstration plant in Thailand that will have the world's largest production capacity utilizing bagasse. The plant can produce cellulosic sugars from bagasse—residue left after extraction of juice from sugarcane—to be used as a raw material for bioethanol production. It can also produce high value-added products such as polyphenols and oligosaccharides.

During the demonstration project, Japanese membrane separation technology will be used to concentrate the sugar solution made from bagasse with the aim of reducing energy consumption by 50% or more compared to that of a conventional concentration process using an evaporation

method. Operations started in July to verify efficient energy conservation and the effectiveness of manufacturing high value-added products using the process. It is expected that the system will be widely utilized in Thailand, which is one of the world's major sugarcane producers.

Weblink: [http://www.nedo.go.jp/english/news/AA5en\\_100389.html](http://www.nedo.go.jp/english/news/AA5en_100389.html)

### ***Liquefied biogas for a Swedish ship***

Skangas have supplied the Swedish shipping company Furetank with Liquefied Biogas for its ship FURE VINGA. This is one of two vessels in the company's fleet powered by liquefied gas. LNG is suitable for all vessel types, including ferries, passenger ships, tankers, bulk, supply and containerships. LNG offers several benefits by reducing local and global pollution. Switching to LNG completely removes SOx and particulates and reduces NOx emissions by up to 85%. In addition, LNG reduces CO2 emissions by at least 20%. Skangas expects the LNG demand for ships to increase significantly in next few years. Liquefied biogas (LBG) is similar LNG. LBG is a renewable and environmentally friendly fuel made from 100% local feedstocks.

Source/ read more: <https://www.skangas.com/skangas/news/2018/fure-vinga/>

## **POLICY / LEGISLATION / MANDATES / STANDARDS**

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### ***Malaysian Government investigating B10 blend***

The Malaysian government is looking to enhance the use of biodiesel in the country, and is currently in talks with stakeholders (automotive and petroleum-based companies) on the matter. Currently, B7 biodiesel is sold in Malaysia. A push for the B10 blend is planned to be implemented in the second half of 2019.

However, fuel providers have come out to say that the B10 blend will only be applicable to the Euro 2M standard diesel, while Euro 5 diesel will continue to be offered as a B7 blend. Meanwhile, car companies have voiced their concern about the usage of the B10 blend in their vehicles, while other organizations have claimed that there are no such problems.

Source: *Paultan.org*, 3 August 2018

Weblink: <https://paultan.org/2018/08/03/government-to-enhance-use-of-biodiesel-in-malaysia/>

### ***Indonesia extends B20 blending***

Indonesia plans to require all diesel fuel used in the country contain biodiesel starting September 2018 to boost palm oil consumption, slash fuel imports, and narrow a yawning current account gap. While the proposal has been welcomed by the palm oil industry and government, it has raised concerns among the automobile industry the fuel could impact engine performance. Environmentalists fear the boost to local palm oil consumption will hasten Indonesia's already fast spreading deforestation.

The plan is to cut diesel imports by mandating that all diesel consumers, including power plants and railways, use biodiesel that contains 20 percent bio-content (B20), typically palm oil. Officials estimate this will save Indonesia around \$6 billion per year. The program will increase domestic consumption of palm oil in the world's largest producer of the edible oil, providing a market for output that has climbed by 35 percent over the past five years.

Source: *Reuters, Business News*, August 7, 2018

Weblink: <https://uk.reuters.com/article/uk-indonesia-biodiesel-explainer/indonesia-bets-big-on-biodiesel-to-limit-costs-of-oil-imports-idUKKBN1KS0CA>

## ***Sustainable Palm Oil Trade***

A Memorandum of Understanding (MoU) has been signed which, for the first time, recognizes the Indonesian Sustainable Palm Oil (ISPO) and the Indian Palm Oil Sustainability (IPOS) Framework as legitimate sustainability frameworks for palm oil production and trade between Indonesia and India. This MoU was signed on 16 July 2018 between the Solvent Extractors Association of India, the Indonesian Palm Oil Board and Solidaridad during a high-level meeting with the Coordinating Ministry for Economic Affairs, in Jakarta, Indonesia. It is expected this cooperation will lead to the promotion of IPOS and ISPO aligned sustainable palm oil in Indian, Indonesian and other markets.

