



Newsletter

May - June 2014

INTERNATIONAL REGULATORY DEVELOPMENTS

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EUROPE

Council Debate on Clean Air Package

On 12 June 2014 Environment Ministers held a first public policy debate on two legislative proposals – the Directives on National Emission Ceilings (NEC) and on emission standards for Medium-size Combustion Plants (MCP) – which are part of the Clean Air Package proposed by the Commission at the end of 2013.

The Greek presidency proposed to focus the debate on the main political issues, in particular on matters related to the scope such as flexibility and exemptions.

As regards MCP, there was much support for the proposal which will be crucial to achieve compliance with air quality standards. However, several delegations requested added flexibilities for specific situations and expressed concerns for small MCP and the emission limit values proposed.

Many Member States supported the stepwise approach and the coverage of all economic sectors in the NEC Directive proposal, but concerns were expressed on the level of ambition. Several Member States noted that further examination of the impacts of the proposed emission ceilings should be carried out, especially on the agricultural sector.

Amendment to Fuel Quality Directive published

On 11 June 2014 an amendment to the Fuel Quality Directive 98/70/EC was published in the Official Journal as Commission Directive 2014/77/EU.

Analytical methods for Gasoline and Diesel market fuels in the Directive refer to standards established by the European Committee for Standardization (CEN). Due to technical progress, CEN replaced some of these standards by new ones in 2012 and 2013. The amendment therefore reflects those changes in analytical standards in Annexes I and II of the Fuel Quality Directive 98/70/EC.

European Member States will now have to transpose the amendment into their national legislation.

Directive 2014/77/EU is at <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0077&from=EN>.

Commission Report on UNECE WP.29 highlights WLTP and Retrofit Regulations

On 28 May 2014 the European Commission published a Staff Working Document on "Progress Report on the 2013 activities of the World Forum for Harmonisation of Vehicle Regulations (UNECE WP.29)".

This report describes the major automotive-related developments and activities over 2013, sets out the legislative progress made in relation to both the 1958

and 1998 UNECE Agreements, and reviews the close links between UNECE and the EU.

The World Light-duty Test Procedure (WLTP) Global Technical Regulation (gtr) – phase 1a, describing the core elements of the new test cycle, was adopted by WP.29 in March 2014. The Contracting Parties who voted in favour will have one year to initiate its introduction in their national or regional law. According to the report, once transposed into legislation, the new standard will make the consumers buying new cars feel more confident about the fuel efficiency advertised by manufacturers. In addition, the more accurate CO₂ emissions measurements will deliver a solid basis for the governments to determine carbon emission limits. The new gtr is also expected to contribute to ensuring better air quality and to providing more accurate data for consumers in line with the substantial growth in the popularity of low-emission vehicles. This WLTP test cycle is the result of five years of efforts at the WP.29, initiated at the request of policy makers, the industry and consumers.

The WLTP should be implemented in the EU legal framework together with European specific modalities in the course of 2014. The new procedure should be applicable as of 2017 and 2018 for new types and for all new vehicles, respectively. The implementation of the new cycle and procedure should ensure compliance with the Euro 6 emission limit values under real driving conditions, with transitional arrangements from 2014 to 2017, the report indicates.

The report also reviews the new UN Regulation on Retrofit Emission Control devices (REC) which was adopted in November 2013. The wide implementation of this UN Regulation, complemented by the adoption of specific retrofit requirements at national and local level by the Contracting Parties, will contribute to a quicker suppression of the emissions of air pollutants and will result in the more rapid replacement of vehicles and engines that are scrapped from the vehicle stock, the Commission says. Furthermore, it will open a new policy option for local governments to reduce emissions of air pollutant (PM and NO_x) from buses operating in city centres at a lower cost than new buses.

The Commission concludes that it will continue to increase its involvement in the UNECE technical regulatory process in 2014 with a view to guaranteeing enhanced competitiveness for the EU automotive industry and to providing a high level of safety and environmental protection to European citizens and consumers worldwide.

The progress report for 2013 can be downloaded from http://ec.europa.eu/enterprise/sectors/automotive/document/s/unece/index_en.htm.

Commission Strategy on Heavy-duty CO₂ Emissions

On 21 May 2014 the European Commission published its strategy to curb CO₂ emissions from heavy-duty vehicles (HDVs) being trucks, buses and coaches.

HDV emissions represent about a quarter of road transport CO₂ emissions and 5% of total EU greenhouse gas emissions. The Impact Assessment that underpins the HDV strategy shows that CO₂ emissions from HDV transport grew by 36% between 1990 and 2010 and projections based on a 'no policy change' scenario imply that in 2030-2050 total EU HDV CO₂ emissions would remain close to current levels, and thus around 35% higher than in 1990. This is not in line with the Commission's objective of reducing by 2050 GHG emissions from transport by 60% compared to 1990 levels.

Studies already suggest that state-of-the-art technologies can deliver 30% CO₂ reduction in new HDVs in a cost-effective way. The strategy therefore focuses on short-term actions to certify, report and monitor HDV CO₂ emissions and is a first step towards curbing emissions.

The Commission has developed a computer simulation tool, VECTO, to assess CO₂ emissions from new HD vehicles. With the support of this tool the Commission intends to bring forward proposals for legislation next year which would require CO₂ emissions from new HDVs to be certified, reported and monitored.

When this legislation is in force the Commission may consider further measures to curb CO₂ emissions from HDVs. The most apparent option is to set mandatory limits on average CO₂ emissions from newly-registered HDVs, as is already done for cars and vans. Other options could include the development of modern infrastructure supporting alternative fuels for HDVs, smarter pricing on infrastructure usage, effective and coherent use of vehicle taxation by Member States and other market-based mechanisms.

The strategy document is addressed to the European Parliament and the Council, which are invited to endorse it and help deliver the actions outlined.

The strategy is available at http://ec.europa.eu/clima/policies/transport/vehicles/heavy/docs/com_285_2014_en.pdf and the impact assessment is at http://ec.europa.eu/clima/policies/transport/vehicles/heavy/docs/swd_2014_160_en.pdf.

EU Position on Vehicle Standards in Transatlantic Partnership Negotiation

On 14 May 2014 the European Commission published a series of negotiating positions in five key topics of current talks on the future EU-US Transatlantic Trade and Investment Partnership (TTIP): chemicals,

cosmetics, pharmaceutical products, textiles and clothing, and motor vehicles.

For cars and trucks, the Commission indicated that even though EU and US technical requirements differ, both aim to ensure high standards of health, safety and environmental protection. Therefore the aim of the Commission is to achieve compatibility without lowering standards on either side. The two main objectives are mutual recognition of existing standards and regulations, and cooperation to draw up future regulations, especially on new technologies.

The Commission suggests "a methodological approach enabling regulators to assess whether the regulations of one side are equivalent (i.e. have the same effect, overall or in specific areas of safety and environmental protection) to those of the other side. Such an approach would require the contribution of industry and of other relevant stakeholders. The EU and US industry would be requested to provide, as an input to the TTIP discussions, relevant information to help conduct such an assessment: this would include as much evidence and data as possible in support of the request for consideration of equivalence."

In the future closer EU-US cooperation within the United Nations Economic Commission for Europe (UNECE) could also help to set new global regulations. According to the Commission, reinforced cooperation in the context of the UNECE 1998 agreement would be the central element to cover new technologies and lead to the adoption of Global Technical Regulations (gtr), in areas such as hydrogen and electric vehicles, the emissions test cycle, and advanced safety technologies.

The EC position on motor vehicles is at http://trade.ec.europa.eu/doclib/docs/2014/may/tradoc_152467.pdf.

Europol reports on Stolen Catalytic Converters

Europol, the European Union's law enforcement agency, reported on 16 June 2014 that metal theft has emerged as a significant criminal phenomenon across EU Member States in recent years, including catalytic converters stolen from cars for their Platinum Group Metal (PGM) content.

