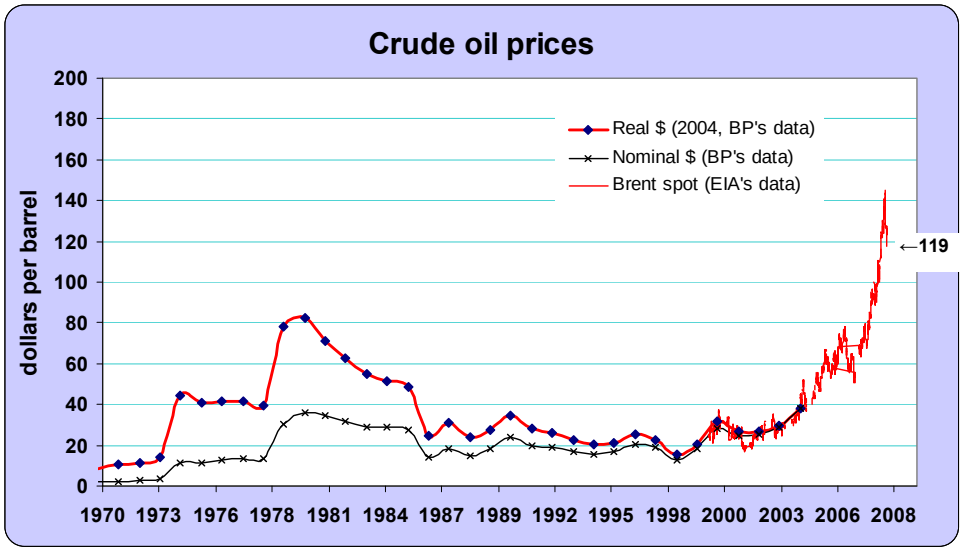
July 2008, issue no. 3/2008

AMFI Newsletter

Advanced Motor Fuels Information



Until now the crude oil price has been climbing, but will the oil price stabilise? Data from BP (www.bp.com) and EIA (www.eia.doe.gov). Figure by Editor.

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

AMFI provides four electronic Newsletters yearly describing recent news on advanced motor fuels, vehicles, energy and environmental issues in general. AMFI Newsletter is available on the website:

www.iea-amf.vtt.fi

CONTENTS

GENERAL INTEREST

US incentives for biofuels, "Farm Bill"

In May 2008, the US Congress adopted the Food, Conservation, and Energy Act of 2008 (H.R. 2419, new number H.R. 6124 in June 2008), the so called Farm Bill. The Congress accepted this $289 billion legislation against a presidential veto. WTO criticises that the increased farm support challenges the international rules of global trade. Also the United Nations criticises the law for preventing healthy competition of developing countries.

Biofuel and bioenergy provisions of the bill emphasize "advanced biofuels", e.g. cellulosic ethanol. $320 million is reserved for loan guarantees for biorefineries. Development and production of dedicated energy crops are encouraged. Tax credit for cellulosic biofuels is given, but only to fuel produced and used as fuel in the United States. A sugar to ethanol program, biomass R&D and a biofuels infrastructure study are included in the Farm Bill as well.

*Sources: House Committee on Agriculture. Fact Sheets of Farm Bill (*agriculture.house.gov*). International Herald Tribune, 12 May 2008. US. farm bill could run afoul of global trade rules. (hwww.iht.com).*

First ecolabel for fuels

The Nordic Ecolabel organisation has announced that companies can apply for the Nordic Ecolabel (commonly known as "The Swan") for certain fuels: ethanol, biodiesel, biogas and/or a mixture of these fuels. Ecolabelled fuels need to meet the requirements for the entire product lifecycle, from raw materials to the finished product. The most essential requirements for Ecolabelled fuels are:

- A limit value for the CO_2 emission over the entire life-cycle of the fuel.
- Restrictions on the total energy used in the production stage.
- Traceability of crops and certified sustainable farming.
- Limited health effects of these fuels.

In the first version of the requirements for the Ecolabelled fuels grains are not accepted as feedstock. This is due to uncertainty concerning the influence of using grains for fuels on the global food supply. Within a year the requirements for Ecolabelled fuel will be revised to consider new results from research, certifications and EU directives. *Source: Press Release from Nordic Ecolabel, 25 June 2008* (*www.biofuel-cities.eu*).

