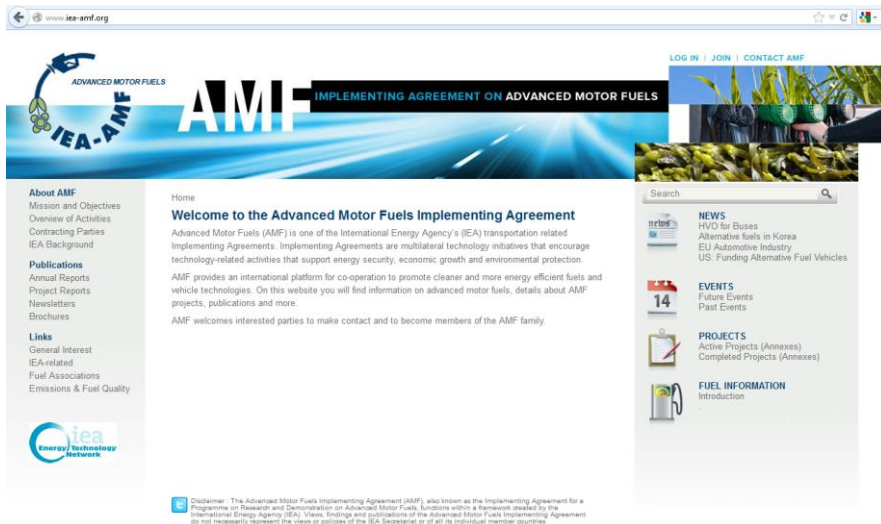




AMFI Newsletter



New AMF Website online ([go to website](http://www.iea-amf.org))

The AMFI Newsletter is prepared for the members of the Implementing Agreement on Advanced Motor Fuels of the International Energy Agency (IEA/AMF).

The AMFI releases four electronic newsletters each year.

A group of authors prepares contributions to this newsletter:

- Ralph MCGILL, FEEC
- Werner TOBER and Robert ROSENITSCH, TU Vienna
- Manfred WÖRGETTER, BIOENERGY 2020+
- Nuwong CHOLLACOOP, MTEC
- Päivi Aakko-Saksa, VTT

Editing by Päivi Aakko-Saksa, VTT, and Dina Bacovsky, BIOENERGY 2020+.

The AMFI Newsletter is available online at: www.iea-amf.org

CONTENTS

GENERAL INTEREST	3
ALCOHOLS AND (BIO)GASOLINE	5
BIODIESEL ESTERS	6
SYNTHETIC AND RENEWABLE DIESEL/JET	6
ELECTRIC VEHICLES AND FUEL CELLS	7
MISCELLANEOUS	8
IEA & IEA/AMF News	10
PUBLICATIONS	11
EVENTS	12

DETAILED CONTENTS

GENERAL INTEREST

Strong Support for Renewable Fuels Agenda
EPA Proposes 2013 Renewable Fuel Standards
Court rules EPA Ethanol Mandate "unreasonable"
New Excise Tax Scheme Announced in Thailand
EU launches Clean Fuel Strategy
Real World Emissions from Diesel Vehicles
EU: Antidumping duty on US bioethanol

ALCOHOLS AND (BIO)GASOLINE

Bioethanol from Tapioca Residue
First Bioethanol Pipeline

BIODIESEL ESTERS

US Biodiesel Production Tops 1 Billion Gallons in 2012
Biodiesel Board Goal: 10% of Diesel Market in 10 Years

SYNTHETIC AND RENEWABLE DIESEL/JET

New Bio-oil Production System

ELECTRIC VEHICLES AND FUEL CELLS

Future of hydrogen powered cars
Automotive Fuel Cell Cost and Durability Target Request
For Information Issued
Biodiesel Range-Extender for e-Vehicles

MISCELLANEOUS

Transport Biofuels: R&D&D Funding in the EU
DOE Funds Biomass Supply Chain Technologies
EU support for alternative maritime fuels
Step forward for Keystone Pipeline
Web updates: new Transport Research and Innovation
Portal

IEA & IEA/AMF News

AMF Website online
AMF Membership
AMF Executive Committee
AMF Annexes / Projects

PUBLICATIONS

EVENTS

GENERAL INTEREST

Strong Support for Renewable Fuels Agenda

For the second year in a row, national polling presented today at the National Ethanol Conference proved that Americans, by an overwhelming majority, support the key federal policy driving renewable fuel innovation in America today — the Renewable Fuel Standard (RFS). In a poll commissioned by the Renewable Fuels Association (RFA) and conducted by American Viewpoint, 64 percent of adults polled said they supported the RFS, while just 25 percent are opposed.

