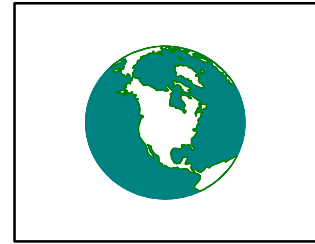


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# CAR LINES

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## EUROPE

### 1. Parliament Committee Weakens Proposed Euro VI NOx Standards for Trucks

On July 15<sup>th</sup>, proposed tougher limits on exhaust emissions from trucks and buses, including ozone precursors such as nitrogen oxides and hydrocarbons as well as particles, were backed by the European Parliament Environment Committee. MEPs want the new "Euro VI" regulation emission limits to apply de facto from 1.1.2014, nine months earlier than the Commission proposed.

The proposed Euro VI regulation, assessed in a first reading report by Rapporteur Matthias Groote, lays down harmonized technical rules for heavy vehicles over 2,610 kg (5,750 pounds), which all new vehicles will have to comply with in order to get the necessary type approval.

MEPs backed the Commission's proposed limit values for damaging emissions of pollutants, with the sole exception of that for nitrogen oxides (NOx), which they sought to raise to 500 mg/kWh from the Commission's proposed 400 mg/kWh. The committee rejected amendments by the rapporteur that would have reduced the particle mass limit to 5 mg/kWh. Instead, they backed the Commission proposal of 10 mg/kWh - a 66% reduction compared with Euro V.

MEPs adopted amendments which in practice would require all new heavy goods vehicles to comply with the standards from 1.1.2014, three months earlier than the Commission's proposal, but nine months later than the Rapporteur had proposed. Thereafter, the registration, sale and putting into service of vehicles that do not comply with the standards will be prohibited. New types of vehicles must meet the standards one year earlier. The Commission is asked to adopt the associated technical regulation by the end of 2009, after which manufacturers will have 48 months to make the necessary technical changes to the vehicles.

MEPs back the Commission's proposal to include measures relating to access to repair information in the regulation, so as to ensure effective competition on the market in repair and maintenance services. Similar measures already exist for the relevant legislation on passenger cars (Euro 5). The committee approved amendments to adapt those provisions to the particularities of heavy goods vehicles.

Finally, MEPs rejected 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.

German center-right lawmaker Anja Weisgerber incredibly said the increased nitrogen oxides limit allows technical solutions that will reduce the carbon dioxide produced by a vehicle engine by as much as 50 percent. This would deliver "a better trade-off" between emission of nitrogen oxides and carbon dioxide, Weisgerber said.

Even at 500 mg/kWh, however, the proposed Euro VI limit is significantly lower than the Euro V standard, which is due to come into force in October 2008. The Euro V standard for trucks and buses limits emissions of nitrogen oxides to 2,000 mg/kWh.

Overall, the Committee voted 51-0, with one abstention.

The Committee's version of the legislative proposals must now be approved by the full Parliament, then negotiated with and approved by EU member states represented in the EU Council, before coming into effect.

## **2. Netherlands Requests EU Air Pollution Delay**

The Dutch government has requested European commission clearance to postpone implementation of ambient concentration limits for large particular matter (PM<sub>10</sub>) until mid-2011 and for nitrogen dioxide to 2015 under new EU air quality rules. The deadline for both limits was originally 2010. The government sent the request to Brussels in July and a reply is due within nine months. Nearly 2 billion Euros have been earmarked for national and local measures in a comprehensive air quality program designed to meet the delayed deadlines.

## **3. France to Use EU Presidency to Push For 30 Percent Cut in Emissions by 2020**

France kicked off its presidency of the EU Council by promising to push for a climate change agreement among the 27 EU member states during its six-month term, which runs from July 1 to Dec. 31. On July 3<sup>rd</sup>, Jean-Louis Borloo, France's Minister of Ecology, Energy, Sustainable Development and Territorial Planning, said that France plans to be the driver behind EU negotiations on climate change with a particular focus to reach an EU-wide agreement to reduce the European Union's greenhouse gas emissions 30 percent by 2020.

In a proposal in January, the EU Commission laid out a proposal to reduce emissions by at least 20 percent by 2020, with the potential to increase the target to 30 percent if other major greenhouse gas emitters, in particular the United States, agreed to match the cuts.

Flanked by the environment ministers from Sweden and the Czech Republic, as well as EU Commissioner for Environment Stavros Dimas, Borloo made his comments while speaking to reporters during a press briefing on the first day of informal meetings of the EU environment council, held by France July 3-5 in the park of St. Cloud, outside of western Paris. The informal meetings gathered EU environment ministers and representatives of nongovernmental organizations, the European Parliament, and the European Commission to discuss the European Union's environmental goals during France's EU presidency.

Czech Deputy Prime Minister and Minister of Environment Martin Bursik said the Czech Republic, which will take over the rotating EU presidency Jan. 1, 2009, fully supports France's ambition for an EU-wide climate change agreement this year. But EU agreement should come "at least by the end of March [2009], before elections for the European Parliament," Bursik said. "We would prefer the agreement by the first of January but that [may] be too much to manage," he said, adding that the Czech Republic would be prepared to take up the relay in January 2009 if necessary.

Meanwhile, Swedish Environment Minister Andreas Carlgren said an "EU-wide climate change agreement would really give [the European Union] the credibility [it] would need ahead of Copenhagen." Sweden will hold the EU presidency in the second half of 2009. In December 2009, Copenhagen will host the 15th Conference of the Parties to the U.N. Framework Convention on Climate Change, where parties hope to finalize an international climate agreement to replace the Kyoto Protocol.

Carlsgren said the upcoming COP-14 meeting in Poznan, Poland, in December 2008 "should really be used as a platform to prepare for the [Copenhagen] meeting next year and to build trust ... with developing countries."

Dimas concurred. "We have to make progress in Poznan to [reach] an agreement in Copenhagen to effectively fight climate change," he said. "What we need is 30 percent reductions to really tackle climate change. We need a range of 35 to 40 percent cuts [in emissions] for the medium term and we need all major emitters on board, including the United States and some developing countries, in a common but differentiated way," Dimas said.

#### **4. European Commission Seeks Details on French-German Vehicle Emissions Plan**

On July 3<sup>rd</sup>, European Commissioner for Environment Stavros Dimas said that the European Commission is waiting for further details regarding a Franco-German proposal on a phased-in EU target for reducing automobile carbon dioxide emissions by 2020 before making a formal response. Following a Franco-German ministerial council meeting in Straubing, Germany, the two countries announced on June 9<sup>th</sup> a strategy to reduce carbon dioxide emissions from European cars, setting a level of between 95 and 110 grams of carbon dioxide per kilometer (5.4-6.2 ounces per mile). The emissions limit would be reached by 2020 for new and existing cars, "but [would] allow flexible transition periods."

Merkel and French President Nicholas Sarkozy said the countries' environment ministers would provide additional details at a later date.

On June 25, the Italian government said it opposed the agreement. Stefania Prestigiacomo, Italy's new minister of environment, said the weaker emissions limits under the Franco-German plan would harm the environment while also favoring manufacturers of larger cars in France and Germany at the expense of makers of small cars, like Italy's Fiat. "The proposal is unacceptable because it weakens environmental norms as a way to help local industry in those two countries," Prestigiacomo said in a statement.

#### **5. Trucks Could See Environmental Tolls by 2011, Under EU Commission Proposal**

On July 8<sup>th</sup>, the European Commission published proposals to loosen European Union restrictions on levying environmental charges on road freight. Until now, EU member states have only been able to charge tolls on trucks crossing their territory that are designed to recover the costs of building and maintaining road infrastructure. However, under the Commission's plan, member states would be able to factor in the cost of pollution, including noise pollution, and congestion caused by heavy goods vehicles.

According to the Commission, the new charging regime, which would take effect starting in 2011, would encourage road freight operators to use their vehicles more efficiently, thus reducing fuel consumption by 8 percent and cutting greenhouse gas emissions.

Existing EU rules on road freight charging are contained in a 1999 law known as the Eurovignette Directive (1999/62/EC), which the new proposals would modify. The Eurovignette is a sticker or certificate attached to a truck showing that a time or distance-based fee has been paid to compensate EU governments for road infrastructure costs.

Under the Commission proposals, member states that do opt for environmental tolls for road freight must set the charges using a common calculation method. States also must ensure that charges are transparent and proportional, and they must collect the charge "through electronic systems which do not create hindrance to the free flow of traffic," according to the Commission.

The proposals stipulate that revenues raised by the environmental levies must be used for research and development into cleaner transportation or for mitigation of road transportation-related pollution.

The proposed charging regime can apply to vehicles of 12 metric tons or more in 2011 and to vehicles above 3.5 metric tons starting in 2012.

The additional cost per kilometer from environmental charging will be [Euros] 0.04-0.05 (\$0.06-0.08), according to Commission estimates.

The revision of the Eurovignette Directive must be agreed to by the European Parliament and EU member states, represented in the EU Council, before it becomes law.

## **6. Swedish Parliament Wants Vehicles to Be Adapted for Ethanol Fuel**

A new law (2007/08:46) permitting road vehicles to be adapted to run on ethanol has been adopted by the Swedish Parliament. The new rules, which were approved on July 1<sup>st</sup>, allow gasoline and diesel-powered passenger cars and light trucks to be converted to ethanol as long as a number of technical criteria are met. An inspection regime will be put in place to monitor conversions.

Although an earlier regulation dating back to May 2007 allowed some on-road vehicles to be adapted to run on biogas, Environment Ministry spokesman Mattias Johansson said that ethanol conversions have previously not been included in legal texts and have therefore been considered illegal.

In accordance with a government subsidy program, anyone who buys a new low-emissions vehicle before Dec. 31, 2009, is eligible for an 'eco subsidy' of SEK 10 000 (\$1,650). As the subsidy applies only to "new" cars, ethanol-converted vehicles must be re-registered to qualify.

The Swedish Motor Vehicle Inspection Company pointed out that as with designated green cars, ethanol-converted vehicles also would receive an exemption from congestion pricing, which is currently in effect in Stockholm.

According to the Swedish Environmental Protection Agency, sales of hybrid or biofuel-powered vehicles rose by 49 percent in 2007. "Green" vehicles account for about 18 percent of the total number of new cars sold.

## **7. Environment Committee Wants Lower Biofuel Use Goals, Stricter Standards**

On July 7<sup>th</sup>, the European Parliament's Environment Committee approved amendments that call for a significant revision of European Union plans to have biofuels as the cornerstone of its target requiring renewable energy to account for 5.75 percent of energy use in the transport sector by 2010 and 10 percent by 2020. The amendments, approved on a 36-0 vote by a cross-

party group of European parliamentarians, called for the renewable target in the transport sector to be lowered to 4 percent by 2015, with at least 20 percent of that amount coming from the use of non-biofuel sources, such as hydrogen from renewable sources or biogas from lignocelluloses biomass and algae.

In addition, the Environment Committee said the 2020 target should fall between "8 and 10 percent," with a similar increase in the contribution from non-biofuel sources.

The Environment Committee also approved amendments demanding stricter biofuel sustainability criteria than what had been informally agreed to by EU member states in the Council of Ministers. The amendments would eliminate any biofuel that does not currently contribute a life-cycle carbon dioxide savings of at least 45 percent compared to fossil fuels, with a further increase to 60 percent by 2015.

The amendments approved by Parliament's Environment Committee will be taken up by the institution's General Assembly for a final vote in September. The Environment Committee's 36-0 vote represented a wide-range of political parties and signaled that the changes likely would be approved in the September vote. Whatever target is ultimately agreed to, approval is required from both the Parliament and the EU Council of Ministers.

#### **8. Particulates, Ozone, Other Pollutants Affect 53 Percent of Spain Report Finds**

Pointing to an estimated 16,000 premature deaths annually, the environmental group Ecologistas en Acción (Environmentalists in Action) on July 9<sup>th</sup> released an annual air quality report stating that more than half of Spaniards are breathing polluted air. According to the report, *Air Quality in the Spanish State, 2007 Assessment*, more than 53 percent of the population is exposed to some form of air pollution.

While 48 percent are breathing coarse particulate matter (up to 10 micrometers in size, or PM<sub>10</sub>), another 21 percent are affected by nitrogen dioxide (NO<sub>2</sub>). Likewise, excessive levels of ozone affect rural and suburban areas.

The group said that roughly 80 percent of pollution in urban areas is caused by traffic, with most Spanish cities failing to develop credible plans for reducing traffic and pollution.

#### **9. DEFRA Claims Deeper Reductions in GHG Emissions Than Kyoto Goal**

The United Kingdom is on course to cut greenhouse gas emissions 23 percent by 2012 compared with 1990 levels, almost twice its goal of 12.5 percent in the Kyoto Protocol, the head of the Department for Environment, Food and Rural Affairs (Defra) said on July 17<sup>th</sup>. In a foreword to the government's annual report on its climate change strategy, Secretary Hilary Benn said initial estimates for 2007 showed U.K. greenhouse gas emissions at 639.4 million metric tons of carbon dioxide equivalent, 2 percent below the 2006 figure of 652.3 million tons.

The annual report, which brings together all the government's recent published climate change data, said provisional estimates for carbon dioxide emissions during 2007 were around 543.7 million tons, a 2 percent drop from the 2006 figures of 554.5 million tons. In 2006, carbon dioxide accounted for about 85 percent of greenhouse gas emissions, the report said.

The report that combining the provisional estimates of carbon dioxide emissions in 2007 with emissions trends for other greenhouse gases suggests that total U.K. greenhouse gas emissions in 2007 were 22 percent below 1990 figures.

Defra's 2007 annual report did acknowledge that the current official data did not include emissions from international aviation and shipping. The report said aviation and shipping were omitted because "there is no international agreement yet on allocating them to national greenhouse gas inventories." It added that if emissions of carbon dioxide from international aviation and shipping bunker fuels sold in the United Kingdom were added to the national carbon dioxide emissions inventory for 2006, these sources would amount to about 7 percent of the national total.

In spite of the debate on emissions data, the annual report said that by 2010, the United Kingdom's emissions of greenhouse gas emissions could be 23 percent below 1990 levels by taking into account the net impact of allowances and credits surrendered through the European Union Emission Trading Scheme. Looking further to 2020, the report estimated that greenhouse gas emissions would fall to 31 percent below 1990 levels while carbon dioxide emissions could decrease to 26 percent below base year levels.

The report said one of the main reasons for the provisional estimated drop in carbon dioxide emissions in 2007 was a switch from coal to natural gas for electricity generation. The other factor in the decrease was lower fossil fuel consumption by households and industry, the report said, citing government initiatives such as the Carbon Emissions Reduction Target, launched this April to encourage energy suppliers to invest in energy efficiency in homes.

#### **10. Report: Britain's Carbon Dioxide Emissions Higher Than Official Data Suggest**

The United Kingdom's overall carbon dioxide emissions have risen since 1992 if emissions associated with the importation of goods and services into Britain are taken into account, according to a July 2<sup>nd</sup> report prepared by international researchers. Overall carbon dioxide emissions linked with the United Kingdom's consumption of goods and services increased by nearly 115 million metric tons of carbon dioxide between 1992 and 2004, an 18 percent rise in emissions, according to the report, Development of an Embedded Carbon Emissions Indicator.

During the same period, the United Kingdom managed to reduce emissions at home by 5 percent through reducing the carbon intensity of production processes and energy generation, according to the Department for Environment, Food and Rural Affairs (Defra), which commissioned the Stockholm Environment Institute and the University of Sydney to conduct the study.

The report's findings echo criticisms made by the National Audit Office in a March report, which argued that the U.K. government's official statistics on emissions failed to take account of emissions associated with manufactured goods and services imported into and exported out of the country.

The rise in carbon dioxide emissions associated with U.K. imports rose from 4.3 percent of the country's total emissions in 1997 to 21 percent in 2004, the report said.

The United Kingdom has increased its reliance on imports from other countries, the majority of which are part of the 30 member nations of the Organization for Economic Cooperation and Development (OECD), according to the report.

Some of Britain's manufacturing sector also has moved to developing countries where manufacturing is more carbon-intensive, the report said.

### **11. U.K. To Slow Down Biofuels Expansion Following Critical Review**

The United Kingdom will slow down the expansion of biofuels until it has more evidence about their sustainability and wider environmental impact, Transport Secretary Ruth Kelly announced on July 7<sup>th</sup>. The decision follows the same-day release of the Gallagher Review of the Indirect Effects of Biofuels Production. The study was commissioned by the government in February, and led by Ed Gallagher, chair of the government's Renewable Fuels Agency.