Hesitation regarding biofuels in Europe

On 7 July 2008 the European Parliament's Environment Committee voted to cut EU's biofuel target from 10% to 4% by 2020. The proposed target of 4% of renewable fuels by 2020 would include at least 20% electricity or hydrogen from renewable sources, biogas or transport fuels from ligno-cellulosic biomass and algae. However, the European Commission commented that this vote was not very significant as five other committees have voted on support to the 10% biofuels target (the Regional Affairs, Agriculture, Transport, Economic Affairs and International Trade committees). In the meeting of informal talks, the EU ministers concluded that the target share of biofuels in transport, 10% by 2020, had been misinterpreted and is not limited to biofuels, but includes also renewable energies.

UK is slowing down the introduction of biofuels as a result of the so called "Callagher Review", which discussed the indirect effects of biofuels. The British Government had commissioned preparation of this review to Ed Gallagher, the chair of the Renewable Fuels Agency. The conclusion of the review was that there is a future for a sustainable biofuel industry. However, more evidence is needed on their impact on land use, climate change and food prices. The "Gallagher review" recommends the 5% target be delayed to 2013/14.

The change in the attitude towards biofuels reflects the studies showing influence of biofuels on food prices, deforestation and water shortages, e.g. the so called "World Bank report" stated that 'green' fuels have pushed up food prices worldwide by 75%.

Source: EURActiv, 7 July 2008, (www.euractiv.com)

GASEOUS FUELS (NG, LPG, biogas)

First CNG hybrid bus

The first commercial bus with a CNG hybrid-electric drive system was launched in San Diego, California by the Metropolitan Transit System, MTS. ISE Corporation developed a CNG Hybrid Drive System, a variant of ISE's ThunderVolt™ hybrid drive system, and integrated it into a standard 40 foot transit bus that was supplied by MTS. Currently MTS maintains and operates 476 buses of which 75% are CNG.

The CNG Hybrid Drive System is based on ISE's proven ThunderVolt™ gasoline hybrid drive systems and features a Cummins ISB Gas Plus engine, a Siemens 165 kW electrical generator, two Siemens duo inverters, two Siemens 85 kW drive motors and Cobasys-developed NiMH batteries. MTS provided a New Flyer bus for the program and New Flyer assisted ISE in the modification of the bus chassis.

*MTS' new CNG hybrid-electric bus. Photo with courtesy of ISE (*http://www.isecorp.com*).*

The $1 million CNG hybrid prototype bus will further give benefits when compared to already efficient and clean CNG buses:

- Significantly greater fuel economy than standard CNG
- Reduced NO_x emission over standard CNG
- Reduced CO_2 emissions
- Reduced brake wear and brake maintenance
- Operate quieter than standard CNG buses

Source: ISE Press Release, 28 April 2008. (http://www.isecorp.com/)

Liquid biogas development

AB Volvo has developed a truck running on liquid biogas. Now Volvo and Mack have set up a company called Terracastus Technologies to commercialise liquid biogas. Technology for conversion of biogas to liquid fuel was developed by Acrion in the US. Mack and Volvo have cooperated with Acrion, and now Terracastus Technologies has exclusive right to commercialise this technology. Liquid biogas gives many benefits when compared to gaseous fuels, in the same way as LNG. When energy density increases, less effort on transportation and distribution is needed and driving distances increase. The first plant is expected in Lidköping in Sweden. One of Volvo's demonstration trucks on renewable fuels is running on liquid biogas (see AMFI October 2007). *Source: MiljöRapportten, 18 June 2008.* (*www.miljorapporten.se*).

HCNG in India

India's Standing Committee on Emission Regulations has approved the use of up to 20% hydrogen in CNG (HCNG) in commercial transport applications. In India, HCNG projects involve major local vehicle OEMs, Ashok Leyland, Bajaj Auto, Eicher Motors, Mahindra & Mahindra and Tata Motors and HCNG experts, Eden Hydrogen. HCNG blends are being introduced to reduce NO_x emissions and to serve as a pathway to hydrogen vehicles. *Source: NGV Global, 16 July 2008.*

ALCOHOLS, (BIO)GASOLINE

Ethanol car emissions study

The Swedish Road Administrations has studied exhaust emission from two FFV cars using ethanol/gasoline blends containing 5% (E5), 70% (E70) and 85% (E85) ethanol and one bi-fuel car using biogas and an E5 blend (5% ethanol blended in gasoline). . Increasing ethanol content increased most regulated and unregulated emissions measured at -7°C. PAH emissions and calculated cancer potency was significantly higher for E85 than for E5 at -7°C with FFV cars, but in mostly vise versa at +22°C. Aldehyde emissions were generally higher, but emissions of aromatic components and alkenes lower for E85 than for E5 fuel. Testing was conducted without an engine heater. *Source: Miljöbilens Värld, May 2008.* (*www.gronabilister.se*), *Vägverket news* (*www.vv.se*).