Source: <http://www.ethanolrfa.org/news/entry/new-poll-shows-strong-support-for-renewable-fuels-agenda/>

EPA Proposes 2013 Renewable Fuel Standards

The U.S. Environmental Protection Agency (EPA) announced on January 31 that it is proposing the 2013 percentage standards for four fuel categories that are part of the agency's Renewable Fuel Standard program (RFS2). For 2013, the program is proposing a 1.35 billion gallon increase of renewable fuels over the amount mandated for 2012. The proposal will be open for a 45-day public comment period.

The Energy Independence and Security Act of 2007 established the RFS2 program and the annual renewable fuel volume targets, which are expected to steadily increase to an overall level of 36 billion gallons in 2022. To achieve these volumes, EPA calculates a percentage-based standard for the following year. Based on the standard, each refiner and importer determines the minimum volume of renewable fuel that it must use in its transportation fuel.

The proposed 2013 overall volumes and standards are as follows: for biomass-based diesel, 1.28 billion gallons or 1.12%; for advanced biofuels, 2.75 billion gallons or 1.6%; and for cellulosic biofuels, 14 million gallons or 0.008%. The total renewable fuels target is 16.55 billion gallons or 9.63% of transportation fuels.

Source:

<http://yosemite.epa.gov/opa/admpress.nsf/0c0affede4f840bc8525781f00436213/75e7cf36330d01c185257b040067f287!OpenDocument>

Court rules EPA Ethanol Mandate "unreasonable"

A federal court delivered a defeat to the biofuels industry, ruling the U.S. government exceeded its authority by requiring refiners to purchase cellulosic biofuel despite the fact the next-generation fuel is not commercially available.

The U.S. Court of Appeals for the District of Columbia decided in favor of the American Petroleum Institute (API) when it ruled that the Environmental Protection Agency's process for estimating cellulosic biofuel output "did not take neutral aim at accuracy" and "was an unreasonable exercise of agency discretion."

The court ordered the EPA to reevaluate the 2012 cellulosic standards and have a more realistic mandate in future years. Since no cellulosic was commercially produced in 2012, API contends the mandate for 2012 should be set at zero. For 2013 and beyond, API has asked that EPA base projections on at least two months of actual production, rather than "wishful thinking."

Source: <http://www.usatoday.com/story/news/politics/2013/01/25/epa-biofuel-mandate-unreasonable/1865567/>

New Excise Tax Scheme Announced in Thailand

On December 18, 2012, Thai Cabinet has agreed to change its scheme for vehicle excise tax from engine size to CO₂ emission, in order to reflect current automotive development trends on environment and energy efficiency. The effective date is set to be on 1 January 2016, which will allow Thai automotive industry to adapt in time. The following table shows the new excise tax structure.

Type of Vehicle	Current excise tax				New excise tax			
	Engine size	Tax rate			CO ₂ emission	Tax rate		
		E10	E20	E85		E10/E20	E85/NGV	Hybrid
Passenger vehicle <10 person	<2,000cc	30	25	22 [†]	<100 g/km	30*	25	10
	2,001-2,500cc	35	30	27	101-150 g/km			20
	2,501-3,000cc	40	35	32	150-200 g/km	35	30	25
					>200 g/km	40	35	30
	>3,000cc (>220HP)	50	50	50	>3,000cc	50	50	50
PPV/ DoubleCab / SpaceCab / Pick up	≤3,250cc	20/12/- /3,18			≤200 g/km	25*/12/5/3,18		
					>200 g/km	30/15/7/5,18		
	>3,250cc	50			>3,250cc	50		
EcoCar (Gasoline/ Diesel) / E85	1,300/1,400	17			≤100 g/km	14*/12		
					101-120 g/km	17/17		
Electric Vehicle/ Fuel Cell/Hybrid	≤3,000cc	10			≤3,000cc	10-30**		
	>3,000cc	50			>3,000cc	50		
NGV-OEM	≤3,000cc	20			≤3,000cc	25-35**		
	>3,000cc	50			>3,000cc	50		