The review raised questions about whether new land for biofuel production will lead to higher, rather than lower, greenhouse gas emissions both within the European Union and internationally.

"Given the uncertainty and potential concerns Professor Gallagher sets out, I believe it is right to adopt a more cautious approach until the evidence is clearer about the wider environmental and social effects of biofuels," Secretary Kelly said in a prepared statement. "We also need to allow time for more sustainable biofuel technologies to emerge."

The Gallagher Review said that while biofuels have the potential to deliver by 2020 annual global greenhouse gas savings of approximately 338 million to 371 million tons of carbon dioxide emissions, these gains must be weighed against the risks that the expansion and use of biofuels could drive unsustainable land use change.

The review also suggested that the European Union's proposed 10 percent biofuels target for 2020 is not justified by scientific evidence, but that it could be attained if a number of important conditions are fulfilled. Such conditions include the presence of sufficient controls to ensure that agricultural expansion to produce biofuel feedstock is directed toward idle or marginal land or uses appropriate wastes, residues, or other non-crop feedstock, the review said.

But the review rejected a moratorium on biofuels, arguing that a moratorium would reduce the ability of the biofuels industry to invest in new technologies or to transform the sourcing of its feedstock to the more sustainable supplies necessary to create a truly sustainable industry.

Kelly said the government is considering slowing the rate of increase in the Renewable Transport Fuel Obligation, a program the government introduced April 15. It requires road transport fuel suppliers to ensure that 2.5 percent (by volume) of their total fuel sales is made up of biofuels. Originally, the level of the obligation was due to rise to 5 percent in April 2010, but Kelly said the new proposal would delay the deadline to 2013.

The Transport secretary added that while the United Kingdom will continue to support the EU target to have 10 percent of its transportation fuels come from renewable sources by 2020, the British government will argue that such a target is conditional on evidence showing that the renewable fuels are being delivered in a sustainable way and without significant impacts on food prices.

## **12. Commission to Propose Reduction in VAT on Energy-Efficient Goods**

The European Commission confirmed on July 4<sup>th</sup> that it will present a legislative proposal in October calling for reduced value-added tax (VAT) on energy efficient goods to help reduce greenhouse gases and enhance energy independence. At the same time, the commission said it will include measures in the proposal that will call for the elimination of reduced VAT rates for some products and services that are considered harmful to the environment.

Energy Commissioner Andris Piebalgs stated at a meeting of EU energy ministers that the legislative proposal would contribute, if approved, an important role in helping the European Union reduce energy consumption by 20 percent by 2020. The EU energy ministers meeting was hosted by France, which assumed the rotating EU presidency July 1. Any EU proposal to reduce VAT must get unanimous approval from EU finance ministers in the Council of Ministers.

In 2007, French President Nicholas Sarkozy and British Prime Minister Gordon Brown teamed up to call for an EU proposal to reduce VAT. However, the commission has consistently rejected the idea as being unworkable because it claims that it would be too difficult to establish a reliable set of criteria for determining what is energy efficient. Earlier this year, however, EU heads of state and governments called on the commission to draw up a proposal. As a result, the commission has launched four studies to determine what energy efficient goods could qualify for reduced VAT.

## **13. Lawmakers Back Plan to Add Aviation to EU Emission Trading Scheme in 2012**

On July 8<sup>th</sup>, EU lawmakers approved draft legislation imposing a cap on greenhouse gas emissions from airlines landing in or departing from the European Union and requiring the carriers to trade emission permits, starting in 2012. In adopting the plans by an overwhelming majority of 640-30, with 20 abstentions, lawmakers in the Parliament endorsed a compromise agreement with EU member states. Because EU countries already have agreed to the proposals, finalization in the EU Council will now be a formality. Once the legislation is published in the Official Journal of the European Union, member states will have 12 months to transpose it into their national codes of law.

Under the compromise agreement approved by the Parliament, all flights within, into, and out of the European Union will be included in emissions trading from 2012, with the exception of research flights, and flights operated by small airlines that fall under a certain threshold.

The emissions cap for 2012, beyond which airlines must buy additional carbon allowances, will be set at 97 percent of average annual emissions between 2004 and 2006, falling to 95 percent in 2013 when the third phase of the EU Emission Trading Scheme begins.

Most of the carbon credits given to airlines at the outset of the scheme will be given for free, but 15 percent will be auctioned. According to the legislation, revenues from auctioning should be used for climate change mitigation, including paying for climate change adaptation measures, funding low-emissions transportation research, and supporting energy efficiency and renewable energy measures.

## **14. Details Regarding Aviation in the EU Emissions Trading Scheme Emerging**

The UK's Department for Transport has clarified rules surrounding the inclusion of aviation in the EU's Emissions Trading Scheme from 2012. Aviation generates 3 percent of all carbon dioxide (CO<sub>2</sub>) emissions in the 27-member bloc.

Below are details of the plan:

- All airlines flying into and out of EU airports will be included
- Instead of separate emissions caps for each of the 27 member states, one EU-wide cap will be set based on historical levels
- 2012 emissions cap to be set at 97 pct of average 2004-06 EU airline emissions
- Proposed cap of 95 pct of average 2004-06 emissions for 2013 onwards, though this is still being discussed under wider EU negotiations
- According to the EU Commission, 2004-06 average emissions were around 218 million tons of CO<sub>2</sub>. They are estimated to be 340 million by 2015, and over 400 million by 2020
- According to DfT, the scheme is likely to affect at least 87 major airlines, 35 of which are headquartered outside the EU.
- As head of the EU presidency, France hopes to reach a first reading agreement on the plan in December 2008
- Airlines will receive 85 percent of Aviation Allowances (AAs) for free in February 2012
- The remaining 15 percent to be auctioned by government shortly thereafter - this may change from 2013 as part of wider EU negotiations
- Every EU member state will hold an AA auction over the course of a few days in mid-2012
- There are no limitations as to who can participate or how many AAs can be bought in any of the 27 auctions - this may lead to increased volatility and speculation
- In the UK, auction revenues will not be earmarked, or 'hypothecated', to fund renewable energy projects or fight climate change
- Airlines can use EUAs, the credits traded under the EU Emissions Trading Scheme (EU ETS), for compliance, but heavy industry participating in the EU ETS cannot use AAs
- Airlines can also use UN-approved offsets (CERs or ERUs), the project-based credits issued under the Kyoto Protocol, to cover 15 percent of their emissions - this may change from 2013 as part of wider EU negotiations
- 3 percent of all AAs will be set aside for new operators and fast-growing airlines, defined as having growth over 18 percent per annum
- Flights under 5.7 tons will be exempt
- Commercial airlines with emissions less than 10,000 tons of CO<sub>2</sub> or who fly less than 243 flights into, out of or within the EU within a 4-month period will be exempt
- PSOs (Public Service Obligations) on specific routes between outermost regions or where capacity does not exceed 30,000 seats will be exempt
- Non-EU heads of state will be exempt

#### **15. Court Upholds Environmental Impact Tax Levied on Passenger Flights in Holland**

On July 17<sup>th</sup>, a Dutch court of appeals in The Hague upheld a ruling that maintains a recently levied tax on passenger flight tickets. The tax, passed by the Dutch Parliament in 2007, imposes a [Euros] 11.25 (\$17.82) tax on flight tickets within Europe, and adds [Euros] 45 (\$71) to flights outside the continent. Revenues from the tax are not earmarked, and will be a part of overall government income.

The lawsuit was filed by the Board of Airline Representatives in the Netherlands (BARIN), a trade association representing airlines, as well as Maastricht Aachen Airport and Ryanair. They claimed that the tax is illegal under Dutch and international law.

Passengers, not airlines, will pay the tax, but airline representatives argue that the extra cost will impact bookings, said Nanke Kramer, a press officer for Netherlands' national airline KLM. It could not have been implemented at a worse moment . . . [airlines are having] difficult times because of extremely high fuel prices, as well as the economic situation worsening," Kramer said, adding that passenger bookings have already gone down in July. She said passengers can take flights from airports in neighboring Germany and Belgium, or refrain from flying altogether.

Currently, KLM is not planning any service changes, but that could change when airline officials adjust the winter schedule at the end of October, Kramer said. KLM estimates that up to 1 million passengers could abstain from taking flights from Dutch airports in the next year as a result of the tax.

## **16. Transport Remains Main Source of Health-Damaging Pollutants in EU**

According to a new report by the European Environment Agency, road transport remains the single main source of nitrogen oxides (NOx), carbon monoxide (CO) and non-methane volatile organic compounds (NMVOCs), and the second-most important source of fine particulate emissions (PM10 and PM2.5) in the EU-27.<sup>1</sup>

This inventory report accompanies the annual emission inventory submission of the European Community to the UNECE Convention on Long - Range Transboundary Air Pollution. It presents an overview of air pollutant emission data reported by the EU-27 Member States between the years 1990 to 2006. In particular, the report highlights the significant contribution to air pollution made by the transport sector. Across the EU-27, significant emission reductions have occurred for various air pollutants since 1990 - the reported emissions of nitrogen oxides in 2006 have decreased by more than 35 % and sulfur dioxide by almost 70 %. The emission reductions have taken place across many of the economic sectors reported by countries.

## **17. EU Consults on Carbon Reduction Plan for Vans**

The European commission is consulting on legislative proposals to reduce carbon dioxide emissions from light commercial vehicles such as vans. The plans were outlined last year alongside similar proposals for cars. The draft legislation on cars is currently being discussed by EU legislators and the French presidency of the bloc hopes to reach agreement by December.

The commission will reportedly publish draft legislation early next year calling for average emissions cut to 175 grams per kilometer (g/km) by 2012 and 160g/km by 2015. In 2002, emissions averaged 201g/km.

In a consultation paper to be discussed by stakeholders the commission says individual targets for 2012 and 2015 would be set for each manufacturer, based on the average mass of their fleet. Those failing to meet their targets could face fines.

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<sup>1</sup> Annual European Community LRTAP Convention Emission Inventory report 1990-2006, 28 Jul 2008

Manufacturers producing vans and cars could have a single emission target, according to the paper. There would also be derogations for small manufacturers.

### **18. Green Car Test Shows "Much Room for Improvement"**

The car industry "needs to reach the next level" in cutting carbon dioxide and other pollutant emissions, the International automobile federation (FIA), which represents car users, said after releasing its latest vehicle environment assessments. Even the Toyota Prius hybrid car - the "best ever performer" - has yet to achieve a maximum five star rating, the FIA said. It acknowledged the difficulty in addressing CO<sub>2</sub> and other air pollutants simultaneously but said this was "the standard all must aim for across all of their models".

In the latest round of testing taking place over summer 2008, some manufacturers have made impressive progress in producing more environmentally friendly cars. Others are still making high emissions models.

- The Mazda 6 2.0 Estate Sport Diesel is in the top ten of best performers achieving 81 points from its relatively low levels of CO<sub>2</sub> and pollutant emissions. It is eight places behind best ever performer the Toyota Prius which achieved 89 EcoTest points when last assessed.
- The Mazda is joined by the Volvo V50 1.6D, the Mercedes SL 350 and the Citroen C5 Tourer HDi in achieving a four star rating under the latest round of testing. No car – not even the Prius - has yet achieved a maximum five star rating indicating that there is much room for improvement across the industry.
- At the bottom of the table in this round was the BMW M3 Cabriolet scoring zero points for CO<sub>2</sub> emissions performance. The score represents an emission level of over 294.6 g CO<sub>2</sub>/km. It is joined by the BMW M3 Coupé which scored just one point on CO<sub>2</sub> emissions.
- Both the Cabriolet and Coupé do achieve a much better score (45 and 48 points respectively) for cutting levels of harmful exhaust emissions such as nitrogen oxides, hydrocarbons and carbon monoxide. This shows the difficulties manufacturers can have in addressing both pollutants and CO<sub>2</sub> – each key aspects of environmental performance – at the same time.

EcoTest, set up by the FIA Foundation, rates cars according to both CO<sub>2</sub> and pollutant emissions. An extension of the EU's official test cycle, EcoTest aims to provide consumers with additional information on which to base car purchasing decisions. In order to be awarded a five star rating, cars should be achieving a total of over 90 points from both CO<sub>2</sub> and pollutant emissions levels.

In the latest round of EcoTest assessments, several cars have joined BMW in receiving low scores for CO<sub>2</sub> performance. They include:

- - The Alfa Romeo Brera 2.4 JTDM which achieved 11 points for CO<sub>2</sub> emissions, 35 points for pollution and a two star award overall.
- - Mitsubishi Shogun 3.2 DI-D Automatic CO<sub>2</sub> 10 points; pollution 30; overall two stars.
- - Chevrolet Captiva 2.0 LT Sport (7 seat) CO<sub>2</sub> 15; pollution 29; overall two stars.

As EcoTest gives a broader picture than just CO<sub>2</sub>; some cars achieve high scores for CO<sub>2</sub> but are given a poor overall rating when exhaust pollutants are taken into account. In the latest

report, the Subaru Legacy 2.0D achieves a CO2 rating of 43. This is the best score for CO2 emissions so far under the EcoTest assessment and corresponds to 150g CO2/km outperforming others in its class.

However, the Subaru does fall down on pollutants as it produces relatively high levels of harmful exhaust emissions and only achieves a 3 star rating overall. The maximum possible five star rating would be achieved by performing consistently well over both CO2 emissions and pollutants.

EcoTest puts cars through a rigorous driving cycle and collects data on the resulting CO2 emissions and pollutants. The test involves more extensive assessments than those required by the EU. EcoTest is based on the New European Driving Cycle (NEDC), a prerequisite for type approval in the EU. EcoTest goes beyond the EU's requirements by testing for performance in a range of different environments including on the motorway. Cars are also tested in urban conditions for carbon dioxide emissions and pollutants including nitrogen oxide, hydrocarbons and carbon monoxide. EcoTest assesses diesel engines for emissions of particulates.

### **19. EU Could Get Climate Commissioner**

The European commission is likely to create a new post of climate change commissioner when its mandate is renewed next year, according to press reports. The move would unite climate-related policy roles currently held by several different commissioners. It would also bolster the profile of EU climate policy as the bloc enters serious negotiations on a post-2012 world climate policy.

A new "college" of 27 commissioners will be nominated by EU governments when the current commission's period of office ends next summer. The commissioner chosen as president of the body will have the sole right to decide whether or not to create a climate portfolio.

According to reports there is now significant political momentum behind the idea of a climate commissioner. Current president Jose Manuel Barroso has made climate a major EU policy priority and is seeking nomination for a second term in the role.

Greek environment commissioner Stavros Dimas is also seeking a second nomination and reportedly would be keen to head the new department. He would be unlikely to retain the environment portfolio because commissioners are generally discouraged from doing the same job for a second term.

A new climate change directorate-general (DG) would be created to back up the new commissioner, taking on tasks in trade, enterprise, competition and energy policy that are currently dealt with across various commission departments. An earlier suggestion to house these joint climate responsibilities in the commission's secretariat-general - the president's DG - has fallen out of favor, according to reports.

### **20. U.K. Parliament Committee Says Policy Promoting Use of Clean Cars Ineffective**

Proposals by the U.K. Treasury to increase road taxes for the most polluting vehicles are "too small to be effective" and consequently "the projected carbon savings are far less than they could be," a parliamentary committee said in a report issued on August 4<sup>th</sup>.

In the 2008 U.K. budget released in March, the Chancellor of the Exchequer announced new vehicle excise-duty (VED) rates, with new rate "bands" set to go into effect in 2009, aimed at encouraging people to buy cleaner vehicles that emit less carbon dioxide. The Environmental Audit Select Committee welcomed the six new VED bands set out in the budget, including a new top ban for cars emitting more than 255 grams of carbon dioxide per kilometer (12.8 ounces per mile). But "the differentials between VED bands are still not large enough to drive market transformation," it said in its report, Vehicle Excise Duty as an Environmental Tax.

To further develop the market for low-emission cars, the committee recommended that the Treasury examine the merits of a type of "feebate" system such as exists in France, in which levies on high-emission vehicles are accompanied by subsidies for low-emission cars.

At the same time, the committee said the government should accelerate development of new vehicle technology, improve public transportation, and encourage the growth of car-sharing schemes.

## **21. EU States Favor Revision of Energy Taxes to Help Reduce GHG Emissions**

According to a July 31<sup>st</sup> European Commission report, a majority of EU member states favor revising the European Union's energy taxation directive to achieve the group's environmental objectives, such as a reduction in greenhouse gases. A majority of EU member states also support achieving compatibility with the EU Emission Trading Scheme (ETS), and there is considerable support for imposing a carbon dioxide tax on sectors that are not covered by EU emissions trading. However, member states have contrasting views on the need to impose "border adjustment taxes" on products imported from countries that do not take measures to reduce greenhouse gases and commit to ratifying the Kyoto Protocol.