Ethanol powered diesel car

The world's first diesel car using ethanol was exhibited at the Malmö Motor Show. BSR has optimised a Saab 9-3 diesel car for E95 (95% ethanol) fuel. This project is carried out together with SEKAB in Örnsköldsvik, a producer and distributor of Bioethanol, and with the EU project BEST (Bioethanol for Sustainable Transport). This car equipped with a combustion chamber, fuel system and engine software shows reduced fuel consumption, high performance and low exhaust emissions. *Source: BSR news, 26 March 2008.* (*http://en.bsr.se/news/219/*).

Ethanol powered diesel car. Photo with courtesy of BSR (http://www.e95.eu/).

Certified ethanol from Brazil to Sweden

A group of Brazilian ethanol companies will export certified sustainable ethanol to Sweden. The standard addresses certain social and environmental requirements, e.g. zero tolerance for child and slave labor. In addition, mills must use at least 30% mechanized harvesting today, and increase this to 100% by 2014. An independent international company will audit all the production units twice a year.

Sweden consumes about 800 million litres of ethanol per year and at least half of that is supplied by Brazil. Now 115 million litres of certified anhydrous ethanol will be sold to Swedish Sekab. Mills will be paid 5-10% more for the certified product than for uncertified ethanol. *Source: Reuters, 25 June 2008. (www.reuters.com).*

WWFC Draft Ethanol guideline

The automobile and engine manufacturers have prepared the First Edition of the Worldwide Fuel Charter (WWFC) Guidelines for Ethanol. This guideline considers the impact of fuel quality on the vehicle/engine performance and exhaust emissions so that the fuel quality requirements could be adjusted with the engine and vehicle needs. This guideline addresses the fuel properties of 100% ethanol, which can be used as a blendstock for fuels. The draft guideline is open for comments until 1 October 2008. *Source: WWFC - Draft Ethanol guideline July 2008. (www.acea.be).*

Gasoline from algae

Sapphire Energy of Sonoma, CA has produced "green" gasoline from algae. This “green” gasoline is compatible with the existing petroleum infrastructure and fulfills ASTM fuel quality standards. *Source: Sapphire Energy, Press Release, 28 May 2008 (www.sapphireenergy.com)*

BIODIESEL ESTERS

Biodiesel blend: ASTM specification

The ASTM has approved new specifications for biodiesel blends. After more than five years of research, ASTM has approved three key sets of biodiesel specifications:

- Changes to the existing B100 biodiesel blend stock specification (ASTM D6751)
- The conventional petrodiesel specification (ASTM D975) updated to include up to 5% biodiesel (B5)
- A new specification for blends of between 6% biodiesel (B6) to 20% biodiesel (B20) for on- and off-road diesel.

The B100 specification (D6751) was modified by adding the cold soak filtration test, which is an improved method to screen low temperature operability of biodiesel.

The regular diesel pool may contain up to 5% biodiesel (B5) with the approval of the changes in ASTM D975 specifications. This means that biodiesel could become more widely available at refuelling stations as a B5 blend, a blend which is currently accepted by most automakers and engine manufacturers in the USA. The ASTM International Main Committee also approved specifications for B5 biodiesel in heating oil (marketed as "Bioheat").