Footnotes

*Active Safety Regulation for

passenger vehicle <10 person with CO₂ ≤ 150 g/km

PPV with CO₂ ≤ 200 g/km

EcoCar with CO₂ ≤ 100 g/km

**Under regulation of CO₂ emission

[†]1,700cc ≤ engine size ≤ 2,000cc

PPV = Pick up passenger vehicle

More information:

1. <http://www.mcot.net/site/content?id=50d14a42150ba07e070000e2>
2. <http://www.bangkokpost.com/business/economics/326858/emissions-based-car-tax-approved>
3. <http://www.mcot.net/site/content?id=50d06755150ba0af070000b0> (in Thai)
4. <http://www.thaipost.net/news/191212/66835> (in Thai)

EU launches Clean Fuel Strategy

The European Commission announced in January an ambitious package of measures to ensure the build-up of alternative fuel stations across Europe with common standards for their design and use. Policy initiatives so far have mostly addressed the actual fuels and vehicles, without considering fuels distribution. Efforts to provide incentives have been un-coordinated and insufficient.

The Clean Power for Transport Package consists of a Communication on a European alternative fuels strategy, a Directive focusing on infrastructure and standards and an accompanying document describing an action plan for the development of Liquefied Natural Gas (LNG) in

shipping. One example of proposals regarding road transport states that publically accessible CNG refuelling points, with common standards, would be available Europe-wide with maximum distances of 150 km by 2020.

Source: http://ec.europa.eu/commission_2010-2014/kallas/headlines/news/2013/01/clean-fuel-strategy_en.htm

Real World Emissions from Diesel Vehicles

The European Union must cut emissions from diesel vehicles as part of its efforts to reduce air pollution, which is causing close to half a million premature deaths per year, EU officials said. The European Commission says it will publish legislative proposals to improve air quality in the second half of this year. As well as a law on air quality, it has already put forward tougher vehicle emissions standards and is introducing stricter vehicle testing standards. The aim is to ensure levels recorded during tests accurately reflect pollution levels during daily use (real world emissions) and not just in a controlled environment.

Source: <http://www.reuters.com/article/2013/01/08/eu-air-diesel-idUSL5E9C85A920130108>

EU: Antidumping duty on US bioethanol

The EU Council adopted, on 19 February, a regulation imposing definitive antidumping duties (i.e. extra import duties) on imports of bioethanol (referred to as "fuel ethanol," i.e. ethyl alcohol produced from agricultural products) originating in the United States of America. The rate of the definitive anti-dumping duty shall be €62.30 per tonne net. The antidumping duty shall be applicable in proportion, by weight, of the total content of pure ethyl alcohol produced from agricultural products. Bioethanol for uses other than fuel shall be exempted from the definitive anti-dumping duty.

Source: *Europolitics*

Link: <http://www.europolitics.info/sectorial-policies/anti-dumping-duty-on-us-bioethanol-art348429-14.html>

ALCOHOLS AND (BIO)GASOLINE

Bioethanol from Tapioca Residue

NEDO (Japan) and the National Innovation Agency of Thailand concluded a memorandum of understanding on December 17, 2012 in Bangkok to implement a demonstration project utilizing technologies for producing bioethanol from cassava residue after starch extraction (tapioca residue) in Thailand.

Source: http://www.nedo.go.jp/english/whatsnew_20121219.html

Read more: <http://www.nedo.go.jp/content/100511968.pdf>



First Bioethanol Pipeline

Logum Logistica is currently constructing the world's first bioethanol pipeline in Sao Paulo, Brazil. Bioethanol shall be transported from Riberao Preto, the center of sugar and ethanol production in Brazil, to the ethanol logistics center in Paulinia.