The conclusions drawn by the Commission are based on the responses the EU executive body received following the March 2007 publication of a green paper outlining possible policy options--taxes and other "market-based instruments"--to help the European Union meet its environmental objectives.

"In general the Green Paper was welcomed and the issues considered were deemed relevant even though further EU action in exploring new market-based instruments was received with some prudence," the Commission said in its conclusions. "For that reason every action in this area should be carefully analyzed and subject to assessment of impacts ... the replies received called on the Commission to justify why the further development of taxation at EU level for environment rather than fiscal reason should be the adequate means for this purpose." "On this point, member states and business sector respondents stressed that the main target of taxation is generally to generate revenue," the Commission added.

There was large support for the revision of the EU tax directive put forth in the Commission's green paper, especially as a way to establish coherence with the EU carbon dioxide trading emissions program that began in 2005 to help the European Union meet its Kyoto Protocol target. Many respondents believed it was important to alleviate the burden imposed on energy intensive industries, as they were already making significant economic sacrifices via the EU ETS.

"Generally governments agree unanimously that ... the revision of the Energy Taxation Directive is a priority in this field," the Commission said. "There was a large support from governments for an increase in minimum rates that were considered too low to achieve a significant level of

harmonization, incentivize energy efficient behavior and contribute to the fight against climate change. At the very least, it was felt they needed to be aligned with inflation."

One way to achieve this would be to apply a carbon dioxide tax in sectors not covered by the EU emissions trading directive, the Commission said.

When the EU energy taxation directive was approved in 2003, Frits Bolkestein, who at the time served as the EU internal market and taxation commissioner, said the legislation had more loopholes than "Swiss cheese." And some member states picked up on that theme in response to the Commission's green paper, insisting that many of the exemptions be eliminated in any revised directive.

Earlier in 2008, when the European Union launched a range of new legislative initiatives, including the revamping of the EU ETS to meet an ambitious greenhouse gas target of a 20 percent reduction from 1990 levels by 2020, there had been considerable debate about the need to impose "border adjustment taxes" on imported goods from countries that had not ratified the Kyoto Protocol--first and foremost the United States.

"Some member states see border tax adjustments as a necessary complement to the EU [ETS] while others regard this measure as a restriction to free trade," the Commission report said. "Compatibility with [World Trade Organization] rules was considered as a key question in this respect. Governments also pointed to other measures such as sectoral agreements in order to ensure the participation of these [trading] partners in a common effort to reduce greenhouse gas emissions and fight climate change.

"Those member states that took a skeptical position towards measures such as border tax adjustments argued that the measures carry several risks such as impracticability, potential WTO dispute or even retaliatory measures against European goods," the Commission added.

Based on a package of legislative measures introduced in January, the Commission called for the issue of the border tax to be addressed after 2011. However, some EU member states are insisting that border taxes be agreed to as part of the legislation due to be finalized by the end of 2008 under the EU presidency currently chaired by France.

Some other conclusions drawn by the Commission via the consultation period include:

- There was overwhelming support for a market-based instrument forum to support the exchange of information and best practices, as well as to get more closely involved in the decision-making process.
- A need was perceived for the European Union to achieve coherence between taxation policy and its commitment to have renewable energy account for 20 percent of all EU energy consumption by 2020 by removing unfavorable levies.
- Some EU member states insisted that the European Union needs to establish a more "environmentally motivated" VAT system, especially in areas where the principle of polluter payment is not yet ensured.
- In the transport sector, environmental road-use charges, as well as taxation, were considered possible ways to deal with the increasing environmental impact.

- There was a big gap among EU member states on the need to harmonize landfill taxes in the European Union and to coordinate waste management policy.
- A large number of member states were in favor of exempting biofuels from a carbon dioxide tax as a way to enhance their development, especially for second-generation biofuels that will produce fewer greenhouse gases.

## **22. France Considers Kilometer-Based Tax on Foreign Trucks Using French Roads**

In October, the French Parliament will begin considering a plan to levy a per-kilometer tax on foreign heavy trucks that use French roads, according to a spokeswoman for the Ministry of Ecology, Energy, Sustainable Development and Territorial Planning. The plan would tax trucks [Euros]0.05 to [Euros]0.30 (\$0.8 to \$0.47) per kilometer driven through France for all trucks over 3.5 tons, a spokesperson said, adding that Parliament will discuss the proposal starting October 3<sup>rd</sup>.

The proposal also is on the agenda for an upcoming meeting of EU transport ministers.

The French government has estimated that such a tax could bring in [Euros] 1 billion (\$1.55 billion) a year by 2010, to be spent on France's transportation infrastructure.

The plan grew out of the Grenelle Environment Forum of October 2007 in Paris, at which the government sought to formulate new initiatives and policies for sustainable development. The proposal also will figure in the upcoming informal council of EU transport ministers. The council will discuss, among other things, a proposal to revise the so-called EU Eurovignette directive (1999/62/EC), which lays down common rules on how EU states may charge heavy goods vehicles for using the road network.

The changes to the directive, already modified in 2006 (2006/38/EC), will be one of several sustainable transport proposals under consideration during the meeting. France is serving as the EU rotating president from July to the end of the year.

## **23. Poll Says Europeans Back Tough Car Emission Targets**

A majority of Europeans back planned legislation to enforce big cuts in carbon dioxide emissions from new cars, according to a public opinion poll in the European Union's five biggest countries. The survey, carried out by the TNS Opinion pollster for the Friends of the Earth, may strengthen the case for the European Parliament to keep tough targets for lowering emissions of one of the main gases blamed for global warming.

The TNS survey showed 87 percent of those polled in Britain, France, Germany, Italy and Spain supported measures to reduce the fuel consumption of new cars by a quarter, a cut equivalent to meeting a 120 gram target.

Carmakers, especially those producing luxury models in Germany, are lobbying to extend the deadline, citing long production cycles for new vehicles. They say the legislation would harm their business and lead to job losses.

But the poll showed 64 percent believed the planned measures would benefit the economy because consumers would buy less fuel and have more to spend on other goods.

The car proposal is part of a wider EU plan to slash CO2 emissions by at least one fifth by 2020, compared with 1990 levels. France hopes to clinch a final deal during its presidency over the bloc in the second half of 2008. A compromise is expected to emerge from complex negotiations between the European Parliament and the EU's 27 governments.

Under the Commission's proposal, improved engine technology is to achieve a cut to 130 grams per km, with other improvements in tires, gears and air conditioning to do the rest. Carmakers failing to meet the target are to face fines.

#### **24. Study Says Car Makers Lag EU's CO2 Vision, Japan Worst**

Car makers are not doing enough to meet the European Union's proposed targets for cutting carbon dioxide emissions, with several Japanese car brands facing the biggest challenge to make the grade, according to a new report by environment group T&E. Overall, car makers will have to cut CO2 emissions by 17 percent to reach the proposed goals for 2012, the report said. French and Italian car makers are furthest along that road, while Germany's luxury BMW brand is making the fastest moves to catch up, added the report, based on European Commission sales data from 18 EU countries.

The study came shortly before European lawmakers reconvened after a summer break for a battle over one of the EU's most hotly-contended pieces of environmental legislation. As part of its drive to lead the world in fighting climate change, the European Commission has proposed curbing average CO2 emissions from new cars to 130 grams per kilometer by 2012, compared to current levels of around 158 g per km. The move is part of a broader EU effort to cut CO2 emissions by at least one fifth by 2020, compared with 1990 levels, in a bid to stave off the worst effects of climate change.

According to the T&E report, France's PSA Peugeot-Citroen and Renault and Italy's Fiat are the best-placed to meet their proposed goals for 2012 and will have to cut CO2 emissions by just 10 percent, 13 percent and 14 percent respectively.

While Toyota and Honda rank fourth and fifth in the table of efficiency, with 15 and 16 percent cuts to be made, Nissan, Mazda and Suzuki are three of the four worst-performing brands and face heavy cuts. Suzuki has the hardest task of all, and would have to cut emissions by 25 percent by 2012 to make the grade.

The report also showed that BMW made the biggest efficiency gains last year, cutting CO2 emissions by 7.3 percent in 2007, compared with a European average of 1.7 percent. BMW's average CO2 emissions from new cars was 170g per km last year, compared with 184g per km in 2006.

#### **25. Climate Proposals Face Crucial Votes in European Parliament Committee This Fall**

A package of proposed EU climate legislation will reach a crucial stage this October when the European Parliament's Environment Committee votes on a series of legislative reports concerning draft legislation on revising the Emission Trading System (ETS) after 2012, emissions reduction targets for EU countries to be achieved outside sectors covered by the ETS, and carbon sequestration. All three legislative proposals are scheduled to be voted on by October 16<sup>th</sup>.

Lawmakers also will vote on September 9<sup>th</sup> on plans to reduce carbon dioxide emissions from cars, a measure that is not part of the climate package but complementary to it.

The various measures contained in the climate package were put forward by the European Commission in January and are now under consideration by both the Parliament and by EU member states represented in the EU Council. Both institutions must separately formulate their positions on the proposals, before negotiating the final form of the legislation.

EU policymakers want to complete the legislation before Parliamentary elections take place in mid-2009 and before the 15th session of the Conference of the Parties to the United Nations Framework Convention on Climate Change, to be held in Copenhagen in December 2009. The European Union hopes the U.N.-sponsored climate talks in Copenhagen will result in a finalized international climate framework to succeed the Kyoto Protocol.

The Environment Committee votes in the fall will give a strong indication of the Parliament's position on the final shape of the climate legislation. The different legislative proposals have been under consideration by the Parliament for several months. Their reports on the legislation, which are already public, set out a range of amendments to the Commission's original legislative texts.

The Environment Committee will approve or reject these amendments, thus taking the first step in establishing the Parliament's position on the legislative package. The committee's amendments are then subject to the approval of the full Parliament, which will vote on the draft legislation once the committee has finished its work.

## **NORTH AMERICA**

### **26. EPA Tightens Engine Standards on Small Gasoline Engines**

The Environmental Protection Agency (EPA) has set strict new standards for gas-powered lawn equipment and marine engines, substantially reducing the amount of gas fumes, carbon monoxide, hydrocarbons and smog-forming pollutants emitted from a wide range of engines. The regulations will take effect in 2010 and 2011.

When fully implemented, the rule will yield annual emission reductions of 600,000 tons of hydrocarbons, 130,000 tons of nitrogen oxide (NO<sub>x</sub>), 5,500 tons of direct particulate matter, and 1.5 million tons of carbon monoxide (CO). EPA expects the new standards to save approximately 190 million gallons of gasoline each year.

The rule kicks into gear in 2011 for lawn and garden equipment of 25 horsepower or less. For a full range of gas-powered personal watercraft and inboard and outboard engines, the rule powers up in 2010.

To meet the new exhaust emission standards, manufacturers will likely employ catalytic converters for the first time in many small watercraft and lawn and garden equipment. EPA determined this strategy was feasible and safe. This regulation also includes the first national standards for boats powered by stern-drive or inboard engines, and carbon monoxide standards for gasoline-powered engines used in recreational watercraft.

Non-road gasoline-powered engines, such as those used in lawn and garden equipment, will see an additional 35 percent reduction in smog-forming hydrocarbon (HC) and NO<sub>x</sub> emissions. These cuts go beyond the 60 percent reduction that saw final implementation two years ago under an earlier rulemaking. The updated engines will also achieve a 45 percent reduction in fuel evaporative emissions.

Recreational watercraft powered by gasoline engines will incur a 70 percent reduction in HC and NO<sub>x</sub> emissions, a 20 percent reduction in CO and a 70 percent reduction in fuel evaporative emissions.

The total estimated public health benefits range between \$1.6 and \$4.4 billion by 2030. These benefits outweigh estimated costs by at least eight to one according to EPA, while preventing over 300 premature deaths, 1,700 hospitalizations, and 23,000 lost workdays annually.

## **27. EPA Questions GHG Benefit Estimates in NHTSA Fuel Economy Analysis**

EPA is raising serious concerns that the National Highway Safety Traffic Administration (NHTSA) is significantly underestimating the benefits of reducing greenhouse gases (GHGs) in a draft environmental impact statement (EIS) that the highway department issued to support its proposed rule to boost vehicle fuel economy standards between 2011 and 2015.

Although the draft EIS for the first time considers the benefits of reducing GHG emissions, EPA warns that NHTSA undercuts those benefits because it severely underestimates gas price projections, among other issues. “While EPA is supportive of the effort to raise fuel economy standards and believes that all of the action alternatives would result in environmental benefits when compared to the no-action alternative, we do have significant concerns with the data used in the [EIS] and the range of alternatives found therein.”

NHTSA was forced to consider the rule’s climate benefits following a U.S. Court of Appeals for the 9th Circuit ruling last year that rejected an earlier NHTSA fuel economy rule for the years 2008-2011 in part because it calculated the rule’s GHG benefits at zero.

In the comments, EPA notes that NHTSA used a fuel price projection of \$2.04 to \$3.37 per gallon between 2011 and 2015, and says using higher fuel prices “would change the base case (as the market reacts to higher fuel prices) and the projected benefits, and it would increase the level of the ‘optimized’ fuel economy standard.”

The agency urges NHTSA to carefully consider projections for fuel prices and notes the important nexus between this estimate and future projections for the final EIS.”

EPA also takes issue with NHTSA’s selection of a single marginal benefits value of \$7 per ton of carbon dioxide (CO<sub>2</sub>) to represent the social cost of carbon (SCC), particularly because it limits those benefits to domestic ones. “Given that U.S. emissions have global externalities, NHTSA should analyze global SCC estimates in addition to any domestic estimates to more fully capture all of the externalities. This could be justified from the fact that U.S. citizens may value impacts felt outside our borders,” EPA says.

The comments add, “It should also be noted that SCC estimates are only a partial accounting of the social costs of carbon. NHTSA does not currently account for non-monetized impacts and potential catastrophic risks of climate change in its decision-making approach. . . . Finally, EPA is concerned that NHTSA has not accounted for non-CO<sub>2</sub> GHG emissions changes that would

be expected with the policy, e.g., changes in fuel use will bring changes in non-CO2 GHG emissions associated with fossil fuel extraction, production, transportation, refining and combustion.”

## **28. Showdown Looming Over California Car Regulations**

The White House and Rep. Edward Markey (D-MA) are squaring off over whether California has the right to go its own way around fuel economy standards proposed by the National Highway Traffic Safety Administration. In the process of proposing these regulations, NHTSA argued that California’s effort to regulate autos for greenhouse gas emissions is pre-empted by the federal regulatory process on fuel economy.

Markey, the chairman of a broad House climate change policy oversight select committee, suspects the same kind of top level interference – and ex parte participation by big industry – that he believes took place in EPA greenhouse gas regulatory policymaking. As he notes in a statement: “The NPRM contained the administration’s view that state regulations to reduce heat-trapping pollution from motor vehicles were preempted by national policy. In subsequent exchanges, when asked for more information on how this decision was reached, and by whom, NHTSA responded that they would not provide any of the documents to the Select Committee because the documents were ‘pre-decisional.’”

In a response letter to NHTSA, Chairman Markey notes: “I am not aware of any court that has recognized ‘pre-decisional’ as an adequate basis to withhold documents from a valid Congressional request.” The letter further stated that if the agency is relying on a claim of executive privilege to withhold the documents, then that claim should be formally asserted.

Though the issue probably won’t be decided on the basis of what documents Markey gets or doesn’t get, the question of whether CA has the right to regulate autos for greenhouse gas emissions under the grandfathered authority given it by the Clean Air Act, or whether this regulation is actually a fuel economy regulation squarely under the sole authority of the federal government, is one of the central themes in the carbon control policy debate. Court decisions to date have sided with California.

## **29. California to Sue EPA on Greenhouse Gas Emissions**

California will sue the US Environmental Protection Agency for "wantonly" ignoring its duty to regulate greenhouse gas emissions from ships, aircraft, and construction and agricultural equipment, state Attorney General Jerry Brown has announced. Brown said the lawsuit, to be filed in Washington after a 180-day waiting period mandated by the Clean Air Act, was meant to force the EPA into action.

The lawsuit follows two similar ones this year by California in conjunction with other states on car and truck emissions and ozone pollution.