One of the reasons preventing manufacturers from accepting higher blends was the lack of fuel specifications. With the adoption of the new standards, more engine manufacturers are expected to allow the use of B6-B20 blends in their engines. *Source: National Biodiesel Board, 20 June 2008 (http://nbb.grassroots.com/08Releases/ASTM_final/).*

WWFC Draft Biodiesel guideline

In the same way as for ethanol, the automobile and engine manufacturers have prepared the First Edition of the Worldwide Fuel Charter (WWFC) Guidelines for Biodiesel. This guideline considers the impact of fuel quality on the vehicle/engine performance and exhaust emissions so that the fuel quality requirements could be adjusted with the engine and vehicle needs. This guideline addresses the fuel properties of 100% FAME type biodiesel, which can be used as a blendstock for fuels. The draft guideline is open for comments until 1 October 2008. *Source: WWFC - Draft Biodiesel guideline, July 2008. (*www.acea.be*).*

Largest US biodiesel plant

GreenHunter Energy has started its biodiesel refinery with a production capacity of 105 million gallons per year (~335 ktoe/a) in Houston, Texas. The refinery is the largest biodiesel refinery in the US. The new GreenHunter facility can produce biodiesel from animal fats, vegetable oils, or a blend of these two feedstocks. *Source: GreenHunter Energy, Inc. 2 June 2008* (*http://greenhunterenergy.com*)

According to the National Biodiesel Board, the total US biodiesel production capacity reached 2,240 million gallons per year in 2007 (~8.4 million tons/y), but only 20% of this capacity was used due to poor market conditions and high feedstock prices (*http://www.biodiesel.org/*). European biodiesel capacity is some 16 million tons/a, and production in 2007 was 5.7 million tons according to the European Biodiesel Board (*http://www.ebb-eu.org/stats.php*).

Preem invests in tall oil biodiesel

Preem invests in upgrading one of its refineries for biofuels. Starting 2009 it will use 140 000 ton per year of various renewable feedstocks, e.g. vegetable oils and animal fats, but primarily tall oil. Preem, Södra (association of forest owners) and Sveaskog (state-owned forest company) are to become joint-owners of SunPine AB, which invests in a new tall oil to "pine diesel" processing plant in Piteå. Sweden will be the first country using wood based feedstock for industrial scale green diesel production. Crude tall oil is a by-product of the pulp and paper industry and it contains e.g. fatty acids (as free acids), sterols, alcohols, sulphur and other components. Crude tall oil can be upgraded to tall oil fatty acids, which can be further esterified or hydrated to diesel components. *Source : Preem, Press release, 7 July 2008. (www.preem.se). Green Car Congress, 7 July 2008 (www.greencarcongress.com)*

SYNTHETIC AND RENEWABLE DIESEL

NExBTL plant in Rotterdam

Neste Oil builds an 800,000 t/a NExBTL plant which costs €670 million in Rotterdam in the Netherlands (see AMFI April/2008). The plant is to be completed in 2011. Neste Oil will work with the same key partners in Rotterdam that it selected for its project in Singapore. The plant is to be located close to other chemical plants, which will offer a number of synergy opportunities. Technip Italy will act as the project's main contractor and Air Liquide will supply the hydrogen required by the process. *Source: Neste Oil Corporation, Stock Exchange Release, 13 June 2008 (www.nesteoil.com).*

Renewable diesel launched in Finland

Neste Oil has launched a diesel fuel, containing a renewable component, in Finland. The fuel called Neste Green diesel contains 10% renewable NExBTL. Neste Green diesel will first become available in Helsinki metropolitan area and afterwards in other parts of Finland. *Source: Neste Oil press release, 6 May 2008. (www.nesteoil.com).*

Eni to invest in tar sands and biofuels in Congo

Eni, an Italian based oil company, will invest 3 billion dollars in Congo in tar sands and biofuels, with an expected production of 150 million barrels of oil equivalent (boe). Eni has reached an agreement for the exploration and exploitation of non-conventional oil in tar sands in two areas covering a total of 1790 km^2. The company will use its Eni Slurry Technology (EST) for improving the quality of heavy oils. The project will also benefit from the M'Boundi oilfield. Gas in this area can also be used to supply the EST plant and enrich the heavy oil.

The Food Plus Biodiesel project will use vegetable oil from palm tree cultivation on about 70,000 unfarmed hectares. Around 340,000 tons/year of crude palm oil is expected, enough to cover the domestic demand for food uses and to produce 250,000 tons/year of biodiesel. The project will employ approximately 10 000 people. Crude vegetable oil that will not be

used for food will be destined to biodiesel production using Eni's Ultra-Bio-Diesel technology. After a first pilot phase, the feasibility of building a bio-refinery in Congo will be considered. *Source: Eni, Press release, 19 May 2008.* (*www.eni.it*).