The value of catalytic converters depends on the type of vehicle but Europol quotes a minimum price for the PGMs (platinum, palladium, and rhodium) of €50 on the second-hand market. They are stolen from vehicles parked on the street as well as from recycling companies. Recently, a recycling company in Belgium lost 300 second-hand catalytic converters, worth €15 000, to theft. Europol notes that taller cars with more ground clearance, such as Sports Utility Vehicles or vans, are specifically targeted as it is easier to remove their catalytic converters.

EEA 2013 Final Report on NEC Directive

On 12 June 2014 the European Environment Agency (EEA) published the final report on national emissions inventories from Member States for 2012, as required by the National Emission Ceilings (NEC) Directive.

Air pollutant emissions have decreased over the last decades, but some are still being emitted above legal limits in the EU, in particular nitrogen dioxides. The final report confirms that eleven countries breached at least one emission ceiling in 2012.

EEA Technical Report No 10/2014 is at www.eea.europa.eu/publications/nec-directive-status-report-2013.

EEA Provisional Data on CO₂ Emissions from Vans

On 21 May 2014 the European Environment Agency (EEA) published a provisional database of CO₂ emissions from new vans registered in the EU in 2013, as required by Regulation (EC) 510/2011.

There were 1.2 million new vans registered in the EU in 2013, with average CO₂ emissions of 173.3 g/km. This means emissions were below the 175 g/km target four years ahead of the 2017 deadline.

Emissions levels were very different across Europe – they were lowest among new vans sold in Malta, Portugal and France, while new vehicles in Slovakia, Germany and the Czech Republic had emissions approximately a third higher.

EEA indicates that there are nevertheless some uncertainties in the data. The vans' CO₂ data is complex due to the relatively high number of vehicles type-approved in multiple stages where different parts are built by different manufacturers. In the case of multi-stage vans, the base vehicle manufacturer is responsible for the CO₂ emissions of the final vehicle.

Manufacturers should now verify the data to check whether they are correct. The EEA will publish final data on new vans' CO₂ emissions in the autumn 2014.

The EEA provisional vans' CO₂ database is at www.eea.europa.eu/data-and-maps/data/vans-2.

Assessment of Maritime Emission Control Areas in EU

The European Commission has published a new report on 'Specific evaluation of emissions from shipping including assessment for the establishment of possible new Emission Control Areas in European seas'.

The report, prepared by the Flemish Institute for Technological Research (VITO), Transport & Mobility Leuven (TML), and the International Institute for Applied Systems Analysis (IIASA) for the Environment Directorate presents scenarios of air emissions from international shipping on the seas surrounding Europe.

Emissions have been estimated for the medium-term (up 2030) and for the long-term (2050) and results of this study were already used within the work on the revision of the EU Thematic Strategy on Air Pollution (TSAP) and the publication of the Clean Air Programme for Europe in December 2013.

Scenario 1 explores effects of implementing the NECA (NO_x Emission Control Area) Tier III standards on top of the existing SECA (Sulfur Emission Control Area) legislation in the Baltic and North Seas (with the English Channel), together with SECA and NECA within the territorial waters of the EU Member States. Scenario 2 assumes the extension of ECA legislation to Exclusive Economic Zones. Scenarios 3 to 5 consider various ways to reduce emissions from the Mediterranean and Black Seas. Scenario 6 explores the effects of slow steaming (i.e. speed restrictions). Scenario 7 demonstrates the possible reduction of fine particles emissions through fitting vessels with particulate filters. Finally, the Maximum Technically Feasible Reduction (MTFR) case (Scenario 8) demonstrates the potential to reduce emissions through implementation of all technical measures on new and existing vessels in all European seas. Scenario 9 (Maximum Control Efforts - MCE) combines the MTFR assumptions with slow steaming. In a separate sensitivity study, the effects of using LNG for short sea shipping are demonstrated.

Implementation of the MTFR scenario would reduce the emissions of SO_x in 2030 by about 73% and of NO_x by 69% compared with the baseline. PM emissions would drop by 66%.

If 50% of vessels involved in international short sea shipping in the Baltic Sea and the North Sea would use LNG instead of oil in 2030, emissions from these two sea regions would decrease by about 25%.

The consultants' report is available at <http://ec.europa.eu/environment/air/pdf/review/Main%20Report%20Shipping.pdf>.

Public Consultation on Transparency Measures on Nanomaterials

On 13 May 2014 the European Commission's Directorate-General Enterprise and Industry launched a public consultation to help develop and assess plans for an EU nanomaterials registry.

The Commission will conduct an impact assessment to identify and develop the most adequate means to increase transparency and ensure regulatory oversight on nanomaterials. This consultation will support that impact assessment. Its objective is to obtain stakeholder views on the currently available information on nanomaterials on the market, the problem definition that forms the basis of the impact

assessment, as well as the potential positive and/or negative impacts of policy options.

Two basic registry designs are considered. The first one would require manufacturers and importers to submit substance identity information and annual production figures for nanomaterials produced in quantities over 100 grams a year and say how they are used. Companies making articles designed to release nanoparticles and firms distributing nanomaterials would also have to supply volume and usage data.

The other option would require separate registrations for each use of a nanomaterial. Both proposals would require submissions to be updated annually and could include exemptions for substances registered under the REACH regime or other legislation, pigments and fillers, and nanomaterials used in R&D.

The other options under review are a business-as-usual approach and an EU observatory compiling existing information and commissioning new research.

The consultation will run until 5 August 2014 at http://ec.europa.eu/enterprise/sectors/chemicals/reach/nanomaterials/public-consultation_en.htm.

Revised List of Critical Raw Materials

The European Commission adopted on 26 May 2014 a Communication on the review of the list of critical raw materials for the EU and the implementation of the Raw Materials Initiative.

Raw materials are called critical when their high supply risk is mainly due to the fact that a large share of the worldwide production is concentrated in few countries.

Six new materials appear on the 2014 list: borates, chromium, coking coal, magnesite, phosphate rock and silicon metal. The revised list of 20 Critical Raw Materials includes also antimony, beryllium, cobalt, fluorspar, gallium, germanium, indium, magnesium, natural graphite, niobium, tungsten, heavy rare earths, light rare earths, and platinum group metals (PGM).

ADEME Publication on Road Vehicles' Emissions of Particles and NOx

On 26 June 2014 the French Environment and Energy Management Agency (ADEME) published a position on particles and NOx emissions from road vehicles.

ADEME notes the positive effect Euro standards have had on reducing particles emissions with the introduction of Diesel Particulate Filters but also points to the high real-driving NOx emissions of Diesel cars. ADEME considers that DeNOx technologies such as Lean NOx Traps and Selective Catalytic Reduction systems will not allow light vehicles to achieve the Euro 6 limit in real-driving conditions.

According to ADEME, further emissions reductions beyond Euro 6 will be more and more difficult and every

new aftertreatment technology induces new primary or secondary pollutants. Exposure of population to ultra-fine secondary particles emissions for example is not well known but is thought to seriously affect health.

More work is needed to better estimate vehicular emissions on test cycles closer to reality and during DPF regeneration events, ADEME adds.

Also, to reduce the impact of road transport on air quality, ADEME suggests to act primarily on Diesel vehicles that are not equipped with DPFs and which still account for $\frac{2}{3}$ of the Diesel park in France.

The ADEME paper (in French) can be downloaded at www2.ademe.fr/servlet/getBin?name=2A1F00FFFA3EA957C4D19C4B7EB7B012_tomcatlocal1403699318770.pdf.

Air Quality Assessment in Paris in 2013

Airparif, the air quality monitoring agency of the Paris region, published on 14 May 2014 their assessment of air quality in Ile-de-France, the French capital city region, in 2013.

In 2013 more than 3 million inhabitants were potentially exposed to pollution levels breaching regulations, mainly in the city and along the main traffic axes. Five pollutants are still critical in Ile-de-France: nitrogen dioxide, particulates (PM₁₀ and PM_{2.5}), ozone, and benzene.

Compared to 2012, pollution levels however tended to go down, Airparif said.

The air quality assessment is available (in French) at www.airparif.asso.fr/pdf/publications/bilan-2013.pdf.