Further expansion of this pipeline both deeper into Brazil as well as further to the port of Sao Sebastiao is under consideration, but will depend on the success of the first part of the pipeline. It is not yet clear whether ethanol producers will switch from current truck-based transportation mode to transport by pipeline.

Source: *Austrian chamber of commerce*; Link: http://portal.wko.at/wk/format_detail.wk?AngID=1&StId=714950&DstID=646

BIODIESEL ESTERS

US Biodiesel Production Tops 1 Billion Gallons in 2012

The U.S. biodiesel industry broke the billion-gallon mark in 2012 for the second consecutive year, according to year-end production figures from the U.S. Environmental Protection Agency (EPA). The National Biodiesel Board (NBB) noted that the total volume of nearly 1.1 billion gallons (around 3.26 Mtoe) exceeded the 2011 production by 6 million gallons.

December production totaled just 59 million gallons, the lowest monthly volume of the year. The National Biodiesel Board attributed the production drop to uncertainty over the biodiesel tax incentive. Congress renewed the \$1-per-gallon incentive on New Year's Day as part of the so-called "fiscal cliff" legislation. Biodiesel production is reported under the EPA's Biomass-based Diesel category in the Renewable Fuel Standard (RFS). The fuel is made from a mix of resources, such as recycled cooking oil, soybean oil, and animal fats.

Source:

<http://www.biodiesel.org/news/biodiesel-news/news-display/2013/01/23/epa-biodiesel-production-exceeded-1-billion-gallons-in-2012>

Biodiesel Board Goal: 10% of Diesel Market in 10 Years

The National Biodiesel Board (NBB) announced a new goal during the Biodiesel Conference & Expo in Las Vegas: 10% of the on-road diesel market by 2022.

"It is not about replacing every drop of petroleum; it is about continuing to diversify transportation energy so we can meet our needs affordably and sustainably," said National Biodiesel Board CEO Joe Jobe. "Biodiesel will play an increasing role to help protect fuel consumers and the U.S. economy from unstable energy markets that are grossly distorted by political factors in the most politically unstable region in the world and by nationalized oil companies of totalitarian regimes."



Source:

<http://www.truckinginfo.com/channel/fuel-smarts/news/story/2013/02/biodiesel-board-goal-10-of-diesel-market-in-10-years.aspx?prestitial=1>

SYNTHETIC AND RENEWABLE DIESEL/JET

New Bio-oil Production System

VTT has made a breakthrough in biomass-based bio-oil production with an innovative, intelligent process that marks the beginning of a new era in the energy sector. By combining two different technologies - pyrolysis and combustion - within a power plant in such a way that each benefits from the other, VTT's totally new technology makes the commercial production of bio-oil financially viable for the first time. About to be implemented on an industrial scale, the process will enable significant bio-oil production capacity by 2020 - the year by which Europe must achieve 20% of its final energy consumption from renewable energy.

More information: http://www.earto.eu/fileadmin/content/03_Publications/2012CS_VTT.pdf

ELECTRIC VEHICLES AND FUEL CELLS

Future of hydrogen powered cars

Over one and a half million hydrogen powered vehicles could be on UK roads by 2030 according to a joint Government-industry study published today. The forecast is made in an interim report commissioned to evaluate the benefits of hydrogen fuel cell electric vehicles (FCEVs) and ensure the UK is well positioned for their commercial roll-out.

Produced by the UKH2Mobility project - which brings together leading businesses from the automotive, energy, infrastructure and retail sectors with Government - the study provides a 'roadmap' for the introduction of vehicles and hydrogen refuelling infrastructure in the UK.

The key findings are:

- Consumer - up to 10 per cent of new car customers will be receptive to fuel cell vehicles when first introduced, attracted by the newness of the technology and environmental considerations.
- The roadmap shows that once mass FCEV production is established, bringing costs down, there is the potential for 1.6 million vehicles on UK roads by 2030.
- Infrastructure will need to be established.
- FCEVs could reduce UK annual total vehicle CO2 emissions by three million tonnes in 2030.
- Using a range of manufacturing methods can deliver hydrogen at a cost that is competitive with diesel, with 60 per cent lower CO2 emissions in 2020.
- A basic initial network of Hydrogen Refueling Stations is required. Phase 1 of the project estimated the total finance needed to be around £400m to 2030.