"Ships, aircraft and industrial equipment burn huge quantities of fossil fuel, causing greenhouse gas pollution, yet President Bush stalls with one bureaucratic dodge after another," said Brown. "Because Bush's Environmental Protection Agency continues to wantonly ignore its duty to regulate pollution, California is forced to seek judicial action," he said.

Brown said he was filing the lawsuit because he had petitioned the EPA three times to implement such regulations and was met only with a "pathetically weak" proposal that did not conclude greenhouse gases endangered public health.

In April, California, with the support of Republican Gov. Arnold Schwarzenegger, was one of 18 states to sue the EPA for failing to limit greenhouse gas emissions from new cars and trucks despite a ruling by the US Supreme Court a year earlier that the agency had the power to do so.

In May, California joined 12 other states in suing the EPA, claiming it violated the Clean Air Act by not toughening ozone pollution standards enough.

The EPA has also come under fire from Democrats in Congress. Earlier this week, three Democratic senators, including California's Barbara Boxer, called for the resignation of EPA Administrator Stephen Johnson, saying he had sided with polluters instead of fighting global warming and other ecological problems.

Brown said California would likely be joined in the latest lawsuit against the EPA by Connecticut, Oregon, New York City, the California Air Resources Board, the South Coast Air Quality Management District and an a coalition of environmental groups.

### **30. US EPA Denies Texas Biofuels Waiver Request**

The US EPA has denied a request submitted by the State of Texas to reduce the nationwide Renewable Fuels Standard (RFS). As a result, the required total volume of renewable fuels mandated to be blended into the fuel supply will remain at 9 billion gallons in 2008 and 11.1 billion gallons in 2009.

In April, the Texas governor requested a waiver of 50% of the RFS mandate for the production of ethanol from grain, citing adverse economic impacts due to higher corn prices in Texas. Over the past three years, global corn prices are up 138% and food prices have increased 83%, in part because of the artificial economic forces created by the RFS requirements, argued the governor.

The law authorizes EPA to waive the national RFS if the agency determines that the mandated biofuels volumes would cause "severe harm" to the economy or the environment. The EPA recognized that high commodity prices are having economic impacts, but it found no compelling evidence that the RFS mandate is causing severe economic harm. EPA considered more than 15,000 public comments in response to the Texas request.

In theory, the RFS mandate can be fulfilled through a number of biofuels, for example biodiesel or biofuels made from non-food feedstocks. However, the economics and the existing incentive system force the use of corn ethanol to fulfill nearly all the RFS requirement. The environmental effect of the increased use of ethanol remains uncertain. Several life cycle studies have identified corn ethanol as one of the least effective biofuels to reduce greenhouse gas emissions. According to some authors, under the energy-intensive US production methods, corn ethanol requires more fossil energy to produce than the energy content of the fuel, thus causing a net increase in greenhouse gas emissions. There are reports that EPA staff has also concluded that corn ethanol causes small net greenhouse emissions increases.

The RFS program was established by the Energy Policy Act of 2005. RFS nationwide volume mandates were increased in the Energy Independence and Security Act, which was signed into law in December 2007.

### **31. Cellulosic Ethanol: Not Easy**

Cellulosic ethanol made from hay, wood or switchgrass represents for many the answer to the food vs. fuel debate, but a new report highlights the inefficiencies in breaking down inedible plants. The report, conducted by researchers at the National Institute of Standards and Technology (NIST) and the National Renewable Energy Laboratory (NREL), says it is difficult to extract the glucose needed to make ethanol from cellulose.

Robert Goldberg, one of the researchers involved in the report, laid out the problem like this in a NIST statement: "They don't want to break down. It takes a long time for wood to rot. It even takes termites a long time to break wood down, and they're pretty good at it. Ethanol producers face the same problem. Because of the way these molecules are arranged, it's difficult to get access to the reactive centers in wood and other biomass."

In view of recent indications that EPA has found that ethanol from corn has net negative greenhouse emissions, this new study raises concerns regarding the longer term viability of ethanol.

### **32. Honda Sees 100,000 North America Sales of New Hybrid**

Honda Motor Co Ltd is targeting annual sales of 100,000 units of its all-new hybrid car in North America, which would represent half of its global sales goal. The five-door, five-passenger dedicated hybrid car, Honda's challenge to Toyota Motor Corp's market-leading Prius, will be priced below Honda's current Civic hybrid, said Richard Colliver, executive vice president of Honda America.

Colliver did not give a timetable as to when Honda aimed to achieve the sales goal for the car, which the automaker is launching in April 2009. Sales of 100,000 units for the new Honda hybrid would represent more than three times the 2007 sales volume of the Civic hybrid, currently Honda's only hybrid car.

The new low-cost hybrid car also underscores Honda's efforts to cut the lead of Toyota in the green car race. The Prius sold 181,221 units in 2006, just under 107,000 of those in the United States.

Despite the pressure of record-high oil prices and concerns over climate change, fuel-efficient and low-emission hybrids still occupy a small niche in the global car market -- partly due to the price premium hybrids demand over comparable gasoline-powered models.

Colliver said Honda is likely to sell 5,000 fewer vehicles in the US market in August than a year earlier, when it sold 158,342 units, due to the persistent supply shortage of its fuel-efficient cars. That would represent a 3 percent fall in monthly sales. Honda's US sales rose 2.6 percent in the year to date through the end of July. Colliver said he still sees a good chance of increasing sales for the full year as high gasoline prices boost demand for its fuel-efficient line-up, led by the Civic and the Fit.

### **33. GM to Finish Electric Car Design by Mid-September**

General Motors Corp has announced that it will finalize the design of the all-electric Chevy Volt by mid-September and aims to have 50 prototypes with production-ready parts by the end of 2008. GM has been racing to finish development of the Volt in time for its planned launch in 2010. The Volt is the centerpiece of GM's effort to move away from large SUVs, as truck sales tumble and gasoline prices remain high.

"We have one gate in our process we call a styling freeze, which is happening in the middle of September," Frank Weber, GM's vehicle line executive in charge of the Volt, told reporters on the sidelines of an automotive conference.

GM is designing the Volt to run for 40 miles (64 kilometers) on a lithium-ion battery pack that can be recharged at a standard electric outlet. The introduction of thousands of electric vehicles still depends on advances in lithium-ion battery technology and the ability to bring down the cost of the vehicle.

"The No. 1 priority is to make the battery program robust," Weber said. "The conceptual future is not to extend the range much further.... The future is to take the same range and the same original 40 miles but then have battery packs about half the size, twice the robustness and half the cost."

GM, which has already featured the Volt in its advertising as part of a bid to improve its public image, is planning an initial volume of 10,000 vehicles.

Weber said GM intends the Volt to be a mass-market vehicle. "We've always said the Volt is not a niche program," he said. "Niche volume would not work. All the suppliers are looking for significant volumes to build up capacity and make sure this also works for them."

### **34. First Mass US Crossing for Hydrogen Fuel Cell Cars Completed**

Hydrogen fuel cell cars from nine automakers have completed a 13-day cross-country trip, in the first such mass US crossing for vehicles powered by this zero-emission technology. There were stretches without hydrogen fueling stations when the vehicles were carried on flatbed trucks, the longest being from Rolla, Missouri, to Albuquerque, New Mexico.

But then one of the goals of the "Hydrogen Road Tour '08" was to demonstrate the need to build more fueling stations if the nascent technology is to develop. There are about 60 hydrogen stations in the United States, and only two are open to the public without prior arrangement.

The industry- and taxpayer-sponsored tour stopped in 31 cities in 18 states.

Honda Motor Co has begun leasing about 200 FXC Clarity fuel-cell autos in Southern California and General Motors Corp is testing about 100 fuel-cell Chevy Equinox SUVs on the road. But those deployments, as well as the autos in the road tour, are experimental, since the technology is not ready for showrooms. Carmakers have spent billions on their development in hopes of capitalizing on a public desire to buy cleaner cars and a US push to reduce its dependence on foreign oil.

The United States consumes about a quarter of the world's oil, and imports 70 percent of its crude. Cars and trucks consume 44 percent of oil used in the country and contribute about a fifth of the carbon dioxide emissions.

Even in a best-case scenario, automakers will only sell about 2 million electric vehicles powered by hydrogen fuel cells by 2020, a study by the National Research Council found.

Cars on the tour came from Honda, GM, Toyota Motor Corp, Ford Motor Co, BMW AG, Daimler AG, Hyundai Motor Co, Nissan Motor Co, and Volkswagen AG.

### **35. Hyundai Aims to Launch First US Hybrid in 2010**

Hyundai Motor Co expects to release its first hybrid in the US market as early as 2010, featuring lithium-ion battery technology. It will be a hybrid version of the Sonata sedan, a prototype of which will be shown in November. That timing could make it one of the first mass-market vehicles on US roads featuring lithium-ion batteries, now widely used to power consumer electronics including cell phones and laptops.

General Motors Corp is readying a rechargeable electric vehicle, the Chevrolet Volt, using lithium-ion batteries, that is also on track for a 2010 launch.

Existing hybrid cars, including the Prius, use nickel-metal hydride batteries. Lithium-ion technology is seen as key by automakers and suppliers to extend the electric-only range of hybrids although the batteries are also expected to add thousands of dollars to the cost of cars, depending on their capacity.

Separately, Hyundai has considered bringing its fuel-sipping i10 micro car to the US market, but has decided against such a plan for now, according to reports.

Hyundai's US sales have slipped almost 3 percent this year but it has gained share in a collapsing US market. Overall US light vehicle sales were down 11 percent.

Korean battery maker LG Chem is supplying Hyundai with lithium-ion batteries for its hybrid vehicles and is in the race to supply batteries for GM's Volt. Auto supplier Continental AG and A123 Systems are collaborating in a rival bid for the contract.

### **36. S. Korean Firms Align To Develop Plug-in Hybrid Car Batteries**

South Korean companies have agreed to form an alliance in an effort to develop a battery pack that can be mounted on future plug-in hybrid electric vehicles (PHEV), government and industry sources have announced. Hyundai Motor, the country's No. 1 carmaker, has teamed up with LG Chem, SK Energy and SB LiMotive to develop batteries in the next 5-6 years that will be a critical part of these eco-friendly vehicles.

The pact outlines the competitive development of a new battery pack by the three companies, with Hyundai Motor pledging to buy as many as possible for use in their future PHEV cars. The company said it wants to roll these cars off its assembly line around 2013.

The Ministry of Knowledge Economy and Korea Automotive Technology Institute will support and guarantee the agreement by the four companies. "Because battery quality will be the

deciding factor of these vehicles, the company or country that makes the best will dominate this market," Yonhap News quoted a ministry official as saying.

The government plans to provide a fund of W40 billion (US\$1=W1,062), W8 billion each year for five years from the second half of this year on the project, while the companies will invest more than W1 trillion.

### **37. Transport Canada Publishes Final Rules on Zero-Emission, Low-Speed Vehicles**

On August 6<sup>th</sup>, Transport Canada published final regulatory amendments intended to permit the sale in Canada of small, battery-powered, low-speed trucks as part of the federal government's overall effort to reduce greenhouse gas emissions. The changes to the Motor Vehicle Safety Regulations (Low-speed Vehicles) under the Motor Vehicle Safety Act update the definition of "low-speed vehicle" to include small trucks, harmonizing Canada's approach with that of the United States, the department said in a regulatory impact analysis statement published with the final amendments in the Canada Gazette, Part II.

"The replacement of smaller fossil fuel powered trucks with LSV trucks is expected to improve local air quality, but overall environmental impacts depend on the extent to which LSV displace conventional fossil-fuelled vehicles and the energy sources used to generate the electricity to recharge the LSV power pack," it said. "The adoption of LSV will depend on various market forces rather than on the current amendment."

Three key differences remain between the Canadian and U.S. standards for low-speed vehicles, including the Canadian regulations' continued support for provincial and territorial rules that require the use of a special emblem to identify slow-moving vehicles and inclusion of a prohibition against the use of devices that temporarily limit the vehicle's top speed as such devices can be deactivated, increasing the risk to the vehicles' users, the department said.

In addition, the Canadian regulations maintain the distinct principle that low-speed vehicles must produce no emissions, reinforced by a requirement that low-speed vehicles not use fuel as an on-board source of energy, it said.

### **38. API Disputes EPA Data on Short-Term SO<sub>x</sub> Health Effects**

The American Petroleum Institute (API) is disputing EPA data that finds harm from short-term exposure to sulfur oxide (SO<sub>x</sub>) at levels below EPA's national ambient air quality standard (NAAQS), arguing that API's evidence finds "no compelling new scientific evidence" to prove such effects. SO<sub>x</sub> is commonly released in the refining of transportation fuels, as well as in the combustion of many energy feedstocks.

API presented a study disputing EPA's data at a July 30 meeting of EPA's Clean Air Scientific Advisory Committee SO<sub>x</sub> review panel, which is reviewing the agency's risk assessment for the primary SO<sub>x</sub> NAAQS that protects human health. The risk assessment and an integrated science assessment (ISA) lay out the latest available science on the health effects of SO<sub>x</sub> since the previous review.

EPA's risk assessment, released July 21<sup>st</sup>, found significant respiratory effects in asthmatics who are exercising and are exposed to five to 10 minutes of SO<sub>x</sub> concentrations between 0.4 parts per million (ppm) and 0.6 ppm. EPA's current SO<sub>x</sub> NAAQS is 0.14 ppm averaged over 24 hours.

API counters that its analysis of the data, which was conducted by the Gradient Corporation, disputes the findings of risks from short-term exposure at levels below the current air standard. "[T]here is no compelling new scientific evidence for a causal association between short-term [sulfur dioxide (SO<sub>2</sub>)] exposure and respiratory morbidity and mortality. The epidemiology data are not sufficient to determine whether any adverse health effects result from short-term SO<sub>2</sub> exposure at levels below" the existing NAAQS, API told the review panel members.

API's analysis says there are questions about the data quality in EPA's assessment, as well as a lack of knowledge about indoor exposures to SO<sub>x</sub> that limits the agency's ability to confirm the findings on health effects as a result of short-term exposures. "[N]o attempt has been made in the [integrated science assessment] to determine how risk estimates vary across studies with different ratios of indoor to outdoor SO<sub>2</sub> concentrations," API says.

The group also says its study finds it is difficult to separate out health effects from SO<sub>x</sub> and other air pollutants. "Because of the high likelihood of exposure misclassification and the impossibility of knowing with certainty in which way this will bias results, the epidemiology data are insufficient to determine whether short-term SO<sub>2</sub> exposure leads to adverse respiratory health effects," the API comments say.

EPA is slated to finalize its ISA by November, and finalize the risk assessment by March 2009. The full SO<sub>x</sub> primary review is set for completion with the release of a final rule in May 2010.

### **39. EPA Administrator Vilified after Discrediting His Own Agency's Proposal**

EPA Administrator Johnson has come under increasing criticism during his tenure for a series of decisions that undercut environmental protection. For example, he is the first Administrator to adopt an air quality standard more lenient than that recommended by the Clean Air Scientific Advisory Committee. His entire air pollution control program has been a shambles and was recently completely thrown out by the courts (see below). But even this weak performance sank to new lows during July when he unveiled but immediately disparaged a proposal to seek public comment on whether the government should regulate greenhouse gas emissions under the Clean Air Act. Although declaring at the outset that the proposed approach would be unworkable, Environmental Protection Agency Administrator Stephen L. Johnson wrote that he was nevertheless going ahead with the process of seeking comment in order to "respond to our legal obligations in a timely manner." In April 2007, the Supreme Court ordered the EPA to decide whether human health and welfare are being harmed by greenhouse gas pollution from cars, power plants and other sources, or to explain why it should not.

In an unprecedented move, however, Johnson issued the advanced notice of proposed rulemaking accompanied by a raft of comments from other agencies urging the government to abandon any effort to regulate carbon dioxide and other greenhouse gases through existing law. Johnson said in the advanced notice that limiting these emissions through the Clean Air Act "could result in an unprecedented expansion of EPA authority that would have a profound effect on virtually every sector of the economy and touch every household in the land," adding that the government should reject this approach.

"If our nation is serious about regulating greenhouse gases, the Clean Air Act is the wrong tool for the job," Johnson told reporters in a conference call. "It's really at the feet of Congress to come up with good legislation that cuts through, literally, decades of regulation and litigation." Johnson -- as well as deputies from other agencies across the country -- had initially sided with

his staff last year and concluded that the Clean Air Act legally obligated the EPA to regulate greenhouse gases on the grounds that they endangered public welfare. But after the White House refused to open an e-mail from the EPA making that finding (don't laugh!), and President Bush signed legislation tightening national fuel economy standards, Johnson announced that he would shift course and simply solicit public comment.