Airparif also published conclusions on the “alternate traffic” measure taken by the region on 17 March 2014 so as to reduce air pollution. It led to a reduction in traffic by 18% in Paris, 13% in the near suburbs, and 9% in the outer suburbs. PM₁₀ concentrations were estimated to be reduced by more than 6% (i.e. concentration reduction of 4 µg/m³) during the whole restriction period. Along the Paris ring road the daily average NO₂ concentration was reduced by 10% with the evening rush-hour NO₂ peak even reduced by 30%, according to Airparif.

Madrid to charge Polluting Cars more for Parking

On 1 July 2014 the city of Madrid will implement a smart parking system using vehicles pollution levels as a basis for parking fee calculation.

Both the engine and the model year of the car will be used to establish parking prices. Hybrids will pay 20% less to park, while a diesel car made in 2001 will see a 20% mark-up for example. Electric cars will park for free. The parking fee will also vary depending on how busy the street is: empty streets will cost less, while a

street with few remaining parking spots left will charge up to 20% more.

The majority of drivers, said the city, will see little difference in the price of parking, which will range between €0.66 and €3.29 an hour. But an estimated one in four drivers will see the cost of parking rise.

The parking meters are part of a wider set of measures designed to improve the city's air quality including energy efficient buses in the city centre and a bike-sharing programme slated to begin in June 2014.

Legal Action on Air Pollution in Austria

The Austrian NGO (Non-Governmental Organisation) Ökobüro has taken legal action, with the support of the NGOs VCÖ-Mobilität mit Zukunft, Greenpeace, GLOBAL 2000 and The Austrian Doctors for a Healthy Environment, against the state of Salzburg for not providing sufficient measures in order to comply with air quality objectives, and in particular the annual limit on nitrogen dioxide concentrations.

VCÖ has pointed out that an immediate extension of the public transport system and the decrease of heavy vehicle traffic are crucial. Other NGO's suggestions include a city congestion charge and a Low-Emission Zone as well as permanent lower speed limits.

Ökobüro said however that since Austria has not implemented the Aarhus Convention and the decisions of the Court of Justice of the EU, neither environmental organizations nor citizens have today the right to take legal actions to require the competent national authorities to take measures.

Danish Clean Air Programme

On 11 June 2014 the Environment Minister of Denmark, Ms Kirsten Brosbøl, announced the launch of the "Clean Air for the Danes" programme.

A package of measures worth 149 million Krone (€19 million) will run over the next three years, aiming at improving air quality in Denmark.

The measures include 74 million Krone to retrofit buses in Copenhagen and 75 million Krone to control emissions from wood stoves and ships, and to develop clean technology and urban cooperation.

The bus retrofit programme in Copenhagen will be launched in autumn 2014. Other initiatives will be finalized in the fall of 2014.

Denmark's New Maritime Emissions Action Plan

On 2 June 2014 Denmark announced a new action plan to ensure efficient enforcement of stricter requirements for ships' sulfur emissions.

On 1 January 2015, when the new stricter requirements for ships' sulfur emissions take effect, compliance with

the regulations is of importance. But, at the same time the Danish Maritime Authority (DMA) said that it is important to Danish shipping that no ship owners get a competitive advantage by speculating in cheating with the content of the fuel. Therefore, efficient and consistent enforcement of compliance with the regulations is decisive.

As part of the action plan, new initiatives have been identified in dialogue with the Danish Environmental Protection Agency and the Danish Shipowners' Association, and continued cooperation is envisaged. The action plan is based on four focus areas: international cooperation, the development and use of new technology, improved statistics, and documentation on non-compliance and sanctions.

The action plan is an extension of the Danish Government's 'Plan for Growth in the Blue Denmark', which contains an initiative entitled "Improved enforcement nationally and globally".

Report on Clean Air Technology Industry in Denmark

On 13 June 2014 the Danish Environment Ministry released a new report prepared by FORCE Technology and Dansk Miljøteknologi on the national clean air technology industry strength.

In this survey, the clean-air sector is defined as companies which develop, produce, inspect, sell or give advice on solutions and products in air pollution prevention; treatment of exhaust gases and air emissions; measuring, inspection and analysis systems for exhaust gas and air; and services, consultation and research in relation to air pollution.

547 Danish companies were identified in these four categories, and the majority of these companies focus on reduction of air emissions.

Due to air emissions regulations in Denmark a number of Danish clean-air industries have developed and supplied the necessary reduction systems for power plants and industry, and this has formed the basis for a significant export of environmental systems. The report indicates that the Danish clean-air sector is characterised by intensive exportations, with the EU being the most important export market.

According to the report, areas with a strong Danish position within the clean-air field include technologies for the automobile industry (including particle filters and catalytic converters).

Based on the analysis, the consultants recommend a series of actions to strengthen the Danish clean-air sector and ensure better framework conditions to promote innovation, job creation and export of Danish clean-air solutions on the global markets. For example Denmark should maintain its leading position in the

field of regulation, and new rules should be imposed at an early stage in Denmark (typically several years before other countries).

The report (in Danish, incl. summary in English) is at www2.mst.dk/Udgiv/publikationer/2014/05/978-87-93178-61-8.pdf.

Milan wins Transport Award

On 20 May 2014 the city of Milan, Italy won the 2014 Transport Achievement Award for its urban road pricing scheme.

The Transport Achievement Award is awarded annually by the International Transport Forum (ITF) at the Organisation for Economic Co-operation and Development (OECD), an intergovernmental organisation for the transport sector with 54 member countries.

The road pricing scheme, known as 'Area C' was introduced in January 2012. Cars entering Milan's 'Area C' are detected by a system of 43 electronic gates. The fee charged per entry is €5. Mopeds, motorcycles, electric cars, vehicles for disabled people as well as some other vehicle categories are exempted. Hybrids, LPG vehicles, and vehicles running on biofuel are also exempt until end 2016. Residents have 40 free accesses per year and pay €2 from the 41st access.

The programme reduced congestion, vehicle accesses to 'Area C' fell by 28% (i.e. 36 723 fewer vehicles per day). Demand for on-street parking has been down by 10% and productivity for freight deliveries within Milan has increased by 10%. The speed of public transport increased (bus: +6.9%, tram: +4.1%). Emissions have also been reduced: Particulate Matter (PM₁₀) by 10% and CO₂ by 35%. Cars using 'Area C' were less polluting, with the share of cleaner vehicles rising from 9.6% of the total to 16.6%, ITF said.

Extension of the Clean Bus Technology Fund in England

On 2 June 2014 the UK Transport Minister Baroness Kramer announced a further £5 million (€6 million) fund to be shared amongst local authorities to make improvements to local bus fleets and other vehicles.

The scheme builds on the £7.3 million awarded last year across 26 local authorities through the Clean Bus Technology Fund. In 2013 the Clean Bus Technology Fund helped modify over 500 buses. This year's scheme allows local authorities to apply for funding to improve other vehicles in their fleets, providing they are used predominantly on local roads with poor air quality. The funding, up to a maximum of £500 000 for any one authority, will allow authorities to retrofit vehicles or convert them to run on cleaner fuels.

"This funding will also secure jobs and growth in the industries delivering the technology", said Mrs Kramer.

UK Air Website revamped

The UK Department for Environment, Food, and Rural Affairs (DEFRA) updated in April 2014 its website on air information resources, UK-AIR. It now includes a new Air Quality Management Areas interactive map.

Also, the previously separate website on stratospheric ozone and UV monitoring was migrated and combined with the UK-AIR website.

The UK-AIR website is at <http://uk-air.defra.gov.uk>.

Dutch Health Council proposes Lower Benzene Occupational Exposure Limit

On 15 April 2014 the Dutch Health Council proposed to the Minister of Social Affairs and Employment in the Netherlands to lower the occupational exposure limit for benzene from the current 3.25 mg/m³ recommended by the EU's Scientific Committee on Occupational Exposure Limits down to 0.7 mg/m³ as an eight-hour weighted average concentration.