Hydrogen fuel cell electric vehicles are seen as part of the portfolio of solutions that will be required to decarbonize road transport. The Automotive Council Roadmap identifies a pathway where fuel cell electric vehicles will complement hybrid and battery electric vehicles and more efficient internal combustion engines.

The Government continues to take a technology-neutral approach to supporting low and ultra-low carbon vehicle technology and recognizes that a portfolio of solutions will be required to decarbonize transport. Both the Plug-in Car Grant and Plug-In Van Grant are open to all vehicles meeting the performance criteria, including hydrogen fuel cell vehicles, pure electric and plug-in hybrid models.

To see the interim report go to <http://news.bis.gov.uk/ImageLibrary/detail.aspx?MediaDetailsID=6299>
Source: <https://www.gov.uk/government/news/future-of-hydrogen-powered-cars-mapped-out>

Automotive Fuel Cell Cost and Durability Target Request For Information Issued

The U.S. Department of Energy's (DOE) Fuel Cell Technologies Office has issued a Request for Information (RFI) seeking feedback from stakeholders regarding proposed cost and durability targets for fuel cells designed for automotive applications. The proposed cost targets are \$40/kW for automotive fuel cell system cost, and the proposed durability target is 5,000 hours corresponding to approximately 150,000 miles.

While automotive fuel cells represent a large market opportunity for fuel cells, further technological improvements are required to make fuel cells competitive with incumbent technology. To further advancement, DOE is seeking general comments on cost and durability targets from developers, manufacturers, end users, and other stakeholders. These targets were set with industry and market input and further comments are requested to refine target values to help drive the research and development required for continued improvements.

Source: RFE

Link: <https://eere-exchange.energy.gov/#Foalde0bdc203-6f56-4bf1-91a6-ed958fb38228>

Biodiesel Range-Extender for e-Vehicles



The STEYR MOTORS M1 provided the basis for the development of a 2-cylinder range extender in lightweight construction, that can be powered by renewable fuels such as Biodiesel. Due to the horizontal (optional vertical) position of the piston, a smart-sized construction is possible. The engine, which is currently getting optimized on the test bench, was developed in the context of the technological lighthouse project of electric mobility "Clean Motion Offensive". This STEYR MOTORS 2-cylinder range extender significantly reduces the costs of an e-vehicle and extends its range to up to 250 km.

Further information:

<http://www.steyr-motors.com/news/news-single/biodiesel-range-extender-with-steyr-power/0b06dcec616d47dcebec9427b8387296/>

MISCELLANEOUS

Transport Biofuels: R&D&D Funding in the EU

A number of EU funding programmes are available relating to the Research, Development and Demonstration of sustainable advanced biofuels and related topics.

- ERA_NET+ BESTF - joint call for proposals for bioenergy demonstration projects in line with EIBI value chains - NEW
- NER300 Funding for 5 Advanced Biofuel and 3 Bioenergy projects, December 2012 - NEW
- Recent calls for proposals - FP7 July 2012
- EIBI Call for Expression of Interest and selected previous calls 2011/2012
- Overview of EC Funding Programmes
- Beyond FP7 - Horizon 2020 starts in 2014
- FP7 National Contact Points (NCPs) and C-EnergyPlus
- EU supported R&D&D activities and studies relating to biofuels
- Global research initiatives open to EU participants

Source and more information: <http://www.biofuelstp.eu/funding.html>

DOE Funds Biomass Supply Chain Technologies

The US Energy Department on January 28 announced about \$6 million for one to two multi-year projects that will develop and demonstrate supply-chain technologies to affordably deliver commercial-scale lignocellulosic biomass feedstocks such as woody plant tissue to biorefineries across the country. This funding will help accelerate the development of integrated, cost-effective supply-chain systems that reduce time and costs to produce biofuels for cars, trucks, and airplanes. All selected projects will require a cost share contribution by the grant recipient, including 20% for research and development activities and 50% for demonstration activities.