Synthetic diesel from wood in Norway

A new Norwegian company, Xynergo, will produce synthetic diesel from woody biomass. A pilot plant at Norske Skog Follum in Norway is scheduled to begin operation in 2010. The company is planning a full-scale facility which could be operative in 2015. It is estimated that 'second generation' biofuels made from forest-based feedstocks could satisfy 15% of the annual diesel demand for road transportation in Norway. *Source: The Norway Post, 13 June 2008. (*www.norwaypost.no*).*

Renewable diesel from algae

Solazyme in San Francisco developed algae based renewable diesel, SoladieselRD, which is obtained through refinery hydrogenation of algal oil. This is a hydrocarbon fuel that meets the ASTM D-975 specification for diesel. The company has earlier announced methyl ester biodiesel from algae. *Source: Solazyme News, 11 June 2008 (http://www.solazyme.com/news080611.shtml*)

OTHER FUELS AND VEHICLES

Honda FCX Clarity fuel cell vehicle

Honda Motor Co., Ltd. has started production of the FCX Clarity fuel cell vehicle. The FCX Clarity was designed from scratch as a dedicated fuel cell vehicle. It is powered by the highly compact, efficient and powerful Honda V Flow fuel cell stack. The FCX Clarity offers superior design and driving performance as well as environmental responsibility. Lease sales are scheduled to begin in July in the U.S. and this fall in Japan. The combined sales plan for Japan and the U.S. calls for a few dozen units within a year and about 200 units within three years. *Source: Honda Worldwide Site News, 16 June 2008 (http://world.honda.com/).*

*FCX Clarity: Principal Specifications (Japan model). Honda Worldwide Site News, (*http://world.honda.com/*).*

Power train	Motor	Max. output	100kW
		Max. torque	256N·m
		Type	AC synchronous electric motor (permanent magnet)
	Fuel cell stack	Type	PEMFC (Proton Exchange Membrane Fuel Cell)
		Max. output	100kW
	Lithium ion battery	Voltage	288V
Fuel		Type	Compressed hydrogen
		Storage	Pressurized hydrogen tank (35MPa)
		Tank capacity	171 liters
Dimensions (L × W × H)			4,835 × 1,845 × 1,470mm
Vehicle weight			1,635kg
Maximum speed			160km/ h
Energy storage			Lithium ion battery

Mazda Premacy Hydrogen RE Hybrid

Mazda Motor Corporation starts testing the Mazda Premacy Hydrogen RE Hybrid minivan on public roads. Mazda's newest hydrogen rotary engine vehicle features a hybrid system that increases the vehicle's power by 40% and doubles the hydrogen fuel range to 200 kilometers (124 miles). Mazda aims to complete the road trials and start commercial leasing in Japan during the fiscal year 2008. The Premacy Hybrid is the world's first hydrogen hybrid car with a bi-fuel system that enables the car to run on either hydrogen or gasoline at the push of a button. The Premacy Hydrogen RE Hybrid also features a hybrid system that combines an electric motor with Mazda's hydrogen rotary engine to realize significantly enhanced performance. *Source: NGV Global, 20 June 2008 (www.ngvglobal.com*).

The first hydrogen Prius in Sweden

Sweden's first hydrogen Prius can be found in Malmö. Driving distance is 150-200 km, performance is similar to a conventional Toyota Prius. The price of the hydrogen Prius is about 1 million SEK (110 000 €). The only hydrogen refuelling station is in Malmö. Hydrogen is produced by wind power and electrolysis. *Source: Miljöbil, 7 June 2008 (www.gronabilister.se*).

Nissan: electric vehicles in 2010

Nissan Motor Company announced plans to introduce an electric vehicle in the US and Japan in 2010, followed by other markets throughout the world in 2012. The Renault-Nissan Alliance has also announced plans to market electric vehicles in Denmark and Israel in 2011. It is the first announced plan by a major automaker to mass-market an electric vehicle. The electric vehicle market is currently dominated by small startup companies, such as Zap, Tesla Motors, and Aptera. *Source: Nissan Motor Company, 13 May 2008 (www.nissannews.com), Renault-Nissan, 29 May 2008 (www.media.renault.com).*

Plug-in hybrids production

The Fisker Karma plug-in hybrid will be available in Europe late 2009. The manufacturer is planning to annually produce 15 000 cars in the US, 50 % of these for export.