The World Health Organization (WHO) says that benzene is carcinogenic to humans, and no safe level of exposure can be recommended. The concentration of airborne benzene associated with an excess lifetime risk of leukaemia of 10⁻⁶ occurrences of leukaemia is 0.17 µg/m³.

Most sources list petrol vapour as one of the main sources for benzene and the European standard for petrol (EN228) limits benzene to 1% v/v.

Acidifying Gases and Ozone Precursor Emissions in 2013 in Norway

On 14 May 2014 Statistics Norway (SSB) published for the Environment Ministry preliminary figures on the emissions inventory of acidifying gases and ozone precursors in Norway in 2013.

SSB said 162 000 tonnes of nitrogen oxides (NO_x) were released in 2013, a decrease of 2.4% from 2012. The primary reason for the decrease is a lower consumption of marine fuel. Emissions by other acid gases (SO₂ and NH₃) remained stable.

The figures are preliminary and will be revised in early 2015. Then more detailed source and figures by industry sector will be published.

NORTH AMERICA

Funding Available for Clean Diesel Projects in the US

The US Environmental Protection Agency (EPA) announced on 1 May 2014 the availability of \$9 million (€ 6.5 million) for clean diesel projects to reduce diesel pollution and emissions exposure from the existing fleet of diesel engines.

The funding comes from EPA's Diesel Emissions Reduction Program (DERA) and will target the most cost-effective projects and fleets operating in poor air quality areas. EPA anticipates awarding between 10 and 20 assistance agreements for diesel emissions reduction projects, such as retrofitting exhaust emissions control and idle reduction devices, and replacing vehicles and engines. Eligible projects include school and transit buses, heavy-duty trucks, marine engines, locomotives, and other diesel engines. EPA estimates that clean diesel funding generates up to \$13 of public health benefit for every \$1 spent on diesel projects.

EPA also announced on 6 June 2014 a further \$1 million grant available for tribal applicants to establish clean diesel projects aimed at reducing emissions from older diesel engines. Projects may include school buses, transit buses, heavy-duty diesel trucks, marine engines, locomotives, energy production generators, and other diesel engines. The deadline for tribes' applications is 12 August 2014.

More info at www.epa.gov/cleandiesel/prgtribal.htm.

EPA proposes Updates to Emissions Standards for Refineries

On 15 May 2014 the US Environmental Protection Agency (EPA) released a proposal to update toxic air pollution standards for petroleum refineries.

EPA is proposing additional emissions control requirements for storage tanks, flares and coking units at petroleum refineries. EPA is also proposing to require monitoring of air concentrations of benzene at the fence of refinery facilities to ensure standards are being met and that neighbouring communities are not being exposed to unintended emissions.

When these proposed updates are fully implemented, EPA estimates toxic air emissions, including benzene, toluene, and xylene, would be reduced by 5 600 tons per year. Volatile organic compound emissions would be cut by approximately 52 000 tons per year. According to EPA, the cost-effective steps will have no noticeable impact on the cost of petroleum products at the 150 petroleum refineries around the country.

The EPA proposal is at www.epa.gov/ttn/atw/petref.html.

Canada proposes New Industrial Emissions Regulations

On 3 June 2014 the Government of Canada proposed new Multi-Sector Air Pollutants Regulations to reduce industrial air emissions.

The proposal includes requirements for stationary spark-ignition gas-fired engines, non-utility boilers and heaters, and the cement manufacturing sector.

Stationary engines covered by the proposed regulations burn gaseous fuels and are typically used for gas compression or as back-up power generators. These engines range in size from small passenger car engines to locomotive engines, and are a significant source of NOx emissions. In one hour of operation, an average-sized stationary spark-ignition engine emits as much NOx as an average light-duty vehicle does in almost 200 000 km, the government of Canada estimates. The proposed regulations would impose performance standards for both new and existing engines. The performance standards are expected to reduce NOx emissions by about 1.8 megatonnes between 2013 and 2035.

Requirements for additional industrial sectors will be added to the regulations in the years ahead, the government said. Once fully implemented, industries will be required to reduce their emissions of nitrogen oxides (NOx), sulfur dioxide (SO₂), volatile organic compounds, ammonia, and/or particulate matter. Environment Canada estimates that there will be 3.4 megatonnes of greenhouse gas reductions between 2013 and 2035, as a co-benefit to these regulations.

CENTRAL & SOUTH AMERICA

ICCT Report on Revision of Heavy-duty Emissions Standards in Mexico

On 2 June 2014 the International Council on Clean Transportation (ICCT) published a study on the revision of NOM 044, the Heavy-duty emissions standard in Mexico.

The paper reports results of a cost-benefit analysis of changes proposed through 2037. A new regulation with significantly lower limits on emissions of particulate matter (PM) and nitrogen oxides (NOx) from trucks and buses requires that new heavy-duty diesel vehicles sold in Mexico be equipped with advanced emissions control devices and on-board diagnostic systems, and generally bring Mexico's regulatory framework into alignment with the international heavy-duty vehicle market as well as the most progressive standards worldwide.

NOM 044 offers manufacturers two compliance pathways, modelled on the US Environmental Protection Agency (EPA) and the European Union standards. At present, the Mexican regulation incorporates outdated versions of those standards, which differ substantially with respect to both effectiveness and compliance costs, the ICCT notes. The new proposal would update NOM 044 to rely on the current versions of the standards - EPA 2010 and Euro VI - leapfrogging an intermediate step in the process. These options are functionally equivalent,

require the same emissions control and diagnostics technologies, and will result in the same compliance costs, according to ICCT.

Over the period 2018 to 2037, the study found, the tighter NOM 044 standards would result in a net benefit to Mexico of \$123 billion (€90 billion), taking into account the value to society of 55 000 avoided early deaths from air pollution and the reduced climate impact from lower emissions of black carbon.

The report indicates more than 30% of the diesel fuel sold in Mexico already meets ultra-low sulfur limits, including fuel supplied to Mexico City, Monterrey, and Guadalajara, and the share will continue to grow.

The ICCT report is at

http://theicct.org/sites/default/files/publications/ICCT_NOM-044_proposal_20140530.pdf.

Brazil raises Biodiesel Content in Diesel Fuel Blend

On 28 May 2014 Brazilian Mines and Energy Minister Edison Lobão announced that the amount of biodiesel that must be blended into Diesel would progressively raise from the current 5% (B5) up to 6% (B6) in July 2014 and 7% (B7) in November 2014.

The increase is aimed at replacing Brazil's Diesel fuel imports with more domestically produced biodiesel that uses oils from soybeans and animal fats such as beef tallow as feedstock.

In 2015, Brazil could replace 10% of the volume of its Diesel demand with domestic biodiesel, according to industry data.

ASIA PACIFIC

Indian Report on Auto Fuel Vision and Policy 2025

The Ministry of Petroleum & Natural Gas of India has released the report entitled "Auto Fuel Vision and Policy 2025" prepared by a specially appointed expert panel.

The report recommends that the entire country adopts Bharat Stage V (BS V) emission norms by 2020. At present, 26 cities, including Delhi, Mumbai, Chennai, Ahmedabad and Lucknow, use BS IV fuels, while the rest of the country uses BS III fuels.

The panel suggests that BS IV fuels be first rolled out in the entire country by 2017 but in stages, starting with northern India in 2015, southern India, as well as parts of Maharashtra, Goa, Gujarat and Rajasthan in 2016, and the rest of the country by 2017.

According to the report's recommendations, BS IV emission norms would become applicable in April 2016 for two- and three-wheelers and progressively rolled out for four-wheelers as BS IV fuel will become

available across the country by 2017. BS V emission norms, in line with Euro 5, are proposed for all categories of four-wheelers (including Heavy-duty vehicles) and would be introduced for new models in April 2020 (1 year later for continuing models). Even though no BS VI emission norm has been developed, the panel also recommends to introduce a new BS VI standard in April 2024. It would not require any fuel specification change compared to BS V fuel.