Source/ read more: [www.4-traders.com/news/Solidaridad-Network-INDONESIAN-INDIAN-PALM-OIL-INDUSTRY-JOIN-HANDS-TO-PROMOTE-SUSTAINABLE-TRADE--26940350/](http://www.4-traders.com/news/Solidaridad-Network-INDONESIAN-INDIAN-PALM-OIL-INDUSTRY-JOIN-HANDS-TO-PROMOTE-SUSTAINABLE-TRADE--26940350/)

## ***Final recast of EU Renewable Energy Directive***

As part of its 'Clean Energy for all Europeans' package, the European Commission in 2016 proposed an update of the Renewable Energy Directive for the period 2021 – 2030 (RED II). A final compromise document was agreed among EU Institutions on June 14, 2018. This policy update provides an overview of the provisions relating to transport fuels in the final compromise document.

There is a sub-target for advanced biofuels produced from feedstocks in Part A of Annex IX. These fuels must constitute a minimum of 0.2% of transport energy in 2022, 1% in 2025 and at least 3.5% by 2030. The RED II defines sustainability criteria for liquid biofuels used in transport, as well as for solid and gaseous biomass fuels used for power, heating and cooling production.

Source: *icct - the International Council on Clean Transportation*  
<https://www.theicct.org/publications/final-recast-renewable-energy-directive-2021-2030-european-union>

## ***Changes to type-approval system in the EU***

In spring 2018, the political bodies of the European Union (EU) adopted a number of measures designed to improve the procedure for determining emissions of new road vehicles.

These bring in new elements such as in-service conformity testing with RDE and the introduction of fuel consumption meters for monitoring purposes. With the recent adoption of these measures the EU has taken a major step towards preventing another Dieseltgate. However, some aspects originally proposed by the European Commission (and supported by NGOs and consumer associations) were not included in the final regulation, such as the creation of an EU-wide type approval authority or breaking the financial ties between vehicle manufacturers and technical services.

Source: *icct - the International Council on Clean Transportation*  
<https://www.theicct.org/publications/changes-to-EU-motor-vehicle-type-approval-system>

## ***Bio-isobutanol approved as fuel additive***

The U.S. Environmental Protection Agency approved the use of bio-isobutanol as a gasoline additive at up to 16 percent by volume after it was demonstrated that it met all applicable requirements under the Clean Air Act. The fuel is now eligible to generate credits under the Renewable Fuel Standard program.

Source: <https://www.epa.gov/fuels-registration-reporting-and-compliance-help/epa-registers-isobutanol-blending-gasoline>

## SPOTLIGHT AVIATION

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### ***Shell and SkyNRG work on renewable jet fuel***

Shell Aviation and SkyNRG announced a multiyear agreement to promote and develop the use of renewable, low-carbon fuel in aviation supply chains. SkyNRG currently supplies drop-in aviation biofuels produced using HEFA technology.

Source: <https://www.shell.com/business-customers/aviation/news-and-media-releases/news-and-media-2018/skynerg-agree-strategic-collaboration.html>

### ***Norway introduces aviation biofuel mandate***

The Norwegian government announced that it will introduce a 0.5% biofuel blending mandate for jet aviation. This marks the first time when biofuel has become an essential element in aviation fuel. The aviation industry has set ambitious targets to mitigate greenhouse gas emissions from air transportation, including carbon-neutral growth from 2020 and beyond, and a 50 percent reduction of net aviation carbon emissions by 2050. Aviation needs multiple solutions for greenhouse gas emission reduction. Currently, sustainable aviation fuel offers the only viable alternative to fossil liquid fuels for powering commercial aircraft.