Source: http://www1.eere.energy.gov/vehiclesandfuels/news/news_detail.html?news_id=18992

EU support for alternative maritime fuels

The European Union will support several studies on alternative maritime fuels through the trans-European transport network (TEN-T) Programme. These studies include:

- a study looking at the potential beneficial effects of using alternative fuels for port operations. The project will assess and test new technologies and alternative fuels in the ports of Valencia (Spain), Koper (Slovenia) and Livorno (Italy) to try and reduce the greenhouse gas emissions from these ports container terminal operations.
- a study aimed at identifying and addressing the potential barriers to the construction and operation of Liquefied Natural Gas (LNG) fuelled vessels. The project will examine the technical requirements, regulations and environmental operation permits that need to be met in order to shift from traditionally fuelled engines to LNG.
- a series of studies to assess the use of Liquefied Natural Gas (LNG) as a shipping fuel in the Port of Gijón in Spain. The project involves conducting studies to evaluate the feasibility and plan the necessary infrastructure adaptations for the use of LNG as a shipping fuel in the Port of Gijón.

Source: *Trans-European Transport Network Executive Agency*

Link: http://tentea.ec.europa.eu/en/news__events/newsroom/

Step forward for Keystone Pipeline

Nebraska Gov. Dave Heineman notified the Obama administration that he has approved the controversial Keystone XL Pipeline to traverse his state, marking a significant step toward reviving the project after President Obama and Secretary of State Hillary Clinton sidelined it. The Republican governor approved a revised route for the Canada-to-Texas pipeline which his office said would avoid environmentally sensitive areas. The decision on final approval now rests with the Obama administration. The State Department is expected to decide within the next several months whether to permit the project to go forward.

The president had previously cited the Nebraska's concerns about the pipeline as a key obstacle to approving the pipeline. At the same time, the president was able to satisfy the concerns of major environmental groups who not only voiced concern about the potential impact of a spill but also the emissions created by extracting and refining oil from oil sands in Canada.

Supporters of the pipeline, including some in the president's own party, have downplayed the environment impact and stressed the economic benefits the pipeline could bring. In Heineman's letter, the governor said construction in Nebraska would yield \$418 million in economic benefits.

Source: <http://www.foxnews.com/politics/2013/01/22/nebraska-governor-approves-revised-keystone-pipeline-route/#ixzz2KFb4iU00>

Web updates: new Transport Research and Innovation Portal

The Transport Research & Innovation Portal (TRIP) gives you an overview of research activities at European and national level. Formerly TRIP was known as the Transport Research Knowledge Centre (TRKC). For TRIP both the web site and content have been enhanced. For in-depth information, consult our programme and project profiles. For a wider view, look at our thematic reports and policy brochures. Share your own experience with others, by submitting project information, news or event announcements.

Link: www.transport-research.info

IEA & IEA/AMF News



AMF Website online

The new AMF website is now online: www.iea-amf.org. Besides explaining the background of AMF, the site provides descriptions of AMF work programs and AMF publications.

AMF Membership

Israel has joined AMF as a Contracting Party on 20 January 2013.

AMF Executive Committee

ExCo 45 is scheduled for 28-30 May 2013 in Gothenburg, Sweden.

AMF Annexes / Projects

Annex 28: Information Service & AMF Website

Annex 35 Subtask 2: Particulate Measurements: Ethanol and Butanol in DISI Engines

Annex 38 Phase 2: Environmental Impact of Biodiesel Vehicles

Annex 39 Phase 2: Enhanced Emission Performance of HD Methane Engines

Annex 41: Alternative Fuels for Marine Applications

Annex 42: Toxicity of Exhaust Gases and Particles from IC-Engines

Annex 43: Performance Evaluation of Passenger Car, Fuel, and Powerplant Options

Annex 44: Alcohol fuels including methanol, by CATARC, China

Annex 45: Hydrotreated vegetable oil, by Germany and Denmark

Annex 46: Alcohol Application in CI Engines, by DTU (**NEW!**)