In a July 30<sup>th</sup> letter to the Administrator, the Union representing EPA's employees pilloried Johnson. "The way in which you subverted the work of EPA staff in your preamble statement on the merits of the supporting rationale for the ANPRM was as unprecedented as it was stunning to your staff and damaging to EPA's reputation for sound science and policy. And the fact that EPA's experts who worked on this ANPRM were not given the opportunity to read or address the adverse comments of OMB, USDA, Department of Commerce, Department of Energy, and the Department of Energy in advance of the ANPRM publication is troubling and, quite frankly, unprofessional."

The letter continued, "The decision to publish the critiques of other agencies in the name of "transparency" in decision-making is both disingenuous and counterproductive. A far more direct contribution would be made to the credibility and transparency of EPA decision-making if you cooperated with congressional requests for documents and hearings. The professional staff of EPA has nothing to hide. In fact, contrary to your assertions of executive privilege, the free flow of policy recommendations would be aided by opening up all (not just selected) communications to public scrutiny."

The move by Johnson ensures that the next president, and the next Congress, will have to take up the question of regulating greenhouse gases.

#### **40. Court Decision Shuts Door on Bush Clean-Air Steps**

A federal appeals court has struck down the cornerstone of the Bush administration's strategy to control industrial air pollution by agreeing with arguments by the utility industry that the E.P.A. had exceeded its authority when it established the Clean Air Interstate Rule in 2005. The court, the United States Court of Appeals for the District of Columbia Circuit, said the rule, which set new requirements for major pollutants, had "fatal flaws."

Mr. Johnson said he was "extremely disappointed" in the court decision "because it's overturning one of the most significant and health-protective rules in our nation's history."

The Clean Air Interstate Rule, which covered states in the eastern half of the country, set new requirements for controls on major pollutants emitted by industry, particularly the electric utilities. At its most stringent, it would have required, beginning in 2015, 70 percent reductions in sulfur dioxide and 60 percent reductions in nitrogen oxide from 2003 levels. At the time the interstate pollution rule was adopted, the E.P.A. estimated that, when fully in effect after 2015, it would cut by 13,000 annually the number of premature deaths from breathing polluted air.

The court ruling, combined with a court decision this year striking down an E.P.A. rule controlling mercury emissions from power plants, means that virtually all controls on the electric utility industry by the Bush administration have no force.

#### **41. EPA Assessment Links Respiratory Illness to Ambient Nitrogen Dioxide Exposure**

Exposure to ambient nitrogen dioxide, even at levels below current standards, increased the risk of hospital visits for respiratory symptoms by between 2 percent and 20 percent, according to the Environmental Protection Agency's final report on the health effects of nitrogen oxides, released July 11. A review of the available scientific studies found evidence "sufficient to infer a likely causal relationship between short term NO<sub>2</sub> exposure and adverse effects on the respiratory system," according to EPA's final report, Integrated Science Assessment for Oxides of Nitrogen--Health Criteria. Increased incidences of asthma and chronic obstructive pulmonary disease were most strongly linked to exposure to nitrogen oxides, according to the assessment.

Nitrogen oxides are emitted from power plants, motor vehicles, and other sources that employ fossil fuel combustion.

The report is the first step in deciding whether to revise the air quality standard for nitrogen oxides, which is 0.053 ppm, measured as an annual average. The Clean Air Act requires EPA to reevaluate national ambient air quality standards every five years; EPA last reviewed the NO<sub>2</sub> standard in 1996, when it opted to retain the existing standard.

The nitrogen oxides review is the first using EPA's revised process for reviewing air quality standards, adopted in 2006 to heighten the role of agency management in deciding whether to revise a standard. The integrated assessment replaces the much more extensive criteria document and focuses on data that are relevant to policymakers, according to EPA

Exposure to nitrogen dioxide concentrations greater than 1 part per million can weaken the lungs' defenses, resulting in increased incidence and severity of pulmonary infections and other adverse health effects, according to the assessment. "Toxicological studies have shown that lung host defenses are sensitive to NO<sub>2</sub> exposure, with several measures of such effects observed at concentrations of less than 1 ppm," according to the assessment. "Together, the epidemiologic and experimental evidence show coherence for effects of NO<sub>2</sub> exposure on host defense or immune system effects."

"Although NO<sub>2</sub>-related health risk estimates may appear to be small, they may well be important from an overall public health perspective owing to the large numbers of persons in the potential risk groups. Several population groups have been identified as possibly having increased susceptibility or vulnerability to adverse health effects from NO<sub>2</sub>, including children, older adults, and persons with preexisting pulmonary diseases," according to EPA.

Nitrogen dioxide exposure has also been positively linked to airway inflammation, increased response to allergens, and other impairments to respiratory functions, according to the assessment. However, the data were insufficient to infer a causal relationship between nitrogen dioxide exposure and impaired lung function, cardiovascular symptoms, and increased mortality.

#### **42. Bush Seeks Senate Consent for Three Treaties Covering Marine Pollution**

On July 10<sup>th</sup>, the Bush administration asked the Senate to approve ratifying three treaties aimed at mitigating marine pollution. David A. Balton, deputy assistant secretary of state for oceans and fisheries, made the request for the Senate's advice and consent during a Senate Committee on Foreign Relations hearing, saying the treaties "address different aspects of marine pollution in distinct and vital ways."

The pacts are the International Convention on the Control of Harmful Anti-Fouling Systems on Ships, also known as the AFS Convention; the Protocol Concerning Pollution from Land-Based Sources and Activities, also known as the LBS Protocol; and, the 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter--also known as the London Protocol.

Balton urged quick action on the treaties, saying in prepared remarks that ratification "will allow the United States to reinforce and maintain its leadership role on oceans issues at the international and the regional levels." He noted that the AFS Convention and LBS Protocol will require implementing legislation prior to ratification. "We believe that early action by the Senate to provide advice and consent would spur both houses (of Congress) to enact such legislation," Balton said.

Two senators were present at the hearing: Sen. Robert Menendez (D-N.J.), who chaired the session, and Sen. Richard Lugar (R-Ind.), the committee's ranking minority member. Lugar noted in prepared remarks that the agreements seek to combat pollution resulting from leaching of protective coatings applied to ship hulls, waste dumping at sea, and runoff of wastewater and agricultural pollutants into ocean waters. "Such pollution harms our ability to make productive use of ocean resources and threatens public health," he said.

The land-based sources protocol is part of the Convention for the Protection of the Marine Environment in the Wider Caribbean Region, also called the Cartagena Convention. The convention seeks to protect the environment of the Gulf of Mexico, Straits of Florida, the Caribbean Sea, and adjacent areas of the Atlantic Ocean. In its negotiations on the pact, "the United States sought to create requirements for other nations bordering this region that would, in effect, bring them up to U.S. standards," Balton said.

#### **43. President Bush Signs Legislation to Curb Pollution from Ships, Implement Treaty**

On July 21<sup>st</sup>, President Bush signed a bill (H.R. 802) to curb air pollution from ships, but whether the measure was enacted soon enough to ensure the United States a seat at the next round of international talks is in doubt. H.R. 802 passed the House of Representatives July 8, but it appears to have come too late to assure the United States a place at the table when the International Maritime Organization convenes in October to revise the 1973 International Convention for the Prevention of Pollution from Ships (MARPOL Convention).

The bill amends the Act to Prevent Pollution From Ships (33 U.S.C. 1901) to implement Annex VI to MARPOL, which took effect in 2005 and sets emissions standards for sulfur dioxide and nitrogen oxides from ships and bans vessels' use of ozone-depleting substances.

The United States had until July 6<sup>th</sup> to approve the bill or lose its seat at the Oct. 6-10 meeting of the Marine Environment Protection Committee of the International Maritime Organization. The IMO committee is meeting to revise the MARPOL Convention. Countries are not considered parties to the convention until the instruments of ratification have been lodged with the IMO for 90 days, which could preclude the United States from voting at the October meeting.

The House originally passed the bill in March 2007, and Rep. James Oberstar (D-Minn.), who sponsored H.R. 802, blamed delays in the Senate for the United States' failure to approve the measure in time. The Senate passed its own version of the bill, forcing the House to take a second vote.

U.S. officials had hoped to push for stricter standards at the meeting.

#### **44. NAFTA Environmental Ministers Reject Climate Change Plan**

On June 26<sup>th</sup>, Environment ministers representing the United States, Canada, and Mexico rejected the concept of an expanded role for the trilateral Commission for Environmental Cooperation (CEC) to develop coordinated climate change policies for North America. The commission should continue to play a significant role in addressing specific areas related to climate change, including the construction of "green" buildings and efforts to make industry supplier chains more sustainable, but it should not be forced to join the growing number of international forums trying to address climate change policy, Canadian Environment Minister John Baird said.

"We believe that the United Nations should be the principal body looking at climate change," Baird told the annual meeting in Ottawa of the governing council of the commission, established to oversee the environmental side deal to the North American Free Trade Agreement. "I do have a concern about the inflationary number of fora on this subject."

The officials were responding to a proposal by economist Jeffrey Schott that NAFTA could be used to negotiate a North American climate change policy that could then serve as a model for a broader international accord. That would follow the precedent set by NAFTA's services chapter, which was a model for the World Trade Organization's General Agreement on Trade in Services, Schott said in a presentation to the commission's council. "NAFTA has always been a negotiating laboratory," he said.

Schott also said the United States, Canada, and Mexico could negotiate, through the North American Agreement on Environmental Cooperation (NAAEC), a short-term "peace clause" that would ensure that none of the three countries impose trade barriers based on the carbon footprint of imported products. In the longer term, the countries could also use the NAAEC and CEC to develop a North American carbon market that would help resolve the climate change issue, he said.

U.S. Environmental Protection Agency Administrator Stephen Johnson said he supports Baird's conclusion on the commission's role on climate change, noting that the United Nations Framework Convention on Climate Change is the appropriate process for seeking a multilateral agreement, supported by the work of the U.S.-sponsored Major Economies Meeting process. There are, however, opportunities for the commission to undertake "complementary" activities to support broader climate change efforts, including work on green buildings, energy security, environmental sustainability, green suppliers, and biodiversity initiatives, Johnson said. "We focus our attention on the U.N. effort, but those complementary activities we continue to push forward," he said.

Quebec Environment Minister Line Beauchamp stressed that although it is "quite obvious" that the United Nations is the logical choice for ongoing climate change negotiations to follow up the Kyoto Protocol, nations should not lose sight of the fact that some U.S. states and provinces are doing their "level best" to achieve climate change targets. Regional activities such as the Western Climate Initiative are providing an opportunity for sub-national governments to seek to set climate change-related targets, Beauchamp said. "I would plead in favor of the CEC's work on climate change to be specific, and we clearly identify what it might be," she said. "If the CEC failed to talk about climate change, this would be perceived negatively."

#### **45. Warming Climate May Spur Conflicts, Competition for Resources, U.S. Official Says**

Climate change is likely to increase competition for water and other natural resources in Asia and Africa by 2030, triggering mass migration and fueling conflicts among nations that will have a long-term impact on U.S. interests, an official with the Office of the Director of National Intelligence told congressmen at a joint committee hearing June 25. Thomas Fingar, deputy director of national intelligence for analysis, said the assessment of how climate change could affect U.S. interests and national security through 2030--a classified document only recently completed by the U.S. intelligence community--suggests that sub-Saharan Africa would be among the most vulnerable regions.

Declassification of the intelligence assessment, launched in spring 2007 in response to congressional pressure, is a decision that would have to be made by the White House, Fingar said at a joint hearing of the House Select Committee on Energy Independence and Global Warming and the House Intelligence Subcommittee on Intelligence Community Management.

Republicans and Democrats alike called for declassifying the document, and Rep. Edward Markey (D-Mass.), who chairs the energy and climate committee, said he would send a formal request asking the Bush administration to release the report later in the day. Intelligence officials at the hearing referred to the report as The National Intelligence Assessment on National Security Implications of Global Climate Change to 2030.

Testimony on the U.S. intelligence assessment came about a month after Rajendra Pachauri, chairman of the U.N. Intergovernmental Panel on Climate Change (IPCC), said better management of water resources is needed to avoid potential crises in developing countries, such as refugee migration and soaring food prices.

Closer to home, the effects "are expected to be costly," according to Fingar's written testimony, including "possible increases in the severity of storms in the Gulf, increased demand for energy resources, disruptions in U.S. and Arctic infrastructure, and increases in immigration from resource-scarce regions" of the world.

### **ASIA-PACIFIC**

#### **46. Taiwan Requires All Diesel Fuel Sold To Contain at Least 1 Percent Biodiesel**

Diesel fuel sold throughout Taiwan must contain at least 1 percent biodiesel, a mixture known as B1 diesel, under a rule that took effect of July 15. Recycled cooking oil will be the main source of the biodiesel additive, according to the Ministry of Economic Affairs (MOEA). Taiwan annually generates more than 30 million liters of waste cooking oil, which is sufficient to meet demand for the switch to B1. Under the new policy, the ministry estimated that Taiwan's annual consumption of diesel fuel will decrease by 38.5 million liters (10.2 million gallons), with a reduction in carbon dioxide emissions of 126,000 metric tons.

Yeh Hui-chin, director-general of MOEA's Bureau of Energy, told a press conference that fuel providers will have a three-month transition period to replace regular diesel with the B1 blend at all oil stations.

B1 has been available since July 2007 at gas stations in two counties, Taoyuan and Chiayi.

Taiwan currently has five biodiesel producers, which produce 42 million liters (11.1 million gallons) of the biodiesel blend annually. The government estimated the new policy will result in an additional 650 million Taiwan New Dollars (\$21.4 million) invested in the biodiesel industry.

The cost of B1 is \$0.01 per gallon higher than that of regular diesel fuel. "Oil providers have to absorb this part. So the policy will not cause a price hike," Yeh said.

In Taipei and Kaohsiung, two of the island's largest cities, more than 500 buses have been running on B2 (a blend of 2 percent biodiesel and 98 percent diesel fuel) and B5 diesel blends since January 2007. The government plans to make B2 diesel available nationwide in 2010.

In addition, starting in 2011, all gas stations in Taiwan will offer gasoline containing 3 percent bioethanol (E3), according to the ministry. So far in the capital Taipei, eight gas stations currently offer the E3 bioethanol blend. Taipei City government vehicles have used the E3 blend since September 2007.

#### **47. New Zealand Setting Standards for Biofuel Sustainability, Content in Fuels**

Starting October 1, 2008, engine fuel sold in New Zealand must contain a minimum amount of sustainable biofuels, according to the Biofuel Bill, which received its second reading in the Parliament on June 23<sup>rd</sup>. Energy Minister David Parker said the government has received a "clear message from the industry--both fuel companies and potential biofuel producers--that they want some certainty on the future for biofuels so they can invest with confidence." He said, "If the [biofuel sales] obligation is not put in place, that certainty disappears."

Parliament is expected to hold a final vote in the next few weeks on whether to approve the legislation.

Parker said that the bill would allow for a "future where an increasing proportion of New Zealand's transport fuel can be produced locally, from by-products of the dairy or beef industry, from wood and grasses grown on otherwise unproductive land, or perhaps one day from algae from sewage ponds."

If adopted, starting from October, oil companies will be obliged to sell an increasing share of their total fuel sales as biofuels; it will start at 0.5 percent in 2008 and will reach 2.5 percent of the annual energy content of total annual gasoline and diesel sales by 2012. Industry submissions to the select committee indicated that a biofuels level of 2.5 percent of total fuel sales could be met by 2012 through domestic production, made from a combination of biodiesel from tallow, rapeseed, and ethanol (mainly from whey).

The bill specifies that biofuels counting toward the sales obligation must comply with several different sustainability criteria. They should emit significantly less greenhouse pollutants over their life cycle than fossil fuels and they should not compete with food production or reduce indigenous biodiversity or adversely affect land with high conservation values.

Detailed regulations elaborating on the three sustainability principles are expected to be finalized by July 1, 2009. According to the bill, matters to be dealt with in the regulations are:

- a methodology to assess the life cycle greenhouse gas emissions from engine fuels;
- a requirement for biofuels to emit at least 35 percent fewer greenhouse gas emissions compared to traditional fossil fuels, as measured over the biofuel's entire life cycle;
- a methodology to assess the effect of a biofuel's production on food production and for assessing whether those effects amount to competition;
- a mechanism for recognizing particular land (including land outside New Zealand) as having high value for food production;
- a mechanism for recognizing particular land (including land outside New Zealand) as having high conservation value;
- A methodology for assessing the effects of the production of a biofuel on indigenous biodiversity and on land of high conservation value.