Source: <http://www.greencarcongress.com/2018/10/20181009-norway.html>

### ***The future of aviation***

International airline associations have written a joint open letter to the European Commission urging it to ensure the ICAO proposed rules governing the CORSIA carbon offsetting scheme are adopted uniformly and in their entirety throughout Europe. They also call for the monitoring, reporting and verification requirements of the EU ETS to be aligned with those of CORSIA in order to avoid an added administrative burden, and for all international intra-EEA flights to be removed from the scope of the EU ETS from January 2021 when the voluntary phase of CORSIA starts.

In response, a group of Europe-based NGOs has called on the Commission to resist any moves to amend the EU ETS directive and for the EU to reserve its position on CORSIA until a review of the ICAO scheme has taken place.

Source: GreenAir Newsletter 19 September 2018

Read more: <http://www.greenaironline.com/news.php?viewStory=2523>

## SPOTLIGHT ELECTRIC VEHICLES

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### ***Canada: Electric Transit Bus Trial Begins***

The first phase of the Pan-Canadian Electric Bus Demonstration and Integration Trial was launched in Vancouver as part of a national effort to advance zero-emissions transit technology. The project is funded at \$40 million and includes 18 interoperable electric buses, seven interoperable overhead chargers, and five routes in three cities. The project standardizes a protocol on the design of the pantograph that connects the charging station to the bus, communications between the bus and the charger, and performance metrics of the system.

Source: <http://cutric-crituc.org/newsblg/2018/4/18/ontario-begins-first-of-its-kind-40m-electric-bus-tests>

## **Heavy-duty electric vehicles infrastructure**

The California Public Utilities Commission authorized four utility programs with a collective budget of \$738 million to accelerate widespread transportation electrification. These programs include \$579 million to develop charging infrastructure at 1,570 sites to support 15,000 heavy-duty electric vehicles. In addition, \$137 million will be used to install 60,000 Level 2 home chargers.

The California Air Resources Board approved its \$423 million plan for the Volkswagen Environmental Mitigation Trust, which includes nearly \$300 million in funding for 1,400 zero-emission buses, freight trucks, and pieces of off-road equipment.

Source: <http://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=6442457607>

Link: [https://www.arb.ca.gov/msprog/vw\\_info/vsi/vw-mititrust/documents/bmp\\_jun2018.pdf](https://www.arb.ca.gov/msprog/vw_info/vsi/vw-mititrust/documents/bmp_jun2018.pdf)

## **Porsche: the future of e-mobility**

Series production of the first purely electric Porsche is set to begin next year. In preparation, the vehicle has now been given its official name: The "Mission E" concept study, the name currently used to describe Porsche's complete electric offering, will be known as the Taycan.

Porsche plans to invest more than six billion euro in electromobility by 2022, doubling the expenditure that the company had originally planned. Of the additional three billion euro, some 500 million euro will be used for the development of Taycan variants and derivatives, around one billion euro for electrification and hybridisation of the existing product range, several hundred million for the expansion of production sites, plus around 700 million euro for new technologies, charging infrastructure and smart mobility.

Source/ find out more: <https://newsroom.porsche.com/en/products/porsche-taycan-mission-e-name-of-series-production-electric-sports-car-electromobility-concept-study-70-years-sportscar-15602.html>

## **IEA & IEA-AMF NEWS**

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### **IEA Electrofuels Workshop**

A workshop on the relevance and potential of electrofuels for decarbonisation of the energy sector was co-organised on 10 September 2018 in Brussels by the International Energy Agency (IEA) and European Commission (DG-ENER). The IEA TCPs Advanced Motor Fuels, Bioenergy, Clean and Efficient Combustion, Hydrogen and Advanced Fuel Cells as well as the ART Fuels Forum supported the event.

The workshop featured an introductory session, a session about the most promising electrofuels hydrogen, ammonia, liquid hydrocarbons and methane, a session about the economics of electrofuels and a session about the usage of electrofuels, divided into road, shipping, aviation and power & industry application. The sessions were complemented with Q&A sessions plus a concluding and outlook panel discussion at the end of the day.