PUBLICATIONS

- **Fuel Cell Buses in U.S. Transit Fleets: Current Status 2012** - The recently published report from the U.S. Department of Energy (DOE) has shown that the fuel economy of fuel cell electric buses is 1.8 to 2 times higher than conventional diesel buses (4 mpg) and compressed natural gas buses (3 mpg). This shows significant fuel economy improvement toward the DOE and Federal Transit Administration's (FTA) target of 8 mpg (diesel equivalent).
Link: http://www1.eere.energy.gov/hydrogenandfuelcells/pdfs/fceb_status_2012.pdf
- **Hydrogen and Fuel Cells Programm Annual Progress Report 2012** - . This document contains individual reports from projects funded by the program, summarizing the innovative work of scientists, engineers, and other experts from industry, academia, and national laboratories.
Link: http://www.hydrogen.energy.gov/annual_progress12.html
- **BP Energy Outlook 2030** - The outlook highlights the growing role of developing economies in global energy consumption, and the increasing share of non-fossil fuels in global energy supply.
Link: <http://www.bp.com/extendedsectiongenericarticle.do?categoryId=9048887&contentId=7082549>
- **Understanding the Health Effects of Ambient Ultrafine Particles Perspectives #3** - Perspectives 3 is the third of a series produced by HEI to describe and interpret results from HEI and other research bearing on important and timely issues for a broad audience interested in environmental health.
Link: <http://pubs.healtheffects.org/view.php?id=394>
- **Inventory of Estimated Budgetary Support and Tax Expenditures for Fossil Fuels 2013** - This Inventory is concerned with direct budgetary transfers and tax expenditures that relate to fossil fuels, regardless of their impact or of the purpose for which the measures were first put in place.
Link: http://www.keepeek.com/oecd/media/environment/inventory-of-estimated-budgetary-support-and-tax-expenditures-for-fossil-fuels-2013_9789264187610-en
- **Taxing Energy Use, A Graphical Analysis** - This publication provides the first systematic statistics of effective energy tax rates – on a comparable basis – for each OECD country, together with 'maps' that illustrate graphically the wide variations in tax rates per unit of energy or per tonne of CO2 emissions.
Link: http://www.keepeek.com/oecd/media/taxation/taxing-energy-use_9789264183933-en
- **Urban buses: alternative powertrains for Europe**- In order to study the advantages and outlook of clean buses, some 40 companies and government organisations participated in a study on the various powertrain technologies available for urban buses in Europe from 2012 to 2030.
Link: <http://www.new-ig.eu/uploads/Modules/Publications/20121029-urban-buses-alternative-powertrains-for-europe---final-report.pdf>
- **Global Land Transport Infrastructure Requirements - Estimating road and railway infrastructure capacity and costs to 2050**- This publication reports on the International Energy Agency's (IEA) analysis of infrastructure requirements to support projected road and rail travel through 2050, using the IEA Mobility Model.
Link: http://www.iea.org/publications/freepublications/publication/TransportInfrastructureInsights_FINAL_WEB.pdf
- **Nordic Energy Technology Perspectives- Pathways to a Carbon Neutral Energy Future** - The five Nordic countries of Denmark, Finland, Iceland, Norway and Sweden have announced ambitious goals towards decarbonising their energy systems by 2050. Based on the scenarios and analysis of Energy Technology Perspectives 2012, the International Energy

Agency (IEA) and leading Nordic research institutions jointly assess how the Nordic region can achieve a carbon-neutral energy system by 2050.

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

- **Clean Power for Transport: A European alternative fuels strategy** – Communication from the Commission to the European Parliament, the Council, the European Economic and Social committee and the Committee of the Regions
Link: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2013:0017:FIN:EN:PDF>
- **Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the deployment of alternative fuels infrastructure** - this legislative proposal (18) provides a general direction for the development of alternative fuels in the Single European Transport Area.
Link: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2013:0018:FIN:EN:PDF>
- **Guidelines on financial incentives for energy-efficient cars** – new EU Commission Staff Working Document on guidelines for low CO₂ emission vehicles incentives
Link: http://ec.europa.eu/enterprise/sectors/automotive/files/environment/financial-incentives-swd-2013-27_en.pdf
- **CO₂ emissions performance of car manufacturers in 2011** - For evaluating the progress of manufacturers towards their targets, the EEA is collecting and quality checking data on CO₂ emissions from passenger cars registered in all Member States of the European Union since 2010. Using the Member State data, this note provides an overview of the performance of cars manufacturers in meeting their CO₂ emissions targets.
Link: <http://www.eea.europa.eu/publications/co2-emissions-performance-of-car>
- The contribution of transport to air quality - **TERM 2012: Transport indicators tracking progress towards environmental targets in Europe** - TERM 2012 presents the most relevant and up to date information on the main issues regarding transport and environment in Europe, particularly in areas with specific policy targets such as greenhouse gas emissions and energy consumption, transport demand levels, noise and other issues.
Link: <http://www.eea.europa.eu/publications/transport-and-air-quality-term-2012>