Regarding retrofit, the panel recommends for the Department of Fertilisers to change regulations and permit urea to be sold for purposes other than agriculture and allow its use in NOx aftertreatment devices. It is recommended that once a region has been fully converted to BS IV grade fuel, commercial vehicles are required by law to be retrofitted with DeNOx catalysts and particulate filters.

The report is at www.petroleum.nic.in/autopol.pdf.

Non-Road Mobile Machinery China III/IV Standards published

On 30 May 2014 the Ministry of Environmental Protection (MEP) of China announced the publication of four new national emissions standards, including China III and IV standards (GB 20891-2014) on "Limits and measurement methods for exhaust pollutants from diesel engines of non-road mobile machinery".

According to MEP, "the new NRMM standards set tougher emissions limits, improve the measurement methods further, add emissions limits for diesel engines above 560 kW as well as the measurement requirements for precious metals, and revise the technical specifications for reference diesel used for emissions tests. After enforcement of the updated standards, the gaseous pollutant emission level of diesel engines used for NRMM will be cut down further."

The China III and IV standards are based on European Stage IIIA and Stages IIIB/IV respectively. "Nitrogen oxides emitted by engines meeting the national Stage III standard will be reduced by 30% to 45%, and particulate matter emitted from engines meeting the national Stage IV standard will be reduced by 50% to 94%", MEP said.

The Stage III standard is to be effective from October 2014 for new types and from October 2015 for all engines. The effective dates for the Stage IV standard have not yet been set.

The three other standards published by MEP address pollutant emissions from boilers (GB 13271-2014), from municipal solid waste incineration (GB 18485-2014), and from tin, antimony, and mercury industries (GB 30770 -2014).

GB 20891-2014 standards (NRMM China III/IV) are at <http://kjs.mep.gov.cn/hjbhzbz/bzwb/dqjhbh/dqydywrwpfbz/201405/W020140603336102800621.pdf>.

China to scrap Millions of Old Vehicles to Improve Air Quality

On 26 May 2014 the Chinese government announced plans to take 6 million ageing vehicles off the roads before the end of 2014 to bring down air pollution.

"Yellow label" vehicles that fail to meet Chinese exhaust emissions standards will be "eliminated", the State Council document said. Of the vehicles to be eliminated in 2014, 20% are in the municipalities of Beijing and Tianjin, as well as Hebei Province – all northern regions frequently facing smog.

In a further step, more vehicles will be scrapped in 2015, involving up to 5 million units in the economically developed regions, such as the Yangtze River Delta, Pearl River Delta and the Beijing-Tianjin-Hebei regions.

The document did not detail implementation, but Beijing's municipal government previously offered subsidies of between 2 500 and 14 500 Yuan (€300 - 1700) to drivers who voluntarily return their ageing vehicles to be scrapped. However, the subsidy did not cover "yellow label" cars that fail to meet even minimum gasoline emissions standards.

The plan also calls for filling stations in Beijing, Shanghai and other major cities to switch to selling only the cleanest grades of gasoline and diesel fuels.

Air Pollution-related Public Complaints rise in Beijing

On 14 June 2014 the Beijing Municipal Environmental Bureau revealed that 12 599 formal complaints about smog were lodged by members of the public from January to May 2014, 124% higher than the same period last year.

Smog was involved in 72.6% of the total number of environment-related complaints submitted to the Beijing authorities from January to May 2014, the environmental bureau said.

In a separate notice, the bureau said that 114 firms had been punished in June 2014 for environmental violations in the catering, car manufacturing and car repair sectors. Companies were ordered to pay a total of 2.45 million yuan (€277 000) in fines.

Singapore to introduce Euro 6 in 2017

The Ministry of the Environment and Water Resources of Singapore told The Straits Times Singapore on 23 June 2014 that Singapore will adopt the Euro 6 emissions standard for petrol and diesel vehicles in the coming years.

Although the Ministry said that it has not arrived at an implementation date, motor industry players said they have been informed of a rollout in the second half of 2017. Currently, the standard for petrol and diesel vehicles in Singapore is Euro 4 and 5, respectively.

While European brands are confident that they will be able to meet such a deadline, media said it may be a challenge for the Japanese, as there is currently no equivalent standard in Japan. Japanese car manufacturers were not ready for the 2006 rollout of Euro 4 for diesel vehicles and prices of Certificate Of Entitlement (COE) crashed. This resulted in thousands of commercial vehicle owners extending the lifespan of their ageing fleet.

While car manufacturers have been given a 2017 target, oil companies may have a longer time to comply. Currently, petrol and diesel fuels meet Euro 4 standards. The Straits Times reported that oil companies will have up to January 2018 to meet the Euro 5 standard for diesel; and up to December 2018 for petrol.

Sri Lanka to reduce Sulfur in Diesel Fuel

Sri Lanka's Ministry of Petroleum Industries announced in early June 2014 that Diesel fuels with reduced sulfur content will be introduced on the local market from 1 July 2014 to reduce vehicular emissions.

The Ceylon Petroleum Corporation will reduce the sulfur content in its Diesel fuel production from currently 2000 parts per million (ppm) to 500 ppm.

The Ministry also announced on 15 June 2014 the import of Ultra Low Sulfur Diesel (ULSD) fuel, equivalent to Euro 5 Diesel fuel, with a sulfur content of 10 ppm. It will be sold under the name of "Lanka Super Diesel Four Star".

Australian Impact Assessment of Outboard Marine Engine Emissions

On 6 May 2014 the Australian Environment Minister Mr. Greg Hunt announced that the Department of Environment will complete an impact assessment by September 2014 of potential emissions control options for marine engines.

The Australian government and industry began work on emissions standards in 2006. A public consultation was held in 2010 but since then the final report has stalled.

The Australian Marine Engine Council (AMEC) which represents Honda, Evinrude and Suzuki, said regulations could follow as early as the first half of 2015; however other industry insiders expect the process could take two years or more.

The US EPA standards for outboard engines are expected to form the basis for the Australian standard.

MIDDLE EAST

Iranian Refineries Upgraded with Chinese Funding

On 27 May 2014 Iranian FARS News Agency reported on plans by China to allocate approximately \$2.2 billion (€1.6 billion) to implement the development project of the Abadan oil refinery in Southwestern Iran.

Managing Director of National Iranian Oil Refining and Distribution Company, Mr Abbas Kazzemi, said that "With the implementation of this project, the quality of products of Abadan refinery, which is the oldest refinery in the country, will be upgraded to Euro 5 grade."

Iran has expanded its refining capacity during the last couple of years. The country plans to increase its gasoline and gasoil production capacity by 64 and 12 million litres per day by completing nine ongoing development plans at its oil refineries. These projects include gasoline units at Abadan, Tabriz, Isfahan, Bandar Abbas, Tehran (Shahid Tondgouyan), Imam Khomeini (Shazand) plus development and upgrading plans at Persian Gulf Star and Lavan oil refineries.

AFRICA

Tanzania to lower Sulfur Levels in Fuel

The Energy and Water Utilities Authority (Ewura) of Tanzania announced on 21 May 2014 that the country is planning to review the sulfur level in fuels with a focus on further lowering sulfur content to about 50 ppm.

Speaking at a stakeholders' seminar in the capital city Dar es Salaam, the Ewura technical manager for petroleum Mr. Maganga said that other countries across the region were transitioning towards low sulfur fuels, but slowly while some others have no regulatory plans at all.

UNITED NATIONS

WLTP gtr published

On 12 May 2014 the UN Global Technical Regulation on the Worldwide harmonized Light vehicles Test Procedure (WLTP) was published as gtr No 15.

It addresses the first phase of development of WLTP, with common measurement of criteria pollutants, CO₂, and fuel and energy consumption.

Phase 2 started this year and will run until 2018 so as to include also a low temperature/high altitude test procedure, durability, in-service conformity, technical requirements for on-board diagnostics (OBD), mobile air-conditioning (MAC) system energy efficiency, and off-cycle/real driving emissions.