Some conclusions from the workshop include the following:

- Within the EU, the driver for electrofuels is the need for decarbonisation
- The cost for renewable electricity has reduced significantly (and the trend continues)

- Biofuels can be combined with hydrogen to increase the yield achieved from the sustainably available biomass
- Electrofuels face a cost challenge, not a technical challenge; research and development on electrolyzers is needed to bring the costs of hydrogen down
- Hydrogen will first be used in the industry and chemicals sector; hydrogen for mobility services is predicted for beyond 2040
- Maritime transports will need significant amount of low/no carbon fuels in the near future to fulfil IMO targets, and ammonia as a fuel could be an interesting option.

### ***AMF Annex 53 impacts local air quality***

AMF Annex 53: Sustainable Bus Systems aimed at developing a methodology for establishing requirements for clean and energy-efficient buses that can be used in the tendering process for public transportation operators in developing regions. Operating conditions in Santiago and also in other major cities in developing countries are very different from usual driving cycles. As to allow for a suitable assessment, bus routes in Santiago were analysed, speed and slope were measured, and the resulting routes were compared to existing driving cycles. Finally, a “Santiago driving cycle” was defined which much better reflects actual operating conditions.

In 2018, the “Santiago driving cycle” was officially adopted by the Chilean Government. All new bus models that are coming to the bus market of Santiago must be tested under this cycle as part of the process of homologation. This ensures that best available technologies can be selected for renewal of the bus fleet. 2,000 new buses with Euro VI technology have now been purchased for Santiago, and 90 battery electric buses. Santiago is the first city in Latin America that requests Euro VI buses.

As a consequence of the activities of AMFs Annex 53 and cooperation from UNEP and Climate and Clean Air Coalition CCAC, Centro Mario Molina Chile and Ministry of Transport were distinguished as winner of CCAC’s global award for enabling policies for clean vehicles.

*Link to award:* <http://ccacoalition.org/en/news/2018-climate-and-clean-air-awards>  
*More information on AMF Annex 53:* [http://iea-amf.org/content/projects/map\\_projects/53](http://iea-amf.org/content/projects/map_projects/53)

### ***Biofuels and air quality***

The AMF experts Nils-Olof Nylund and Päivi Aakko-Saksa produced a section of 5 pages on the air quality implications of transport biofuel consumption for the IEA’s Renewable Energy Market Report 2018. The text is based on knowledge gained through AMF work and on information displayed in the Fuel Info section of the AMF website.

The five pages explain the different types of air pollutant emissions from road transport and their impact on human health, the influence of engine type and aftertreatment technology on air pollutant emissions, describe how biofuel consumption alters air pollutant emissions compared with fossil fuels, and the net effect of biofuel consumption on air pollutant emissions.

*Fuel Info:* [http://iea-amf.org/content/fuel\\_information/fuel\\_info\\_home](http://iea-amf.org/content/fuel_information/fuel_info_home)  
*Biofuels and air quality:* <http://iea-amf.org/content/publications/biofuelsandairquality>

## PUBLICATIONS

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### ***IEA Renewable Energy Market Report***

IEA Renewable Energy Market Report (REMR) 2018 is the IEA market analysis and forecast from 2018 to 2023 on renewable energy and technologies. It provides global trends and developments for renewable energy in the electricity, heat and transport sectors.

The analysis this year contains an in-depth look at bioenergy, the world's largest source of renewable energy, highlighting the untapped potential of modern bioenergy and other renewable sources for greening the industry and transport sectors. Under an accelerated case, the report also highlights policy and market improvements that can unlock further growth of renewable energy in electricity and transport biofuels.

The report also contains a section on the impact of biofuels on air quality, which was authored by AMF members Nils-Olof Nylund and Päivi Aakko-Saksa.