The select committee process revealed a fair amount of opposition to the bill. The largest opposition party, the National Party, noted the many adverse effects of biofuels. It also expressed doubts as to whether the sustainability regulations could be drawn up by July 2009, given that the European Union has set a deadline of 2011 for its biofuel sustainability standard.

In her evidence, the Parliamentary Commissioner for the Environment, Jan Wright, noted the difficulty and cost in verifying the sustainability of imported biofuels and the risk of monopoly pricing associated with mandating a limited domestic supply.

#### **48. Japan to Offer Incentives for Clean Diesel Cars**

Japan will introduce incentives for consumers buying clean diesel cars in a bid to reduce CO<sub>2</sub> emissions, according to reports. The incentive program would be implemented from next April. The incentives would apply to diesel cars that meet the new Japanese emission standards which become effective in October 2009 (NO<sub>x</sub> = 0.08 g/km; PM = 0.005 g/km).

Mercedes-Benz is currently the only brand selling diesel passenger cars in Japan. The E-Class diesel meets the 2005 but not yet the 2009 emission standards. The diesel X-Trail to be launched by Nissan Motor will be the first car to meet the 2009 standards. Honda Motor is planning a clean diesel car next year, while Mitsubishi Motors and Subaru-maker Fuji Heavy Industries have also promised a diesel car for Japan.

Diesel cars are expected to carry a price premium of 300,000 - 400,000 yen (\$2,700-\$3,600) over gasoline cars, part of which will be subsidized.

#### **49. Olympic Host Beijing Enjoys Best Air in Decade, Vows to Banish Smog**

Olympic host Beijing enjoyed its cleanest air in 10 years in August and will adopt strict new measures to ensure its smog does not return, according to a top environment official. Over the past 18 days, air quality in the capital ranged between excellent and fairly good on China's index, Du Shaozhong, deputy director of the Beijing Environmental Protection Bureau, told reporters. And he pledged good conditions would continue.

"Beijing will be built into a liveable city," Du said. "We will take some new measures to ensure that air quality will reach a new level after the Olympic Games." He said those measures would be announced after the Games end, once officials had studied Beijing's "successful experiences".

"Whether it is automobile emissions reduction, or construction site dust reduction or coal pollution reduction, I believe that the requirements will be more stringent," he said, naming three of the top sources of the air pollution that has bedeviled the fast-growing city of 15 million.

Dirty air was one of the biggest worries in the run-up to the Games and the opening ceremony on August 8<sup>th</sup> was held in a swirl of hot haze.

Hundreds of factories in Beijing and surrounding provinces closed temporarily in a crackdown on polluters. And traffic has flowed unnaturally swiftly since late July, when the city adopted even-odd license plate number restrictions aimed at taking half its 3.3 million cars off the roads each day.

Three days of rainfall had also helped clear the haze once the Games started, Du said.

Fresh from running in the Olympic torch relay in hills outside Beijing, UN environmental chief Achim Steiner believes China deserves credit for its green progress and encouragement to do more. Steiner said media fascination with Beijing's smog, which completely cleared revealing blue skies and distant hills after heavy rain in previous days, had been "unfortunate". He said the Communist leaders had done far more than a cosmetic clean-up for the Games, embarking on policies that could make for more environmentally friendly, long-term development as China roared along at double-digit economic growth.

"China did not start planting trees at the Olympics. That began 20 years ago. Now it is one of the only Asian countries where forest cover is increasing ... The Chinese have proven to themselves they are capable of far-reaching innovation."

Other measures like new emissions standards showed there was a growing green commitment within the leadership. "China has some of the worst environmental problems in the world but it is paying more attention to both pollution and degradation. They realize environmental degradation affects economic development."

The Olympics had empowered China's professional environmentalists, involved non-governmental groups, and given senior leaders an unprecedented chance to get the message across to others lower down the official chain and the public, he said.

"This should give the reformers and progressive environmental groups in the government far greater possibility for influence."

"I see China accelerating environmental efforts much more than other developing nations," he said. "Improvement does not mean you have reached an optimum state of affairs though."

## **50. Beijing Says No Extension of Car Controls Post Games**

Olympic host city Beijing has no plans to extend traffic control measures that have seen half the cars taken off the roads past the Games, despite their success at curbing pollution and congestion, according to a Beijing official. But Zhou Zhengyu, deputy head of the Beijing

Municipal Committee of Communications, added he hoped citizens would continue talking public transport of their own will and leave their cars at home voluntarily once the Olympics finish.

Under the rules, in force from July 20 to Sept. 20, cars are banned on alternate days depending on whether their license plates end in odd or even numbers, part of emergency steps taken by Beijing to ease smog levels that could affect athletes.

"These restrictive steps, we have called temporary measures," Zhou told a news conference. "At present, we will stick to the measures as announced."

Many who first complained the restrictions were inconvenient, especially car owners, now realize taking public transport is not so bad after all, as the benefits to the environment can so clearly be seen in the reduction in pollution, he added. "A change is happening in people who are learning about public transport over the Olympics," Zhou said. "We hope that through the Olympics even more people can see the positive side of public transport."

He admitted he could have his work cut out for him in a country whose booming economy is putting money in people's pockets for the first time and fuelling a rapid growth in car sales. "Twenty years ago people wanted to buy household appliances. Now our economy has reached the stage where people want to buy cars," Zhou said. Many people view public transport, like the crowded bus and subway system, as something to avoid if possible.

Yet Zhou said the government was committed to getting people to use public transport, backed by a further massive investment in subways and suburban railways in particular, and by keeping ticket prices low. "Our aim is the increase from 35 percent the proportion of people using public transport to 45 percent," he said. "Ticket prices are one part of the strategy, and are not just a short term plan for the Olympics."

### **51. China to Raise Taxes on Large Vehicles, Reduce Levy on Small Cars**

Owners of large-engine vehicles in China will see their vehicle tax rates increase starting September 1<sup>st</sup>, the Ministry of Finance and the State Administration of Taxation announced on August 13<sup>th</sup>. In its web note, the Ministry of Finance said the new tax rates are intended as part of an overall national effort to reduce energy consumption by 20 percent and to cut emissions 10 percent by 2010. Thus far, China has failed at achieving its annual emissions targets under the five-year plan.

In late July, the State Council announced that it would increase taxes on large-engine cars, in an effort to encourage the use of fuel-saving consumer vehicles.

The new tax rates increase from 15 percent to 25 percent the levy on cars with engines of 3 to 4 liters in capacity. It also doubles to 40 percent the tax on cars with engines of 4 or more liters in capacity. At the same time, consumption taxes on passenger cars with engine capacity of 1 liter or less will drop from 3 percent to 1 percent under the new policy.

According to China Daily, China's large-car consumption is increasing at a rapid pace. The newspaper said imports of sport utility vehicles to China increased by more than 91 percent in the first five months of 2008, and that large cars account for 42 percent of all auto imports.

## **52. China to Add Fine Particles, Ozone to List of Monitored Pollutants**

After the Summer Olympics, China will add two new forms of air pollution to the list of four it currently monitors, media reported on August 3<sup>rd</sup>. The Xinhua news agency said the government will begin tracking the amounts of ozone and fine particulate matter (PM-2.5) in its air quality testing and reporting after the Olympic Games. The news agency quoted a senior environmental official as saying that, while current monitoring is effective, more information will help in cleaning up Beijing's hazy skies.

"We should be able to start regular monitoring of ozone and PM-2.5 next year, which would lead to measures to deal with them," said Fan Yuansheng, director general of the pollution department in the Ministry of Environmental Protection.

## **53. Toyota to Lift Prices on Hybrids, Trucks in Japan**

Toyota Motor Corp has announced that it will raise suggested retail prices on some hybrid and commercial vehicles in Japan from next month to help absorb higher prices of steel, crude oil and other raw materials. Prices will increase by 3 percent for the Prius and Harrier hybrid vehicles, and by an average 2 percent on commercial vehicles including some Dyna/Toyocce trucks and Probox vans, it said in a statement.

The automaker said last month it would raise prices of 13 models in the United States by an average US\$181 or 0.81 percent.

## **54. Tokyo to Get Electric Car Recharging Sites**

Tokyo Electric Power Co (TEPCO) plans to set up as many as 200 recharging stations for electric cars around the Japanese capital next year, the Nikkei business daily has reported. Car makers such as Nissan Motor and Mitsubishi Motors are preparing to roll out electric vehicles in coming years, amid soaring gasoline fuel prices and concerns about global warming.

TEPCO, Japan's largest utility, has developed a device that powers an electric car to run 40 km (25 miles) after a five-minute charge and 60 km (37 miles) after a 10-minute charge, the Nikkei said.

Car dealers selling Mitsubishi Motors and Subaru cars made by Fuji Heavy Industries have agreed to have TEPCO's recharging stations at their shops, while supermarket retailer Aeon planned to host them at some outlets, the paper said. It said TEPCO would also include carparks, convenience stores, banks and post offices in the charging network it plans to set up in the financial year to March 2010, with the aim of expanding the number of stations to around 1,000 in three years or so.

## **55. Japanese Environment Minister Pushes For 25% Medium-Term Emissions Cut**

On August 4<sup>th</sup>, Environment Minister Tetsuo Saito expressed hope that Japan can reduce greenhouse gas emissions by "at least 25 percent" between 2020 and 2030 as he emphasized the need for a medium-term target. The international climate agreement that follows the Kyoto Protocol's expiration in 2012 should elicit commitments from as many countries as possible for both medium-term and long-term emissions targets, Saito said in his first news conference since Prime Minister Yasuo Fukuda named him to head the Ministry of the Environment in an August 1<sup>st</sup> Cabinet reshuffle.

Echoing the analysis of the U.N. Intergovernmental Panel on Climate Change, Saito said the world needs to cap emissions growth between 2020 and 2030 to hold the global temperature rise to less than 2 degrees Celsius. That means "Japan needs to set a midterm target" to respond to the IPCC analysis that developed countries need to cut emissions by "at least 25 percent" by 2020 and probably 40 percent by 2030, compared with 1990 levels, Saito said.

"Of course, [Japan's target] needs to be more than 25 percent. ... I would like to release [Japan's target] at an appropriate time next year." Saito declined to detail how soon he would announce the target or which year Japan would use as a base year. He also did not offer details about how to achieve reductions except to say that Japan would actively use the sectoral approach. Saito said he would hold talks with Japanese industry leaders to gain their understanding for deep emissions cuts.

At the Group of Eight summit in July, leaders from developed countries as well as China, India, and other emerging nations declined to commit to a medium-term target, leaving the work to international negotiations at the 15th Conference of the Parties to the U.N. Framework Convention on Climate Change set for December 2009 in Copenhagen.

Saito said Japan will begin experimenting with an emissions trading program in October and that Japan hopes to link its transactions with markets around the world. In about two years or so, Saito said, experimental trading should give participants sufficient know-how for a commercial emissions trading program.

#### **56. Panel Recommends Australia Consider Doubling Vehicle Innovation Fund**

The Australian government should double to A\$1 billion (\$868 million) the size of its federal grants scheme designed to encourage the manufacture of low-emissions vehicles, according to an independent report released by the government on August 15<sup>th</sup>. Minister for Innovation, Industry, Science and Research Kim Carr said the government will respond soon to the review's recommendations.

In its current form, Australia's Green Car Innovation Fund will match \$3 of industry funding with \$1 of government funding for approved projects, with most of the funds to be allocated from 2011 to 2015. The government also has announced it will provide Toyota Motor Corp. A\$35 million (\$30.4 million) to support the assembly of hybrid vehicles in Australia starting 2010.

The Review of Australia's Automotive Industry recommended that the size of the fund be doubled if it proves successful after two years of operation. It said organizations eligible for grants under the fund should include participants in the automotive supply chain, research organizations, and international firms that carry out eligible activities in Australia.

Australia's federal government commissioned the review.

The review supports the government's proposal to include road transportation in its proposed greenhouse gas emissions trading plan, due to begin in 2010. An alternative plan to reduce emissions from the transportation sector by introducing an emissions standard for new vehicles would be a second-best policy, the review said, because such standards would not necessarily deliver emissions cuts in the most cost-effective way.

Greenhouse gas emissions standards for new vehicles should only be considered if the transportation sector is not included in the trading regime, the report said. It also warned against using an emissions trading regime in coordination with vehicle emission standards.

## **SOUTH AMERICA**

### **57. Santiago Proposes Strongest Vehicle Pollution Control Program in Latin America**

Chile's National Environment Commission (CONAMA) has presented a series of measures to help clean up the air in the smog-prone capital of Santiago. The Decontamination and Prevention Plan for Greater Santiago was published July 15<sup>th</sup> in the government gazette, the *Diario Oficial*.

Although air quality in Santiago has improved since the mid 1990s thanks to the spread of catalytic converters in automobiles and the increased use of natural gas, rising traffic levels and restricted gas supplies have led to an increase in the number of days with critical levels of air pollution since 2006.

Outlining the plan, regional government head Alvaro Erazo said the number of vehicles with catalytic converters allowed on the roads during critical episodes will be doubled from 20 percent to 40 percent (selected according to the last digit of the vehicle's number plate) starting next year. This change was due to come into force this year but was delayed out of fears of the effect of increased passenger numbers on Santiago's problematic public transport system. In addition, vehicles will be required to replace their catalytic converters if they are more than 10 years old. The measure is expected to affect around 400,000 of the 1.1 million vehicles on Santiago's roads, with the regional government carrying out inspections from next September.

The government also plans to improve public transport buses; the 2,090 buses which currently meet EURO II standards will be fitted with particle filters by Sept. 1, 2009, while 253 buses that meet EURO I standards will be withdrawn from service.

Other measures in the plan include the planting of 1,800 hectares of green areas and woodlands by 2011; the total prohibition of stubble burning all year round in the greater Santiago region; expanding the network of bicycle routes by 690 kilometers in greater Santiago over the next five years; and drawing up a plan to formally regulate emissions from off-road machinery by 2010.

The plan would also require industries to inform the authorities each time they change fuels leading to increase in emissions. A continuous monitoring system will be established within the next six months at the region's largest fixed sources of emissions.

With the strong support of the Centro Mario Molina, the principal actions related to motor vehicles and fuels included in the new Santiago decontamination draft plan (the document is in public consultation for 60 days) are the following:

- 15 ppm sulfur in diesel and gasoline by September 2011
- New Buses:
  - EURO III / EPA 98 with a mandatory Diesel Particulate Filter (DPF) (2009)

- EURO IV / EPA 2007 with a mandatory DPF (2012)
- New Trucks:
  - EURO III / EPA 98 with a mandatory DPF (2010)
  - EURO IV / EPA 2007 with a mandatory DPF (2012)
- Gasoline light duty vehicles: EURO 4/ Tier 2 Bin8 (2010).
- Diesel light duty vehicles: EURO 5/TIER 2 BIN 5 2011:
- Motorcycles: Euro II / EPA 2006 (2009), Euro III / EPA 2010 (2010)
- OBD for all new vehicles (specific requirements will be set during next year)
- Incentives for zero and ultra low emission vehicles will be set during next year

### **58. Bogota to Cut Greenhouse Gas Emissions, Plans Air Pollution Crackdown**

Bogota municipal authorities and several private businesses and environmental organizations signed a manifesto June 11<sup>th</sup> promising to reduce the city's production of greenhouse gases. The agreement was signed by the mayor, the heads of the 12 municipal authorities, the municipal planning and recreation offices, and the public energy, telecommunications, water, and transportation companies. The city's Chamber of Commerce, the National Federation of Commercial Businesses, the National Association of Industries, Conservation International, the Clinton Foundation, and Bayer, General Motors, and other businesses also signed the agreement. Signatories promised to reduce greenhouse gas emissions and to mitigate the effects of climate change, to develop cooperative working arrangements on the issue, and to adopt measures to promote efficient use of energy and natural resources.

Colombia is expected to lose most of its high-altitude wetlands and its mountain glaciers due to global warming.

At the same time, authorities inaugurated the city's first mobile air pollution analysis vehicle. The vehicle is equipped to detect ozone, nitrous oxides, carbon monoxide, sulfur dioxide and particles smaller than ten microns in diameter.

Meanwhile, the city plans to launch a new pilot program to compel industries in the city's most polluted neighborhoods to meet environmental regulations. The program will send environmental enforcement officials to repeatedly visit companies in violation of pollution regulations in highly industrial sectors; it will require that businesses meet environmental norms or face the threat of being shut down.