EVENTS

World Biofuels Markets Congress & Exhibition, 12-14 March 2013, Rotterdam, The Netherlands

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

20th International Symposium on Alcohol Fuels (ISAF 2013), 25-27 March 2013, Stellenbosch, South Africa

Conference website: <http://www.isaf2013.co.za/>

3rd International Conference on Lignocellulosic Ethanol, 3-5 April 2013, Madrid, Spain

Registration form: <http://ec.europa.eu/yourvoice/ipm/forms/dispatch?form=biofuels2013&lang=en>

2nd Iberoamerican Congress on Biorefineries, 10-12 April 2013, Jaen, Spain

Conference website: www.ciab2013.org

8th International Congress "Biomass: fuel & power", 16-17 April 2013, Moscow, Russia

Conference website: <http://www.biofuels.ru/subnav/CongressBiomassfuelpower/>

European Algae Biomass 2013, 24-25 April 2013, Vienna, Austria

Conference website: <http://www.wplgroup.com/aci/conferences/eu-eal3.asp>

34th International Vienna Motor Symposium, 25 - 26 April 2013, Vienna, Austria

Conference website: http://www.övk.at/index_en.htm

6th International Conference on Biodiesel, 7 - 8 May 2013, Berlin, Germany

Conference website: <http://www.agqm-biodiesel.de/6th-international-conference-on-biodiesel-eng/>

World Biofuels 2013, 23-24 May 2013, Seville, Spain

Conference website: <http://worldbiofuels.agraevents.com/>

European Biodiesel 2013, 12-13 June 2013, Lisbon, Portugal

Conference website: <http://www.wplgroup.com/aci/conferences/eu-eaf6.asp>

Hydrogen + Fuel Cells 2013, 16-19 June 2013, Vancouver, Canada

Conference website: <http://www.hfc2013.com/conference/conference-overview/conference-overview>

Alternative Clean Transportation Expo, 24-27 June 2013, Washington, DC, USA

Conference website: <http://www.actexpo.com/index.html>

25th International AVL Conference "Engine & Environment", 5-6 September 2013, Graz, Austria

Conference website: <https://www.avl.com/engine-environment-2013>

4th Annual Lignofuels Summit, 25-26 September 2013, London, UK

Conference website: http://www.wplgroup.com/aci/_crosslink/register.asp?intSitePageId=8726

IEA AMF Delegates

Austria

Austrian Federal Ministry for Transport; Andreas Dorda

Canada

CanmetENERGY, Niklas Ekstrom

People's Republic of China

CATARC, Maodong Fang

Denmark

DTU, Jesper Schramm

Finland

VTT, Nils-Olof Nylund

France

ADEME, Patrick Coroller

Germany

FNR, Birger Kerckow

Israel

Ministry of Energy and Water Resources, Bracha Halaf

Italy

Eni SpA, Pietro Scorletti

Japan

AIST, Shinichi Goto
LEVO, Nobuichi Ueda

South Korea

KETEP, Hyun-choon Cho

Spain

IDAE,
Francisco José Domínguez Pérez

Sweden

Swedish Transport Administration
Olle Hådel

Switzerland

SFOE, Sandra Hermle

Thailand

tbd

The United States

DOE, Kevin Stork

Editor: *BIOENERGY 2020+*, Gewerbepark Haag 3, A-3250 Wieselburg-Land dina.bacovsky@bioenergy2020.eu Dina Bacovsky