A future Phase 3 is planned to start in 2018 to define common emissions limit values and OBD threshold

limits, definition of reference fuels, and comparison with regional requirements.

The WLTP gtr No 15 is available at www.unece.org/fileadmin/DAM/trans/main/wp29/wp29r-1998agr-rules/ECE-TRANS-180a15e.pdf.

UN Regulation on Retrofit Devices published

On 25 June 2014 the new UN Regulation concerning the approval of Retrofit Emission Control devices (REC) for heavy-duty, agricultural and forestry tractors, and non-road mobile machinery equipped with compression ignition engines was published as UN Regulation No 132.

A series of amendment to this Regulation, introducing more stringent requirements on the level of emissions reduction, will be published in the next months.

UN Reg. No 132 is available at www.unece.org/fileadmin/DAM/trans/main/wp29/wp29regs/updates/R132e.pdf.

WHO 2014 Database on Ambient Air Pollution in Cities

On 7 May 2014 the World Health organization (WHO) published its 2014 database of ambient (outdoor) air pollution in cities.

The WHO urban air quality database covers 1600 cities across 91 countries with air pollution data from 2008 to 2013. There are 500 more cities than the previous database published in 2011, revealing that more cities worldwide are monitoring their air quality, reflecting growing concern on air pollution's health risks.

Air pollution is represented in the database by annual mean concentration of fine particulate matter (PM₁₀ and PM_{2.5}). The world's average PM₁₀ levels by region range from 26 to 208 µg/m³, with a world's average of 71 µg/m³. Data show that only 12% of the people living in cities that report on air quality reside in cities complying with WHO air quality guideline levels. About half of the urban population being monitored is exposed to air pollution that is at least 2.5 times higher than the levels WHO recommends.

Thirteen of the dirtiest 20 cities were Indian, with New Delhi, Patna, Gwalior and Raipur in the top four spots. The Indian capital had an annual average PM_{2.5} concentration of 153 µg/m³. Dr. Gufran Beig from India's state-run System of Air Quality Weather Forecasting and Research (SAFAR) said however that the WHO figures were biased and misleading. He claimed that PM_{2.5} in Delhi should have been in the range of 110-120 µg/m³ instead of 153.

Beijing was in the 77th place with a PM_{2.5} reading of 56 µg/m³, little over one-third of Delhi's pollution level. WHO experts said the Chinese data was from 2010,

the most recent year made available to them by China. Beijing's government said in April 2014 that PM_{2.5} concentrations stood at a daily average of 89.5 µg/m³ in 2013. Such a reading would put Beijing 17th in the WHO database.

At the cleaner end of the table, 32 cities reported a PM_{2.5} reading of less than 5 µg/m³. Three-quarters of those were Canadian, one was Hafnarfjörður in Iceland and the other seven were American.

WHO stressed nevertheless that the database relies mainly on data gathered by cities themselves and did not aim to rank cities. WHO pointed out that "some of the worst ones ... are not collecting data regularly."

In most cities where there is enough data to compare the situation today with previous years, air pollution is getting worse. Factors that contribute to this increase include reliance on fossil fuels, dependence on private motor vehicles, energy-inefficient buildings, and the use of biomass for cooking and heating. Nevertheless some cities are making notable improvements thanks to policy measures such as banning the use of coal for heating in buildings, using renewable fuels for electricity production, and improving efficiency of motor vehicles, WHO concluded.

The WHO database is available at http://who.int/phe/health_topics/outdoorair/databases/cities/en.

Renewed Collaboration between European Commission and UNEP

On 25 June 2014 UN Under-Secretary-General and Executive Director of the United Nations Environment Programme (UNEP) Achim Steiner and EU Commissioner for Environment Janez Potočnik signed a Memorandum of Understanding (MoU) to reinforce the collaboration between the Commission and UNEP in the field of environment and climate change.

The agreement – signed in the margins of the first United Nations Environment Assembly (UNEA) in Nairobi, Kenya – lays the basis for strengthened cooperation between UNEP and the European Commission at global and regional levels. It builds upon a previous MoU signed in 2004.

The specific areas for strategic dialogue and cooperation will be detailed in an Annex to the MoU to be elaborated in the coming months, building on UNEP's Medium Term Strategy for the period 2014-2017, and the EU's General Union Environment Action Programme to 2020 (7th EAP).

Cooperation to date covers a wide range of activities in areas such as biodiversity, sustainable consumption and production, climate change, water resources, sound chemicals and waste management, environmental monitoring and assessment, and

strengthening environment governance at the global, regional and national levels.

The inaugural UN Environment Assembly (UNEA) concluded on 27 June 2014 with 16 decisions and resolutions that encourage international action on major environmental issues including air pollution. The delegates unanimously agreed to encourage governments to set standards and policies across multiple sectors to reduce emissions and manage the negative impacts of air pollution on health, the economy, and overall sustainable development.

GENERAL

ICCT Report on Real-Driving Emissions of Light-duty Diesel Vehicles

On 30 May 2014 the International Council on Clean Transportation (ICCT) published a new report on in-use testing of three US Diesel light-duty vehicles using a Portable Emissions Measurement System (PEMS).

The report was prepared by the Center for Alternative Fuels, Engines and Emissions at West Virginia University who tested US EPA Tier 2 Bin 5 and California LEV II ULEV vehicles equipped with NO_x aftertreatment technologies, including one lean-NO_x trap (LNT) and two urea-based Selective Catalytic Reduction (SCR) systems.

A variety of test routes categorized based on their predominant driving conditions, namely highway, urban/suburban, and rural-up/downhill driving were used. Additionally, one vehicle was operated over an extended distance of nearly 4000 km predominantly composed of highway driving conditions. Two of the three test vehicles were also tested on a chassis dynamometer at California Air Resources Board's (CARB) vehicle certification test facility.

Real-world NO_x emissions over five routes were found to exceed the Tier 2 Bin 5 standard by a factor of 15 to 35 for the LNT-equipped vehicle, by a factor of 5 to 20 for one urea-SCR vehicle, and at or below the standard for the second urea-SCR vehicle. The second urea-SCR equipped vehicle exceeded the standard only during rural-up/downhill operating conditions, by a factor of about 10.

Distance-specific NO_x emissions for the two high-emitting vehicles were nevertheless below the Tier 2 Bin 5 standard for the weighted average over the FTP-75 certification cycle during chassis dynamometer testing, with 0.022 g/km and 0.016 g/km for the LNT and urea-SCR equipped vehicles, respectively.

In general, CO and THC emissions were observed to be well below the regulatory level for all three test vehicles and driving conditions, with exception of two routes for the LNT-equipped vehicle where THC emissions were observed at slightly elevated levels.

Particle number emissions, inferred from Pegasor particle sensor measurements, were observed below the Euro 5 standard of $6 \times 10^{11}/\text{km}$ except during vehicle operation that exhibited DPF regeneration events, where PN emissions significantly increased by two to three orders of magnitude.

The ICCT report is available at www.theicct.org/sites/default/files/publications/WVU_LDDV_in-use_ICCT_Report_Final_may2014.pdf.

OECD Study on Health Cost of Road Transport Emissions

On 21 May 2014 the Organisation for Economic Co-operation and Development (OECD) published a new report on the cost of air pollution. The study was presented at the International Transport Forum's 2014 Summit in Leipzig, Germany.

According to the report, the number of deaths due to outdoor air pollution fell by about 4% in OECD countries between 2005 and 2010. But while 20 of the 34 OECD countries achieved progress, 14 did not. The number of deaths due to outdoor air pollution in China rose by 5%, and in India by 12% over the same period.

The cost of the health impact of air pollution in OECD countries (including deaths and illness) was about \$1.7 trillion (€1.2 trillion) in 2010. Road transport accounts for an estimated 50% of the economic cost of air pollution in OECD member countries, according to a review of literature presented in the study. In China, the cost of the health impact of air pollution was about \$1.4 trillion in 2010, and about \$0.5 trillion in India. There is insufficient evidence to estimate the share of road transport but it nonetheless represents a large burden, OECD indicates.