In some of these sectors, which have about 2 million residents, average airborne concentrations of particles smaller than 10 microns (PM<sub>10</sub>) are nearly 100 micrograms per cubic meter, about twice the internationally accepted standard and well above Colombia's health standard of 70 micrograms per cubic meter.

Most of the noncomplying industries are small, family-owned businesses, which often burn coal or waste oil as fuel. Some industries burn relatively clean natural gas during the day but switch to cheaper coal or oil at night when the smoke cannot be seen.

### **59. Brazil Fines Ethanol Producers \$75 Million**

On July 1<sup>st</sup>, Brazil fined 24 sugar/ethanol producers in northeastern Pernambuco state 120 million reais (\$75 million) for not having environmental licenses to cultivate sugarcane on their

land, the largest combined fine for an environmental violation ever levied against the sugar/ethanol industry. Each of the 24 producers, which make both sugar and ethanol, was fined R\$5 million (\$3.1 million) for not having environmental licenses for cane cultivation, although they had similar permits for their industrial operations, said Joao Arnaldo Novaes, head of IBAMA, the enforcement arm of the Environment Ministry in Pernambuco state. "Most of these producers were also guilty of other infractions, from illegal deforestation to polluting rivers with vinhoto, an ethanol production residue used as a cane crop fertilizer." But because the producers had failed to obtain their environmental licenses, which require companies to submit to IBAMA satellite images of their property and soil use documents, "we could not accurately measure property boundaries, and thus who was responsible for those infractions," Novaes said. "So we told them that if they paid the fines and applied for cultivation licenses, we would not fine them for the other infractions," Novaes said, adding that IBAMA also will require the companies "to replant illegally deforested acreage."

#### **60. Brazil Congress Committee Approves Recommendations to Fight Climate Change**

A special congressional committee in Brazil has approved a final report outlining 51 recommendations to help combat climate change. The recommendations include replacing energy-inefficient technologies with more energy-saving ones, such as switching from incandescent to fluorescent light bulbs and replacing electrically heated showers with natural-gas-heated ones, according to Senator Renato Casagrande.

The report also proposed an increase in the use of biofuels, such as ethanol and biodiesel, and called for a greater use of non-hydropower-based renewable energy, such as wind and solar power. Eighty percent of Brazil's energy currently comes from hydropower, but there has been recent debate over the cost of building more dams, especially in more environmentally sensitive areas in the Amazon.

The recommendations include providing financial incentives to improve public transport thereby reducing auto emissions, and drafting public policies that would help reduce greenhouse gas emissions, such as more vigorous efforts to combat deforestation in the Amazon, the senator added.

The committee also recommended promoting at world environmental forums the idea of creating a world environmental fund whereby countries' import tax revenues would be used to finance forest protection and sustainable development initiatives, he added.

The recommendations will be sent to federal ministries, as well as state and city governments, to orient their global-warming-reduction activities. The committee will conduct follow-up studies to determine which of the recommendations have been implemented at all levels of government, the senator said.

#### **61. Buenos Aires to Deploy Air, Noise Pollution Meters**

On August 12<sup>th</sup>, the Buenos Aires City government announced it will install 46 stations throughout Argentina's capital to monitor air and noise pollution. The meters will take readings of carbon monoxide, methane, and other exhaust gases as well as of particulate matter and noise. Meters will send the readings to a data-processing center that will issue real-time reports for each area, city Mayor Mauricio Macri said. He added that the total cost of the equipment--which includes 42 smaller gas and noise meters and four larger stations taking particulate matter measures--was \$3.7 million. The readings will be posted on the local government's

website. The smaller stations have been temporarily placed at a city park for fine-tuning purposes before their deployment in coming months. Two particulate matter meters have already been installed. Their presence through the city of 3 million people will help authorities make better decisions on bus routes, industrial facilities permits, and other key urban planning issues. They also will allow for faster reaction to citizens' complaints of air or noise contamination, she said.

## GENERAL

### **62. Exposure to Traffic-related Pollution Linked to Allergic Diseases in Children**

Allergic diseases appear more often in children who grow up near busy roads according to a new study involving several thousand children.<sup>2</sup> Under the direction of the Helmholtz Zentrum München, a German research group conducted a longitudinal study over six years to determine whether associations are identifiable between the onset of atopic diseases and exposure to air pollutants originating from traffic.

The scientists based their analysis, on the one hand, on the corresponding distance of the parental home to streets busy with traffic, and on the other hand, modeled values, for the respective residential addresses of the children, of air pollution with fine dust, diesel soot and nitrogen dioxide.

The research team led by Dr. Joachim Heinrich of the Institute of Epidemiology of the Helmholtz Zentrum München compared, with this, the data of 3,061 six-year old children from Munich and its surroundings. From birth, their development has been tracked within the scope of the so-called GINI and LISA studies. The studies are led by Prof. Dr. H.-Erich Wichmann of the Helmholtz Zentrum München, and, among other things, are aimed at the study of behavioral and environmental risk factors for allergic diseases. In the current analysis, the results of medical research and regular parental interviews were considered. Moreover, the appearance of the specific IgE antibodies against common allergens in blood serum was tested in children at the age of 6.

The scientists were able to estimate individual values of exposure of children to fine dust and nitrogen dioxide, with the help of calculation models. It was shown that an escalation of asthmatic bronchitis and allergic sensitization to pollen and other common allergens occurred with increasing exposure to fine dust. Increased exposure to nitric oxide was linked to increases in eczema.

Connections were noted, in particular, between the appearance of asthmatic bronchitis, hay fever, eczema and allergic sensitization, on the one hand, and residential environment, on the other: compared with their contemporaries living in more distant places, children who lived less than 50 m from a very busy main road were between 1 % and 50 % more likely to contract these diseases. Statistical analysis of the data showed a lower risk with increasing distances from the main roads.

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<sup>2</sup> Helmholtz Zentrum Muenchen - German Research Centre for Environmental Health (2008, July 12). Allergy To Road Traffic: Exposure To Traffic-related Air Pollution Linked to Onset of Allergic Diseases in Children. ScienceDaily. Retrieved July 13, 2008, from <http://www.sciencedaily.com/releases/2008/07/080712144742.htm>

### **63. Switchover to Fuel Cell Vehicles Will Cut Emissions, Cost Billions**

Fuel cell technologies have the potential to greatly curtail the U.S.'s oil use and carbon dioxide emissions, but extensive public and private investment are necessary to make a significant impact in the coming decades, according to the National Research Council. The group researched and developed a best case scenario for fuel cell development and deployment in the U.S., publishing its findings in the report "Transitions to Alternative Transportation Technologies: A Focus on Hydrogen." The main barriers to widespread use of fuel cell vehicles, the report concludes, are vehicle price and lack of production and distribution infrastructure.

Even with increased funding and research, the cost of hydrogen fuel cell vehicles won't be competitive with fossil fuel-burning vehicles until 2023. The Council says fuel cell vehicle production could start ramping up in 2015, with about 2 million vehicles maximum on the roads by 2020.

Once the cost barrier comes down, there could be 60 million fuel cell vehicles by 2035 and 200 million by 2050. The Council takes into account the cost of hydrogen fuel over a vehicle's lifetime in comparing its cost to conventional vehicles.

That best case scenario can only be met with vigorous investment and action. The Council says the government will need to put up \$55 billion in funding from 2008-2023, and private industry will need to pump \$145 billion into fuel cells during the same period.

Currently, the federal government is running the \$1.2 billion Hydrogen Fuel Initiative, which was announced at the 2003 State of the Union Address. On the West Coast, the California Fuel Cell Partnership is working to spread the use of fuel cell vehicles and hydrogen fueling stations.

Although hydrogen-powered vehicles have the potential to bring down carbon dioxide emission drastically in the long run, investments in fuel efficiency and biofuels can help reduce emissions quicker, and the Council encourages that all three technologies be pursued at the same time.

### **64. Major Economies Fail to Agree On Global Greenhouse Gas Emissions Targets**

On the closing day of their summit meeting in Japan on July 9<sup>th</sup>, the Group of Eight industrial nations, joined by eight other major greenhouse gas-emitting nations, failed to agree on common worldwide emissions-reduction targets. The leaders of the Major Economies Meeting on Energy Security and Climate Change released a declaration committing themselves to actions to address climate change and reduce emissions, but offered no concrete targets or deadlines.

According to the declaration, the leaders support "a shared vision," including "a long-term global goal for emission reductions," that assures economic growth, "all aimed at achieving a low carbon society." The declaration also calls for reducing emissions through steps, such as energy efficiency improvements, that are "ambitious, realistic, and achievable."

The Major Economies meeting declaration follows by a day a statement issued by the G-8 leaders offering to support a 50 percent global reduction in greenhouse gas emissions by 2050. The emissions reductions would be enshrined in a global agreement to reduce greenhouse gas emissions to be negotiated in December 2009 in Copenhagen.

The Major Economies statement was hailed by President Bush and his staff as a major step toward a global agreement on climate change, but was attacked by environmental groups, as well as some of the developing countries participating in the group, as capping a G-8 meeting that fell short of doing enough to prevent catastrophic climate change.

According to South African Environment Minister Marthinus van Schalkwyk, the meeting was divided between the G-8 nations, in particular, the United States, Japan, and Canada, which resisted deeper emissions cuts, and five developing nations, China, India, Brazil, Mexico, and South Africa, which demanded steeper cuts from the G-8.

The latter five nations, known as the G-5, released a statement July 8 calling for 85 percent to 90 percent emissions cuts from the G-8 by 2050, and 25 percent to 40 percent emissions cuts by 2020. The G-8 document did not include any targets for interim emissions reductions, leaving it up to each nation to set its own emissions level.

"We are disappointed that some G-8 countries continue to reject the ambitious package that we strive for," Van Schalkwyk said. "We would have liked to see much more from the G-8 this week."

On July 9<sup>th</sup>, President Bush cited progress at the Major Economies meeting, telling reporters, "We made it clear and the other nations agreed that they must also participate in an ambitious goal, with interim goals and interim plans to enable the world to successfully address climate change. And we made progress, significant progress, toward a comprehensive approach."

Van Schalkwyk said, though, "We insist on a midterm target." He cited the lack of a midterm target by the G-8 as the reason for developing nations not signing onto the 50 percent emissions-reduction target in the Major Economies statement. He also noted that the G-5 leaders were issuing their first joint statement, reflecting their unity in demanding more of the developed countries.

Kazuo Kodama, press secretary for the Japanese Foreign Ministry, told reporters that some of the G-8 leaders recognized that the industrialized nations are responsible for most of the greenhouse gases emitted during the past 100 or 200 years, and also that their per capita emissions are much higher than those of developing nations. According to the World Resources Institute, U.S. greenhouse gas emissions were 24.3 tons per capita in 2000, while Chinese emissions were 3.9 tons. Kodama said the G-8 shares a consensus that a climate agreement must take into account fairness toward developing nations.

### **65. Study Finds Production and Use Surging For Former 'Niche' Greenhouse Gas**

Production and use of nitrogen trifluoride, an industrial chemical that is a potent greenhouse gas, are surging, according to a recently published study. In the June 26 issue of American Geophysical Union's journal, *Geophysical Research Letters*, Professor Michael J. Prather, who teaches at the University of California, Irvine, and Juno Hsu, an assistant project scientist at the university, described nitrogen trifluoride as "the greenhouse gas missing from Kyoto."

Only sulfur hexafluoride is more potent than nitrogen trifluoride, Prather and Hsu wrote.

It is not known, however, how much nitrogen trifluoride is in the atmosphere, they wrote. What is clear, Prather and Hsu said, is that use of what once was a "niche" chemical has surged.

Air Products, headquartered in Allentown, Pa., is the world's largest manufacturer, and it announced in November that it would boost its global production capacity to 3,200 metric tons per year by 2009. Another manufacturer, the Tokyo-based Kanto Denka Kogyo Co. Ltd., produces 1,000 tons per year, Prather and Hsu wrote. DuPont also sells the gas, which the study said is used to clean equipment and to make plasma screens for products such as flat panel televisions.

Manufacturers say that nitrogen trifluoride is destroyed during the manufacture of flat screen displays, Prather and Hsu wrote. But they argue that destruction cannot be complete. Some fraction of nitrogen trifluoride will escape into the atmosphere during production, transport, use, or disposal, the study said.

Prather and Hsu said nitrogen trifluoride emissions in 2009 from a single manufacturing company could be equivalent to 54 million metric tons of carbon dioxide, "exceeding the world's largest coal-fired power station."

They urge scientists to document the amount of nitrogen trifluoride in the atmosphere.

They also recalculated its atmospheric lifetime and, consequently, its global climate change potential. Whereas other experts had estimated nitrogen trifluoride's lifetime as 740 years, the methodology Prather and Hsu used calculated an atmospheric lifetime of 550 years. That leads to estimated global warming potential of 12,200, 16,800, and 18,700 for the time horizons 20, 100, and 500 years, respectively. Previously the global warming potentials for nitrogen trifluoride were estimated to be 12,300, 17,200, and 20,700 for the same respective time horizons.

## **66. IEA Recommends Energy-Efficiency Measures To Cut CO<sub>2</sub> Emissions 20 Percent**

On July 9<sup>th</sup>, the International Energy Agency released a report on 25 energy-efficiency recommendations, which it said could reduce global carbon dioxide emissions by 8.2 gigatons, or 20 percent, per year by 2030, if they are implemented immediately. The Paris-based IEA said it provided the recommendations to leaders at the summit meeting of the Group of Eight industrialized nations held in Toyako, Japan.

Speaking at the close of the summit, which ended on July 9<sup>th</sup>, IEA Executive Director Nobuo Tanaka said the recent spike in oil prices is a threat to the global economy and social welfare of millions of people, particularly in developing countries. "For many emerging economies, which are now increasingly reliant on oil imports and are playing a much more significant role in international energy markets than they did during the oil crises in 1973 or 1979, the current crisis is effectively their first oil shock," he said.

Welcoming the G-8's final statement calling for a sectoral approach to improve energy efficiency and to reduce carbon dioxide emissions through new technology, Tanaka urged industrialized countries to use today's technological opportunities to help developing countries to "leapfrog the polluting phase of economic growth."

He said the IEA recommendations are a good place to start. "If implemented globally, without delay, our proposed actions could save around 8.2 [gigatons of carbon dioxide] per year by 2030," he said. That is roughly equivalent to double the 2005 level of carbon dioxide output of all 23 European members of the Organization for Economic Cooperation and Development, he said.

OECD-Europe comprises all EU member countries of the OECD, which are Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Poland, Portugal, the Slovak Republic, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

Noting that the G-8's statement urges progress on clean energy, Tanaka said "Broader international cooperation on promising programs such as deployment of carbon capture and storage (CCS) is essential if we are to identify and move to market the energy technologies of tomorrow." Tanaka said the G-8 has strongly supported an IEA recommendation that governments act now to commit by 2010 at least 20 fully integrated, industrial-scale CCS demonstration projects worldwide, to make CCS available for broad deployment by 2020.

### **67. Large Investors See Returns from 'Green' Technology**

Many of the world's wealthiest individuals are investing increasing amounts of their money in burgeoning alternative fuel, renewable energy, and other advanced "green" technologies--reflecting both environmental concerns and the opportunity for lucrative returns, according to the 2008 World Wealth Report. Roughly 13 percent of the globe's top-tier rich allocated part of their investment portfolios to green technologies or alternative energy, according to the 12th such report prepared jointly by the investment firm Merrill Lynch & Co. and Capgemini, a consulting and technical services company. For example, investment in the clean technology sector increased by 41 percent from 2005 to 2007, rising to \$117 billion from about \$83 billion, according to the report posted on the companies' websites June 24. It said more deep-pocket investors in Europe and the Middle East put some of their green into green portfolios--up to 21 percent--than those in other regions. Their North American counterparts trailed at an average of around 6 percent, the report said.

### **68. OECD Report Questions Benefits of Biofuels, Urges Focus on Saving Energy**

Governments of member countries of the Organization for Economic Cooperation and Development should significantly scale back their expectations of what biofuels can contribute to energy markets and the reduction of greenhouse gas emissions and instead should concentrate more resources on energy-saving measures, OECD said July 16. "We feel that governments throughout the [30-country OECD] area, especially the United States and European Union, have had too high hopes for what biofuels could achieve," said Stefan Tangermann, head of the OECD's Trade and Agriculture Directorate, after presenting the new OECD Economic Assessment of Biofuel Support Policies. "Despite all the efforts that have been made, biofuels produce neither big gains for the environment nor for energy security," Tangermann continued.