Link: <https://www.iea.org/renewables2018/>

### ***IEA's first Global Energy and CO2 Report***

The IEA's first Global Energy and CO<sub>2</sub> Status Report provides a snapshot of recent global trends and developments across fuels, renewable sources, and energy efficiency and carbon emissions, in 2017.

Global energy demand grew by 2.1% in 2017, according to IEA preliminary estimates, more than twice the growth rate in 2016. Global energy demand in 2017 reached an estimated 14 050 million tonnes of oil equivalent (Mtoe), compared with 10 035 Mtoe in 2000.

The growth in global energy demand was concentrated in Asia, with China and India together representing more than 40% of the increase. Energy demand in all advanced economies contributed more than 20% of global energy demand growth, although their share in total energy use continued to fall. Notable growth was also registered in Southeast Asia (which accounted for 8% of global energy demand growth) and Africa (6%), although per capita energy use in these regions still remains well below the global average.

Source: <https://www.iea.org/geco/>

Download: <http://www.iea.org/publications/freepublications/publication/GECO2017.pdf>

### ***Key World Energy Statistics 2017***

2017 marks the 20th edition of IEA's Key World Energy Statistics – the annual booklet of IEA's most used statistics. This milestone's edition has been enriched with more information on energy efficiency and renewable energies, more geographic data and also more of the fundamental data required to fully understand energy security. Key World Energy Statistics contains timely, clearly presented data on the supply, transformation and consumption of all major energy sources for the main regions of the world, providing everyone with an interest in energy key statistics on more than 150 countries and regions including energy indicators, energy balances, prices, RDD and CO<sub>2</sub> emissions as well as energy forecasts.

Link: <http://www.iea.org/publications/freepublications/publication/KeyWorld2017.pdf>



## ***Guidelines for LCA and TEA of electrofuels***

Innovative CO<sub>2</sub> utilisation technologies have shown great potential in reducing environmental impacts and creating economic opportunities. Standardised life-cycle assessment (LCA) and techno-economic assessment (TEA) guidelines are crucial for a comprehensive and transparent comparison between different technologies.

Such guidelines for LCA and TEA have been developed by a consortium of partners from TU Berlin, RWTH Aachen, University of Sheffield and IASS Potsdam, initiated and commissioned by The Global CO<sub>2</sub> Initiative and EIT Climate-KIC. The guidelines aim at enabling a comprehensive and transparent comparison between different technologies, reducing ambiguity in assessment results and avoiding pitfalls, thus accelerating funding decisions and promoting further technology development.

Source: <https://www.iass-potsdam.de/de/veranstaltungen/launch-standardised-guidelines-life-cycle-and-techno-economic-assessment-co2>

## ***Defossilizing the transportation sector***

The German Research Association for Combustion Engines (FVV) has elaborated a fuel study "Defossilizing the transportation sector: Options and requirements for Germany". The study concentrates on comparing 100 % scenarios: 100% CO<sub>2</sub>-free mobility with zero-impact emissions for one powertrain type in each case - electricity, hydrogen, synthetic e-fuels - with a special view on energy requirements and mobility costs. If transportation is to become completely climate-neutral by 2050, the costs for drivers are likely to rise. However, it does not make much difference whether a mid-range passenger car has a battery electric drive, a fuel cell or a combustion engine powered by electric fuels on board: The mobility costs for the three energy paths calculated in this study differ only slightly.

Link: <https://www.fvv-net.de/en/media/news/detail/on-the-road-to-climate-neutral-driving-fvv-presents-new-study-on-future-fuels/>

## ***Decarbonising freight transport***

Decarbonising the transport sector, which accounted for 28% of global CO<sub>2</sub> emissions in 2014, is crucial for the transition to a low-carbon economy. The position paper "THE HIGHWAY TO PARIS: SAFEGUARDING THE CLIMATE BY DECARBONISING FREIGHT TRANSPORT" has investigated decarbonisation pathways for freight transport. The analysis shows that full decarbonisation of global freight emissions should be targeted to around 2050 to meet the Paris Agreement goals. For the EU this means that freight emissions should be reduced by at least 30% below 2015 levels by 2030, with full decarbonisation of overland freight by around 2050.