Main recommendations by OECD include removing incentives for the purchase of diesel cars over gasoline cars; maintaining and tightening regulatory regimes, in particular, vehicle standards regimes such as those currently in place in the European Union; making test-cycle emissions more similar to the emissions the vehicles cause under normal use; investing in more ambitious mitigation programmes, including improved public transport; continuing research on the economic value of morbidity impacts of air pollution and on the specific evidence linking it to road transport; and mitigating the impact of air pollution on vulnerable groups, such as the young and the old.

The OECD report is at www.oecd-ilibrary.org/environment/the-cost-of-air-pollution_9789264210448-en.

New SwRI Consortium on Advanced Combustion Catalyst Technologies

San Antonio, Texas-based Southwest Research Institute has launched a new industry Consortium focussing on catalyst and emission control

technologies for advanced internal combustion engines, the Advanced Combustion Catalyst and Aftertreatment Technologies (AC²AT).

The consortium will include catalyst formulators, substrate and component manufacturers, emission control system integrators and engine and vehicle manufacturers. The focus will be to develop tools and technologies necessary for the synergistic application of catalysts to advanced engine technologies.

Concawe Reports on FAME Impact on Light-duty Vehicles Emissions

Concawe, the oil companies' European association for Environment, Health and Safety in refining and distribution, published two new reports on 12 June 2014 on the impact of biodiesel – Fatty Acid Methyl Esters (FAME) – on the performance of three Euro 4 light-duty diesel vehicles.

Part 1 covers fuel consumption and regulated emissions and part 2 addresses unregulated emissions. The reports measure fuel consumption and characterize in detail tailpipe emissions from two different technologies (DPF and non-DPF vehicles) generated with fuels from 0 to 50% v/v FAME.

The fuel consumption data for all three vehicles showed that the volumetric fuel consumption increases in direct proportion to the increasing FAME concentration and the decreasing volumetric lower heating value (energy content) of the blends. There was no apparent change in the energy efficiency of the vehicles and vehicles were not able to compensate for the lower energy content of the FAME/diesel blends with improved performance.

Increasing FAME content also reduced the particulate mass and the number of solid particles but increased the NO_x, HC and CO emissions. The overall impact of FAME on emissions was small compared to different drive cycles and different vehicles. No significant difference in emissions performance was observed for the two types of DPF systems evaluated in this study.

In part 2, formaldehyde was the most prevalent carbonyl-containing species but there was no clear dependence on FAME content and tailpipe emissions of other measured carbonyl species were at or near to the detection limit.

Concawe will publish another report on the impact of FAME content on DPF regeneration frequency.

Concawe reports No. 6/14 and No. 7/14 can be found at www.concawe.eu/content/default.asp?PageID=569.

New Website on Air Quality and Health

On 6 May 2014 the Health and Environment Alliance (HEAL) and the European Federation of Allergy and

Airways Diseases Patients Associations (EFA) launched the 'Know your air for health' website.

The website aims at providing information on the range of health conditions that are linked to air pollution, and at highlighting regulatory opportunities. EFA and HEAL believe that air pollution health effects can be significantly reduced through stronger EU air policies and further raising awareness on the harm of exposure to polluted air. The NGOs website also suggests that EU citizens should send their MEP (Member of European Parliament) and ministers a letter urging them to support air quality measures. Arguments are provided in a position paper gathering the views of 60 environmental, health and citizens' NGOs from across the EU during the Air Quality policy review conducted by the European Commission in 2013.

More details are at www.knowyourairforhealth.eu.

T&E Analysis of 2013 Cars' CO₂ Monitoring Data

On 26 May 2014 NGO Transport & Environment (T&E) published an analysis of the recently published provisional data by the European Environmental Agency on CO₂ emissions from new cars registered in the EU in 2013.

This briefing is the first part of T&E's campaign 'How clean are Europe's cars 2014'. The second and third part of the report will cover electric vehicles and supercredits as well as the gap between carmakers claimed fuel economy and the real world figure.

According to T&E eight carmakers are on track to meet their CO₂ targets by the 2021 deadline if they keep progressing at the same pace. Volvo, Toyota, Peugeot-Citroën, Renault, Ford and Daimler will all hit their targets early while VW and Nissan are on schedule. On the other hand Fiat would miss their target by one year (2022) and BMW by three years (2024) if they do not accelerate their rate of CO₂ reduction.

T&E says that the data shows that the ability of car brands to meet fuel efficiency standards resides in company strategies rather than the type and size of cars they produce. Last year, Renault displaced Fiat as the manufacturer of the most fuel-efficient vehicles. The biggest annual CO₂ reduction recorded in 2013 was for Volvo who reduced the CO₂ emissions of its fleet by 8%.

ICCT Report on Improvement to EU Heavy-duty CO₂ Evaluation

On 9 May 2014 the International Council on Clean Transportation (ICCT) published a report prepared by the Technical University of Graz on "Options to consider future advanced fuel-saving technologies in the CO₂ test procedure for HDV".

The report offers some insight into how several fuel-saving technologies such as hybridization, state-of-the-art auxiliaries, waste-heat recuperation, or driver support systems could be implemented in VECTO, the EU tool for the simulation of Heavy-duty vehicle fuel-efficiency. It also offers expert estimations of the fuel-efficiency gains that one can reasonably expect from these technologies.

The ICCT report is available at www.theicct.org/sites/default/files/publications/2013-12-19_ICCT-HDV-FuelSaving_FINAL.pdf.

ICCT White Paper on Fiscal Incentives for Electric Vehicles

On 6 May 2014 the International Council on Clean Transportation (ICCT) published a white paper on 'Driving Electrification: A global comparison of fiscal incentive policy for electric vehicles'.

The study, which details differences in the fiscal policies used to support electric vehicle sales across eleven major auto markets, demonstrates clearly that tax exemptions and subsidies are playing a key role in spurring electric vehicle markets. Norway and the Netherlands, in particular, are conspicuous examples of the relationship between fiscal incentives and electric vehicle sales.

The ICCT study is at www.theicct.org/sites/default/files/publications/ICCT_EV-fiscal-incentives_20140506.pdf.

RESEARCH SUMMARY

New Journal of Emission Control Science and Technology

A new Journal of Emission Control Science and Technology will be edited by Springer from January 2015 onwards.

The new publication's scope will be the latest research on control of emissions from mobile (road, land, sea, and air) and stationary sources (e.g. power generation, industrial processes). The Journal will fill a major gap in the field of emissions control and will also introduce a new standard in peer-reviewed emission control publications.

It will include four issues per year with the first one to be printed in January 2015. Fifteen articles are needed by 15 September 2014 and ten more by 1 January 2015. Contributions are welcome.

More information is available at www.springer.com/earth+sciences+and+geography/environmental+science+%26+engineering/journal/40825.

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FORTHCOMING CONFERENCES

11th International Symposium on Combustion Diagnostics

1-2 July 2014, Kurhaus Baden-Baden, Germany

www.combustion-diagnostics.com

The AVL Symposium will discuss combustion analysis, visualisation, and simulation, with a particular focus on the use of rapid measuring technology on more inclusive measurement tasks.

International Congress: Sensors in Exhaust Gas Emission Control

2-3 July 2014, Frankfurt, Germany

www.sv-veranstaltungen.de/en/international-congress-sensors-in-exhaust-gas-emission-control

Main topics for this conference will include soot sensors for particle filter monitoring, current state of technology for NO_x sensors, oxygen sensors for reducing emissions in fuel-saving vehicles, and sensor diagnosis of EOBD for OBDII.

SCR-Systems

7-9 July 2014, Stuttgart, Germany

www.car-training-institute.com/scr

The conference will focus on global emissions legislation, OEM concepts exhaust aftertreatment, SCR catalysts, SCR on filters as combination systems, AdBlue® system components, components and OBD requirements, alternative ammonia storage, numeric models as development tool, and reduction of NO_x raw emissions.