In China, BYD will sell plug-in hybrids in late 2008, and electric vehicles are expected within two years. The target is 300 km driving distance and charging of 80% in 15 minutes. Also Chinese Chery, Geely and SAIC are planning hybrids. *Source: Miljöbil, May 2008 (www.gronabilister.se).*

MISCELLANEOUS

Heavy-duty Euro VI: NOx limit easened

The Euro VI limits proposed by the European Commission (see AMFI 1/2008) were voted on by the Environment Committee of the European Parliament. Proposed Euro VI limits were backed with the exception of the NO_x limit, which was raised to 0.5 g/kWh (proposed 0.4 g/kWh).

The Euro VI emission limits would apply from 1.1.2014 for all new vehicles and one year earlier for new types of vehicles. The Commission's proposal to enable Member States to provide for financial incentives to accelerate the placing on the market of vehicles meeting the new requirements was rejected. *Source: European Parliament News, 15 July 2008. (www.europarl.europa.eu).*

IEA & IEA/AMF News

From Executive Committee

The 35th ExCo meeting of the IEA Executive Committee on Advanced Motor Fuels was held in Vienna, Austria, 27-30 May 2008. General presentations on the following subjects were given: "A view from the EU Member States (Andreas Dorda)", "The current status of alternative motor fuels in China" (Fushen Hou), Japanese Energy Technology Strategy (Yutaka Takada), IEA Transport Related Activities (Nils-Olof Nylund), Impacts of biofuels and alternative fuels on emissions (Ruud Verbeek), Bioenergy IA – Task 39 "Commercializing 1st and 2nd -generation liquid biofuels from biomass (Alex Munack) and IA Hybrid and Electrical Vehicles (Martijn van Walwijk). Many attendees also participated in the International Conference "Transport Fuels Day" on 28 May 2008, arranged by the Austrian Agency for Alternative Propulsion Systems, A3PS.

The IEA Legal Office has proposed a revised legal text for the AMF, and the ExCo decided to adopt the revisions.

The AMF Implementing Agreement expires 31st August 2009. A request for extension will need to be presented to EUWP and CERT. The required documents are the End-of-Term Report 2005-2009 and the Strategic Plan 2009-2013. In order to meet the deadline the final documents must be available at the end of 2008. The Chairman Steve Goguen, assisted by Ralph McGill, takes responsibility of these reports. Input from the Delegates is welcomed.

The Executive Committee Chairman, Vice Chairmen and Secretary were elected for a period of two years from 1st January 2007. These posts are open for election at the next ExCo Meeting, which will be held in Osaka, Japan, 2-4 December 2008. More information on how to apply for the position as Secretary will be available later on AMF's website at *www.iea-amf.vtt.fi*.

Progress of ongoing Annexes

Annex XXVIII "Information Service & AMF Website" (AMFI):
The work has progressed as planned for 2008 regarding the AMFI Newsletter & Database, AMF Website, AMF Outlook and the "Country report" and "Fact sheet" questionnaires. A condensed public version of the "AMF Outlook" report was presented and distributed as paper version (*link to pdf*). Atrax distributed the draft report "Outlook on Standardization of Alternative Vehicle Fuels", which is a separate sub-task of this Annex.

Annex XXXIII "Particle Emissions of 2-S Scooters" was presented by Jan Czerwinski. This activity will be closed in 2008. Possible activities on toxicity will be carried out under a new Annex.

Annex XXXIV "Biomass Derived Diesel Fuels", Sub-task No. 1. Analysis of Biodiesel Options. A final report has been delivered to the Annex participants in June 2008 via e-mail.

Annex XXXV "Ethanol as Motor Fuel". Jesper Schramm presented a status report on Annex XXXV. He noted that he is expecting country reports on the status of ethanol as a transportation fuel in the various AMF countries.

Annex XXXVI "Measurement Technologies for Emissions from Ethanol Fuelled Vehicles, METEV" Petter Åsman reported of the progress of this Annex. In June 2008 a telephone conference will be organized with all stakeholders to settle the details.

Annex XXXVII "Fuel and technology alternatives for buses - Overall energy efficiency and emission performance", was started. This is an initiative by VTT Technical Research Centre of Finland. This Annex will combine fuel cycle analysis with actual testing of various vehicle and fuel technologies. All transport related Implementing Agreements are invited to participate in this project.