Source: <https://www.ecofys.com/en/publications/the-highway-to-paris/>

## ***India Biofuels Annual 2018***

On June 4, 2018, the Indian government released the document National Policy on Biofuels 2018, which proposed blend targets of E20 and B5 be met by 2030. With continued reliance on conventional molasses ethanol, and use of commercially unproven, alternative feedstocks for conventional biofuels, as well as an increased emphasis on advanced biofuels, which are not yet commercialized, it is unlikely the new targets can be met if biofuel imports remain banned as set forth in the new policy. India is set to achieve an ethanol blend of 3.2% in 2018; it is second highest ever but still far short of targets as in the past. The rate for on-road biodiesel blending

with diesel is estimated at 0.14% in 2018, only marginally higher than in recent years.

Source: GAIN Report Number: IN8085,

[https://gain.fas.usda.gov/Recent%20GAIN%20Publications/Biofuels%20Annual\\_New%20Delhi\\_India\\_7-10-2018.pdf](https://gain.fas.usda.gov/Recent%20GAIN%20Publications/Biofuels%20Annual_New%20Delhi_India_7-10-2018.pdf)

### ***R&I perspective for Advanced Biofuels***

A recent study by DG Energy looked into the future potential role of R&I for advanced biofuels. The study is organized in three main tasks: Task 1 assesses the potential for R&I to enable secure, low-cost, and low ILUC biomass feedstock for energy for the 2030 and 2050 time-horizons; Task 2 addresses the potential contribution of advanced biofuels to achieving the EU's ambitious climate change objectives; and finally, Task 3 compares advanced biofuels with alternative fuel options for the road, maritime, and aviation transport sectors.

Link: <https://publications.europa.eu/en/publication-detail/-/publication/448fdae2-00bc-11e8-b8f5-01aa75ed71a1/language-en>

### ***EU emission inventory report 1990-2016***

This document is the annual European Union emission inventory report under the United Nations Economic Commission for Europe (UNECE) Convention on Long-range Transboundary Air Pollution (LRTAP Convention). The report contains a section on trends and key categories of EU pollutant emissions and a sectoral analysis (over all sectors such as industry, transport, agriculture etc.) and emission trends for key pollutants.

Link: [https://www.eea.europa.eu/publications/european-union-emission-inventory-report-1/at\\_download/file](https://www.eea.europa.eu/publications/european-union-emission-inventory-report-1/at_download/file)

### ***ACEA Pocket Guide 2018-2019***

Each year, ACEA compiles this Automobile Industry Pocket Guide in order to provide you with an extensive overview of one of Europe's key industries. It contains the most commonly sought after figures, tables and statistics about the EU and global auto industries.

Link: <https://www.acea.be/publications/article/acea-pocket-guide>

### ***IUCN report "Palm Oil and Biodiversity"***

"The International Union for Conservation of Nature" (IUCN) has published a report providing an analysis of palm oil impacts on global biodiversity and possible solutions. Given other oil crops require up to nine times as much land to produce than palm oil, its replacement would significantly increase the total land area used for vegetable oil production to meet global demand. Avoiding further palm oil-related deforestation will deliver the biggest gains for biodiversity by far, the report found.

The analysis primarily focuses on oil palm in the context of biodiversity conservation based on literature published before 31 January 2018, and aims to provide a constructive pathway to addressing sustainability challenges in the palm oil industry. This report does not assess the social and economic implications of palm oil production and expansion but will refer to these when they are likely to have an impact on biodiversity conservation.