5th NGVA Europe International Show & Workshops

7-10 July 2014, Brussels, Belgium

www.ngv2014brussels.com

5th International CTI Conference: Emission Challenges

8-10 September 2014, Troy, MI, USA

www.emission-control-systems.com

Focus will be on Greenhouse gases (Regulatory and Technology Approaches), Modern Combustion Processes for reduced/low NO_x raw emission, Catalyst Approaches to NO_x Reduction, Ammonia based SCR Systems, Advances in SCR Filter Combinations (SCRf), and Alternative Drive Trains.

What's Next for Europe's Passenger Car and Commercial Vehicle Industries?

10-11 September 2014, Brussels, Belgium

<http://megatrendseurope.automotiveworld.com>

The 2nd Automotive World Megatrends Europe conference will discuss the business models, technologies and trends that look set to shape Europe's commercial vehicle and passenger car industries over the next ten years and beyond.

Gaseous Fuels for Road Vehicles

11 September 2014, London, UK

www.imeche.org/events/S1807

This seminar will examine the application and use of gaseous fuels in vehicles. Delegates will be able to explore the different types of gases that can be used as fuels, and gain an insight into the benefits gaseous fuels have over traditional liquid fuels. What difference can they make to emissions, and CO₂ and fuel consumption? How can they be applied to passenger and commercial vehicles?

26th International AVL Conference “Engine & Environment”

11-12 September 2014, Graz, Austria

www.avl.com/engine-environment-2014

The theme for 2014 is Engine 2020: spark versus compression ignition in a new environment.

AVL Emission Measurement Systems Roadshow

16 September 2014, Stuttgart, Germany

30 September - 1 October 2014, Neuss, Germany

www.avl-abgasmesstechnik.de

SAE 2014 Heavy-Duty Diesel Emissions Control Symposium

17-18 September 2014, Gothenburg, Sweden

www.sae.org/events/hddec

Attendees will hear and interact with the most knowledgeable leaders from the global, heavy-duty diesel powertrain industry who best understand the complicated science of the pollutants emitted during engine combustion and how to treat them.

Real Driving Emissions 2014

17-19 September 2014, Düsseldorf, Germany

www.real-driving-emissions.eu

This conference will review the current status of the introduction of RDE test procedures and its related technologies in the European Union.

20th International Transport and Air Pollution Conference (TAP 2014)

18-19 September 2014, Graz, Austria

www.tapconference.org

The main theme will be energy efficient transport and its implications to air quality. Special focus will be given to emissions measurement and modelling, tunnel and remote sensing measurements, GHG emissions from transport, energy efficient technologies, electric vehicles and alternative fuels, real drive emissions, forecasts, policies and scenarios in transport, urban air quality, non-road, particle number and matter from GDI, non-exhaust PM, primary and secondary aerosols, and source apportionment.

23rd Aachen Colloquium Automobile and Engine Technology 2014

6-8 October 2014, Aachen, Germany

www.aachener-kolloquium.de

The congress provides a wide range of technical presentations addressing current challenges of the vehicle and powertrain industry. Programme-related test vehicles, prototypes and aggregates from participating companies and institutions are presented on the ika test track.

COPERT – SIBYL Training Workshop

15-17 October 2014, Thessaloniki, Greece

www.emisia.com/newsletter_2014/workshop.php

The workshop organized by EMISIA will cover COPERT, the software for calculating air pollutant and greenhouse gas emissions from road transport; SIBYL, a software for vehicle stock projection and evaluation of different road transport scenarios; the updated vehicle fleet database EMISIA maintains for all EU Member States; and a new software for preparation of emission inventories covering all emission sources.

SAE 2014 International Powertrain, Fuels & Lubricants Meeting

20-23 October 2014, Birmingham, UK

www.sae.org/events/pfl/2014

The conference will discuss combustion, hybrid powertrains, engine downsizing, engine control, fuels and fuel efficiency, lubricants, advanced fuel delivery, and emissions reduction.

FEV Conference: Diesel Powertrains 3.0

28-29 October 2014, Montabaur, Germany

www.fev.com/fileadmin/fev-resources/Flyer/Ohne_Deadline_BD_Powertrain3.0_WEB.pdf

The 1st conference on “Diesel Powertrains 3.0” will define the platform that will allow experts to bridge the transition of modern Diesel engines into the next level of overall performance for the upcoming decade.

7th Integer Emissions Summit USA 2014

28-30 October 2014, Chicago, USA

www.integer-research.com/dec-usa-2014

The conference will examine the latest legislation, optimum diesel emissions reduction technologies and strategies for Heavy-duty commercial vehicles, Off-highway vehicles, light-duty vehicles and passenger cars, marine vessels, natural gas vehicles, and Diesel Exhaust Fluid.

FEV International Conference: Advanced Fuels for Sustainable Mobility

4-5 November 2014, Nürburg, Germany

http://www.fev.com/185/?tx_ttnews%5Btt_news%5D=324&cHash=7450d7adb0827ec92f5b1ffa0ac6e77f

The conference will discuss advanced fuels developments for both heavy-duty and light-duty applications.

Homologation Symposium

17-18 November 2014, Munich, Germany

www.tuev-sued.de/academy/conference-management/automobile-rail/homologation

The conference organized by TÜV-Süd will address new CoC documents, German single type approval according to Directive 2007/46/EC, homologation according to international regulations (GOST, CCC, INMETRO, Trias), cooperation with local type approval authorities – single type approvals, data management/CoC, small series, modifications from the perspective from German inspection stations, emissions/WLTP/PEMS, and workshops for passenger cars / trucks and agricultural vehicles.

SAE/JSAE 2014 Small Engine Technology Conference

18-20 November 2014, Pisa, Italy

www.sae.org/events/setc

The conference will discuss the state of the economy and the status of emission regulations, alternative powertrains and the effects on the environment. The vehicle product ranges from ATVs, scooters and motorcycles to portable power generators, lawnmowers and hand tools.

3rd China International Diesel Engine Summit 2014

20-21 November 2014, Beijing, China

www.borscon-de3.com/de3/en

The event will cover worldwide emissions regulations for on-road and non-road applications, OEMs technical roadmaps, latest Diesel engine technology, engine testing, SCR, hybrids, dual-fuel engines, fuel economy, etc.

SAE 2014 Light Duty Emissions Control Symposium

9-10 December 2014, Troy, MI, USA

www.sae.org/events/lde

The Symposium will discuss the recently announced EPA Tier 3 regulations beginning in 2017, diesel and gasoline particulate matter control, CAFE standards, and CO₂ and criteria emission regulations.

36th International Vienna Motor Symposium

7-8 May 2015, Vienna, Austria

www.xn--vk-eka.at/index_en.htm

The symposium will address latest results in worldwide engine and powertrain development, future legislation, fuels and components, drive train electrification, hybrid technology, CO₂ reduction, and exhaust emission control.

Deadline for abstract: 30 September 2014

5th Integer Emissions Summit India 2015

19-21 May 2015, New Delhi, India

www.integer-research.com/dec-india-2014

The conference will explore the challenges and opportunities, and examine successful diesel emissions control strategies, for the Indian on-road and non-road mobile machinery (NRMM) sectors.

8th AVL international Commercial Powertrain Conference

20-21 May 2015, Graz, Austria

www.avl.com/icpc

Main Topics for the Technical Sessions will be truck and bus (hybrid powertrain technologies, LNG / CNG), agricultural tractors (potential of electrically driven implements, alternative fuels), and construction machinery (modern transmission technologies, hybridisation).

15th European Automotive Congress

8-10 June 2015, Győr, Hungary

<http://eaec2015.org>

Topics include safety, emissions, environment, energy, design, quality and automotive logistics.

Deadline for abstracts: 15 October 2014

2015 JSAE/SAE Powertrains, Fuels and Lubricants International Meeting

1-4 September 2015, Kyoto, Japan

<http://pfl2015.jp>

Deadline for abstracts: 1 October 2014

FISITA 2016 World Automotive Congress

26-30 September 2016, Busan, South Korea

Info will be at www.fisita2016.com

Deadline for abstracts: 30 September 2015