Co-operation with other IAs

Nils-Olof Nylund has been nominated as Vice Chairman responsible for Transport within the End-Use Working Party (EUWP). He has the ambition to facilitate cooperation between the following IAs that have transport related activities:

- End-Use Working Party Transport
  - Advanced Fuel Cells (AFC)
  - Advanced Materials for Transport (AMT)
  - Advanced Motor Fuels (AMF)
  - Hybrid and Electric Vehicles (HEV)
- End-Use Working Party Industry
  - Combustion
- Renewable Energy Working Party
  - Bioenergy: Task 39/Liquid Biofuels from Biomass
  - Hydrogen

Thailand - Most welcome!

As of 23 June 2008, the IEA Legal Office has confirmed the participation of the National Science and Technology Development Agency (NSTDA) as Contracting Party in the Implementing Agreement for a Programme of Research and Demonstration on Advanced Motor Fuels, for and on behalf of the Government of Thailand.

We wish you most welcome as Contracting Party in the Executive Committee on Advanced Motor Fuels.

Stephen Goguen — Chairman IEA/AMF

Claës Pilo — Secretary

China - Most welcome!

As of 30 July 2008, the IEA Legal Office has confirmed the participation of China Automotive Technology And Research Center (CATARC) as a Contracting Party in the Implementing Agreement for a Programme of Research and Demonstration on Advanced Motor Fuels, for and on behalf of the Government of the People's Republic of China.

We wish you most welcome as Contracting Party in the Executive Committee on Advanced Motor Fuels.

Stephen Goguen — Chairman IEA/AMF

Claës Pilo — Secretary

A special Transport Contact Group (TCG) has recently been formed by representatives from the IEA Transport Related IAs; the EUWP Vice Chair for Transport and the IEA Secretariat for the mutual benefit of developing ongoing work and initiate projects of common interest. TCG will have annual meetings.

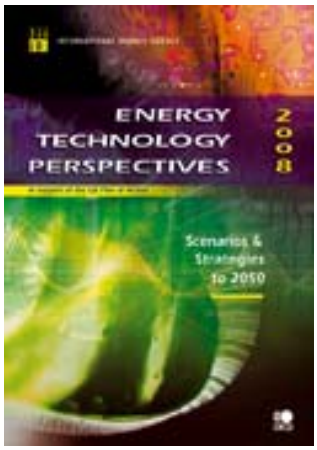
At this AMF ExCo Meeting Martijn van Wahlwijk (Secretary of HEV) welcomed AMF to participate in the HEV ExCo meetings. There was a common opinion that there are numerous opportunities for cooperation. Axel Munack welcomed co-operation between the Bioenergy and AMF IAs. Nils-Olof Nylund reported that he has attended Bioenergy Task 39 meetings. Preliminary discussions have been conducted within the IEA Transport Contact Group, specifically with Advanced Materials for Transport, Bioenergy, and HEV to cooperate within the new Annex XXXVII "Fuel and Technology Alternatives for Buses".

The Transport Related IAs have been asked to participate in the International Advanced Mobility Forum IAMF-2009, a side event of the 2009 Geneva International Motor Show. The ExCo approved AMF's participation in the upcoming IAMF event in March 2009.

Transport Fuels: Crucial factor and driver towards sustainable mobility

The 34th AMF ExCo was held in conjunction with the International Conference on Transport Fuels, which was organized by A3PS, the Austrian Agency for Alternative Propulsion Systems, on 28 May 2008. Steve Goguen gave a presentation on "The R&D-Cooperation in the International Energy Agency Implementing Agreement "Advanced Motor Fuels" and corresponding R&D activities at the US-Department of Energy". Other keynote speeches were given by Ingolf Scahädler, Austrian Federal Ministry for Transport, Innovation and Technology, Andreas Dorda, A3PS, Wolfgang Steiger, EU Technology Platform ERTRAC and Veronique Hervouet, EU Technology Platform Biofuels. Presentations are available at the Conference website: (*www.a3ps.at*).

PUBLICATIONS



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IEA/AMF Delegates

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China – CATARC *Mr. J. Guo*	**Italy** – Eni SpA *Mr. F. Alberici*	**Sweden** – Swedish Road Administration, *Mr. P. Åsman*	**USA** – DOE *Mr. S. Goguen*
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