Link: <https://www.iucn.org/news/secretariat/201806/saying-no-palm-oil-would-likely-displace-not-halt-biodiversity-loss--iucn-report>

## EVENTS

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Bioenergy Australia Conference, BIONERGY STRONG 2018, 17-18 October 2018, Brisbane, Australia

Conference Website: <https://www.bioenergyaustralia.org.au/bioenergy-events/annual-conference/>

13th International Congress on Biofuels and Bioenergy (Biofuels 2018), 18-20 October 2018, Ottawa, Ontario, Canada

Conference Website: <http://biofuels-bioenergy.conferenceseries.com/>

IEA Bioenergy 2018 and ABLC Global 2018, 6-9 November 2018, San Francisco, CA, USA

Conference Website: <http://biofuelsdigest.com/ablcglobal/>

Future of Biogas Europe 2018, 7-8 November 2018, London, United Kingdom

Conference Website: <http://ibbk-biogas.de/future-of-biogas-europe-2018>

Eco Mobility 2018, November 12-13, 2018, Vienna, Austria

Conference Website: <https://www.ieabioenergy.com/ieaevent/ablc-global-2018-iea-bioenergy-conference-2018/>

NGVAmerica Meeting & Industry Summit, 13-16 November 2018, Palm Springs, California, USA

Conference Website: <http://ngvshow.com/>

World Fuels Forum, 21-23 November 2018, Berlin, Germany

Conference Website: <http://worldfuelsforum.com/>

Marine Fuels & Lubricants Conference, 11-12 December 2018, Dubai, United Arab Emirates

Conference Website: <https://marinefuels.ticketforevent.com/>

13th International Congress on Biofuels and Bioenergy (Biofuels 2018), 18-20 October 2018, Ottawa, Ontario, Canada

Conference website: <http://biofuels-bioenergy.conferenceseries.com/>

RNG 2018 Conference, 3-6 December 2018, Dana Point, California, USA

Conference website: <http://www.rngcoalition.com/rng-conference/>

V Latin American Congress on Biorefineries, 7-9 January 2019, Concepcion, Chile

Conference Website: <https://en.biorrefinerias.cl/registration/>

16th International conference on renewable mobility "Fuels of the Future 2019", 21-22 January 2019, CityCube Berlin, Germany

Conference Website: <https://www.fuels-of-the-future.com>

National Biodiesel Conference & Expo, 21-24 January 2019, San Diego, California, USA

Conference website: <https://www.biodieselconference.org/>

Renewable Fuels Association National Ethanol Conference, 11-13 February 2019, Orlando, Florida, USA

Conference website: <http://www.nationalethanolconference.com/>

Lignofuels 2019, 13-14 February 2019, Oslo, Norway

Conference Website: <https://www.wplgroup.com/aci/event/lignofuels-2019/>

AltFuels México 2018, 11-14 March 2019, Mexico City, Mexico

Conference website: <http://www.altfuelsmexico.com/>

9th Symposium on Advances in Automotive Control (AAC 19), 24-27 June 2019, Orleans, France

Conference Website: <https://aac19.sciencesconf.org/>

## IMPRINT

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The **Advanced Motor Fuels Technology Collaboration Programme** (AMF TCP) is one of the International Energy Agency's (IEA) transportation related Technology Collaboration Programmes. These are multilateral technology initiatives that encourage technology-related activities that support energy security, economic growth and environmental protection.

AMF provides an international platform for co-operation to promote cleaner and more energy efficient fuels and vehicle technologies. This newsletter contains news articles on research, development and demonstration of advanced motor fuels, information about related policies, links to AMF projects, and an overview over publications and events.

The newsletter is prepared based on contributions from Werner TOBER and Robert ROSENITSCH, TU Vienna, Shinichi GOTO, AIST, and Manfred WÖRGETTER, BIOENERGY 2020+. It is edited by Dina Bacovsky and Martina Meirhofer, BIOENERGY 2020+. The Newsletter is available online at: [www.iea-amf.org](http://www.iea-amf.org)

**AMF welcomes interested parties to make contact and to become members of the AMF family.** If you wish to get in touch please contact the AMF Secretary, the AMF ExCo Chair or your national AMF Delegate, see contact information below.

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