According to the report, OECD countries' support for biofuels production is expensive, has a small impact on reducing greenhouse gas emissions and improving energy security, and has a significant impact on world crop prices. Commercial production of second-generation biofuels is at least a decade away, the report said, and in any case will not eliminate effects on prices of food crops.

The report called on governments to refocus policies to encourage lower energy consumption, particularly in the transportation sector. It recommended a clear focus on alternative fuels that maximize reduction of fossil fuel usage and greenhouse gas emissions and suggested further

research to accelerate development of second-generation biofuels that do not require commodity feedstocks.

The report said today's biofuels are too dependent on public funding to be viable. "In the United States, Canada, and the European Union government support for the supply and use of biofuels is expected to rise to around \$25 billion per year by 2015 from about \$11 billion in 2006," the OECD report said.

Although reduction of greenhouse gas emissions is a key motivation for current biofuel policies, actual savings are slight, the OECD said. While biofuel support policies cost between \$960 to \$1,700 per ton of greenhouse gases saved, overall, current policies would reduce greenhouse gas emissions from transport fuel by no more than 0.8 percent of transportation-related greenhouse gas emissions by 2015, according to OECD estimates.

The impact of current biofuel policies on world crop prices, largely through increased demand for cereals and vegetable oils, is significant but should not be overestimated, the OECD said. By some estimates, current biofuel support alone could increase average wheat prices by about 5 percent, maize by around 7 percent, and vegetable oil by about 19 percent over the next 10 years, according to the report. It said the 2007 U.S. Energy Independence and Security Act (Pub. L. No. 110-140), combined with the European Union's proposed Directive for Renewable Energy, could result in 13 percent of world coarse grain production and 20 percent of world vegetable oil production going to biofuels production in the next 10 years, up from 8 percent and 9 percent, respectively, in 2007.

The U.S. energy law requires 9 billion gallons of corn-based ethanol or other renewable fuel to be blended with gasoline in 2008 and 36 billion gallons in 2022; the proposed EU energy directive calls for 10 percent of all transportation fuels to come from renewable sources, including biofuels.

How much biofuels reduce greenhouse gas emissions turns out to be a complicated calculation, according to OECD. The OECD report said ethanol made from sugar cane--mainly in Brazil--reduces greenhouse gas emissions by at least 80 percent compared with fossil fuels, while biofuels produced from wheat, sugar beet, or vegetable oil--the crops used in the European Union--reduce emissions 30 percent to 60 percent. Emissions savings from corn-based ethanol, the kind favored in the United States, are generally less than 30 percent, it said. However, these calculations do not take into account the effects of any indirect or direct land-use changes caused by biofuels production, which the report addresses separately.

OECD agricultural economist Martin von Lampe, one of the report's authors, said if land-use issues are taken into account, "[i]t could mean that you can have a negative, potentially even a strongly negative effect on greenhouse gas emissions overall".

"When people talk about a need to apply sustainability criteria to biofuels that will be used, for example, to fulfill any mandate that governments set, it is very difficult to make sure that sustainability applies not only to the place where the biofuel is actually produced, but also avoids [situations in which] land-use changes trigger, for example, destruction of rainforest in other places through a chain reaction of land-use changes," he said.

## **69. Officials from 55 Ports Agree to Reduce Greenhouse Gas Emissions**

On July 11<sup>th</sup>, officials from 55 world ports signed a declaration to reduce carbon dioxide emissions and to improve air quality. The World Ports Climate Declaration, presented at the conclusion of the three-day C40 World Ports Climate Conference held in Rotterdam, represents the first global push by ports toward developing concrete measures to fight climate change. The C40 group is an alliance of the world's largest cities committed to tackling climate change.

The declaration includes initiatives to reduce carbon dioxide emissions on and off shore, to promote renewable energy, and to measure the carbon dioxide footprints of individual ports. The International Association for Ports and Harbors (IAPH) is leading the actions, and plans to formulate a mechanism to monitor ports' progress before a November follow-up conference in Los Angeles.

Major ports that have signed the declaration include those in London, New York, Los Angeles, Tokyo, and Hong Kong.

The declaration provides guidelines for ports, while other remedies discussed during the conference will be evaluated in the coming months. Among the measures under discussion are supporting clean shipping through better ship design and reducing the speed of ocean vessels. Environmental indexing--measuring the burden of particular sources on the environment--might also be used to either penalize or to reward ships coming into port.

Port representatives also discussed the possibility of providing better shore-side electrical connections to docked ships, which often continue to burn fuel for onboard electricity while they load and unload cargo. The declaration encourages the use of renewable energy sources like solar, wind, and geothermal power for port operations.

Ports may also develop ways to measure their carbon dioxide footprints by establishing carbon inventories and setting targets for emission reductions.

The conference was organized by the Rotterdam Climate Initiative, a program to reduce carbon dioxide emissions in the Rotterdam area, and the Port of Rotterdam. The declaration is strongly supported by the Clinton Climate Initiative, a climate change group launched in 2006 by former U.S. President Bill Clinton.

## **70. Report Finds That Asia Offers Cost-Effective Opportunities to Reduce GHGs**

Asia offers the most cost-effective opportunities to mitigate greenhouse gases, but governments, industry, and other interested parties must change the prevailing assumption that reducing greenhouse gases is inherently incompatible with sustainable development, a white paper<sup>3</sup> released June 21 from the Institute for Global Environmental Strategies (IGES) concluded. "In comparison to other regions, developing countries in Asia offer the most cost-effective opportunities (e.g. energy efficiency improvement and energy diversification) for greenhouse gas mitigation and for integration of climate concerns into non-climate policies.

"The region also offers enormous opportunities (e.g. reversing unsustainable land use practices that lead to deforestation and degradation) for exploiting synergies between climate and other international regimes on biodiversity, desertification, and other areas," said the white paper.

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<sup>3</sup> Climate Change Policies in the Asia-Pacific: Reuniting Climate Change and Sustainable Development

It reviews strategies to address climate change; examines mitigation and adaptation policies for specific sectors such as forestry, or media, such as groundwater; and makes policy recommendations.

IGES is a research and public policy institute that focuses on sustainable development in the Asia-Pacific region.

The institute recommends a post-2012 climate change policy that would build on the United Nations Framework Convention on Climate Change (UNFCCC) concepts of common but differentiated responsibility for greenhouse gas mitigation, the polluter pays principle, and a precautionary approaches for adaptation.

Based on workshops and consultations IGES has had throughout Asia, other needs include integrating climate concerns into development plans; focusing more attention on adaptation; facilitating the development and use of low-carbon technologies; and strengthening the capacity of negotiators, the private sector, and financial institutions to address climate change.

### **71. Blair Presents Report Outlining Steps to Halve GHG Emissions by 2050**

Any solution to cut greenhouse gas emissions by at least 50 per cent by 2050 must include the United States and China, former British Prime Minister Tony Blair said June 27<sup>th</sup>. Blair made his comments in Japan during the launch of a new report<sup>4</sup> from nonprofit organization The Climate Group, shortly before the start of the Group of Eight summit.

The report tries "to unite the scientists and experts with the political leaders and decision-makers," Blair said in a prepared statement. "As such, it is explicitly designed to be a practical way through; not yet another campaigning polemic to wake the world up to the challenges of global warming." It represents the first phase of the broader initiative (known as Breaking the Climate Deadlock) by Blair and The Climate Group to strike a global climate deal beyond 2012. The Climate Group operates internationally, and is based in Australia, China, India, the United Kingdom, and the United States.

The report highlighted 10 core building blocks necessary for a global deal, starting with the importance of setting targets to provide a clear direction. Countries need to look at target dates prior to 2050 to help lay out a "pathway to change" and to prevent a rise in emissions prior to mid-century. Another vital area of agreement is how to develop a workable carbon capture and storage (CCS) technology, without which achieving lower emissions targets will be unfeasible or significantly more costly, the report said. New mechanisms are also required to encourage low-emissions technology diffusion in developing countries and to reduce barriers to intellectual property access.

### **72. World Energy Use Projected to Grow 50 Percent by 2030, U.S. Agency Says**

World energy consumption is projected to grow by 50 percent between 2005 and 2030, driven by robust economic growth and expanding populations in the world's developing countries, according to an international outlook released June 25<sup>th</sup> by the US Department of Energy's Energy Information Administration.

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<sup>4</sup> Breaking the Climate Deadlock: A Global Deal for our Low Carbon Future

Total energy demand is projected to increase by 95 percent in developing countries, compared with an increase of 24 percent in members of the Organization for Economic Cooperation and Development (OECD), EIA said. EIA also predicted that worldwide carbon dioxide emissions will grow by more than 50 percent between 2005 and 2030, according to the most likely long-term scenario outlined in the report, with most of the projected emissions growth expected to occur in developing countries.

Average world oil prices have gone up every year since 2003, and prices in 2007 were nearly double the 2003 prices in real terms, EIA said. EIA cited a variety of factors that have caused oil prices to increase to almost \$140 per barrel this year, including strong demand growth in non-OECD countries, especially Asia and the Middle East; no growth in production since 2005 from the members of the Organization of Petroleum Exporting Countries; rising costs for oil exploration and development; across-the-board increases in commodity prices; and a weaker U.S. dollar.

Coal's share of world energy use has increased sharply over the past few years, and without significant changes in existing laws and policies, particularly those related to greenhouse gas emissions, robust growth is likely to continue, EIA said. Coal accounted for 24 percent of total world energy use in 2002 and 27 percent in 2005, largely as a result of rapid increases in coal use in China. China's coal consumption has nearly doubled since 2000, and given the country's rapidly expanding economy and large domestic coal deposits, its demand for coal is projected to remain strong. In the EIA's reference case, or most likely scenario, coal use expands by 2 percent per year between 2005 and 2030, and coal's share of total world energy consumption reaches 29 percent in 2030.

Concerns about rising fossil fuel prices, energy security, and greenhouse gas emissions support the development of new nuclear generating capacity, the agency said. World nuclear capacity is projected to rise from 374 gigawatts in 2005 to 498 gigawatts in 2030. Declines in nuclear capacity are projected only among OECD members in Europe, where several countries (including Germany and Belgium) have either plans or mandates to phase out nuclear power and where some old reactors are expected to be retired and not replaced. China is projected to add 45 gigawatts of net nuclear capacity over the projection period, India 17 gigawatts, Russia 18 gigawatts, and the United States 15 gigawatts.

Sustained high prices for oil and natural gas encourage expanded use of renewable fuels, the agency said. Renewable energy sources are attractive for environmental reasons, especially in countries where reducing greenhouse gas emissions is of particular concern. Government policies and incentives to increase renewable energy sources for electricity generation are expected to encourage the development of renewable energy even when it cannot compete economically with fossil fuels, according to EIA. Worldwide, the consumption of hydroelectricity and other renewable energy sources increases by 2.1 percent per year in the EIA reference case between 2005 and 2030.

### **73. UN Chief Warns Against Waiting for Climate Deal**

The world should not wait until next year to cobble together a new climate change pact according to United Nations Secretary-General Ban Ki-moon. Ban, addressing diplomats and officials at a ceremony for the 20th anniversary of the UN climate panel, said countries negotiating a successor deal to the Kyoto Protocol should aim for a meaningful breakthrough in Poznan, Poland, in December. Delaying major advances until the end of 2009, when a

Copenhagen summit will aim to finalize an accord to tackle rising global temperatures, may be ill-advised, Ban told the event in Geneva.

"We must fight the urge to postpone everything until Copenhagen. Surely we can make concrete progress on some issues," the UN chief said, adding that the Poland meeting should serve as "a very successful bridge" for Copenhagen. "It is my sincere hope that by the end of this year in Poznan parties to the climate change convention will have achieved a better understanding of a shared vision for long-term cooperative action."

Ban said it was imperative for the new US government to play a leadership role in climate change for the international community to agree on strong emission cut targets. "Whoever may be elected as president of the United States, they may be in a better position to address and to lead this process," the UN chief told journalists at the Geneva event.

#### **74. Toyota Cuts 2009 Sales Forecast, Speeds Up Electric Cars**

Toyota Motor Corp has cut its 2009 vehicle sales forecast by nearly 7 percent as high fuel prices hammer demand for large cars and pickup trucks, and said it will speed up the rollout of hybrid and electric cars as their popularity grows. The weaker outlook from the world's most profitable carmaker highlighted an increasingly difficult environment, where orders in the United States and Western Europe for high-margin, gas-thirsty vehicles is slumping. Toyota said it expects to sell about 9.7 million vehicles next year including its Daihatsu Motor Co and Hino Motors Ltd units. It had previously forecast sales of 10.4 million vehicles.

"We are looking at the current shift towards fuel-efficient cars (in the United States) as a structural change in demand," Toyota President Katsuaki Watanabe told a news conference. "We intend to respond quickly and flexibly to this environment."

As part of those efforts, Toyota said it would move forward the launch of a "plug-in" version of its Prius gasoline-electric hybrid car, which can be recharged through an electric socket. It will be available to fleet customers at the end of next year, from earlier plans of 2010. Toyota also said it would speed up the development of vehicles that run only on electricity with the aim of mass-producing them in the early part of next decade. Road tests for the current prototype, called "e-com", had ended in 2006.

Rival Nissan Motor Co is aggressively promoting plans to commercialize pure electric cars, though Toyota stressed that such cars, including its own, would be suited only for short-distance travel for the time being given the limitations on battery storage technology and recharging infrastructure.

General Motors Corp, meanwhile, is looking to beat Toyota with its all-electric Chevy Volt. GM expects to have a showroom-ready version by this year, according to press reports.

For North America, the world's biggest auto market, Toyota lowered its 2009 sales forecast to 2.7 million vehicles from 3 million. Forecasts were lowered by 150,000 vehicles each for Europe, Japan, and the rest of Asia.

Toyota is suspending US production of light trucks for three months to prevent inventory from ballooning and has outlined plans to build the hybrid Prius at a factory under construction in Mississippi instead of the Highlander SUV it had planned to make.

Toyota is launching a third-generation Prius and a new hybrid model under the Lexus luxury marquee -- both due to debut at the Detroit auto show in January. It is also developing a low-cost car, expected to sell for under US\$9,000, aimed at emerging markets such as India and Brazil.

Production of that car is set to begin in 2010 in India, and in Brazil a year later -- lagging GM's plans, announced recently to launch its new small car in India in the second half of next year.

### **75. UN Study Says Scrapping Fuel Subsidies Can Help Climate**

Abolishing subsidies on fossil fuels could cut world greenhouse gas emissions by up to 6 percent and also nudge up world economic growth, according to a new UN report. Subsidies on oil, gas or coal are meant to help the poor by lowering the price of energy but the report, issued on the sidelines of a 160-nation UN climate meeting in Ghana, said they often backfired by mainly benefiting wealthier people.

The study estimated that energy subsidies, almost all for fossil fuels, totaled about US\$300 billion a year or 0.7 percent of world gross domestic product (GDP). "Cancelling these subsidies might reduce greenhouse gas emissions by as much as 6 percent a year while contributing 0.1 percent to global GDP," it said. People forced to pay higher prices for energy would likely cut back on use of fossil fuels, the main source of greenhouse gases from human activities.

Subsidies were biggest in Russia, with about US\$40 billion a year spent mainly on making natural gas cheaper, ahead of Iran with US\$37 billion. China, Saudi Arabia, India, Indonesia, Ukraine and Egypt also had big subsidies on fuels.

The report said liquefied petroleum gas (LPG) subsidies in India, aimed at getting fuel to poor households, totaled US\$1.7 billion in the first half of 2008. But the report said: "LPG subsidies are mainly benefiting higher-income households".

Smarter subsidies such as tax breaks, financial incentives or other market mechanisms could generate benefits for the economy and environment if properly targeted, it said. It pointed to subsidies to promote wind energy in Germany and Spain aimed at helping to shift from fossil fuels. Well-devised subsidies in Chile had spread rural electrification to 90 percent of the population from 50 percent in 12 years, it said.

UNEP also said Africa was starting to benefit from a UN project to help investments in clean technologies such as wind or geothermal power. Nations such as China, India and Brazil have so far won almost all of the 3,500 projects. New projects had been registered in recent months in Mozambique, Democratic Republic of the Congo, Madagascar, Mauritius, Mali and Senegal.

### **76. Sanyo in Talks with Car Makers on Batteries**

Sanyo Electric Co Ltd the world's largest rechargeable battery maker has announced that it is in talks with major car makers in Europe, the United States and Japan on the supply of auto-use batteries. Automotive batteries are expected to be a market with huge growth potential for suppliers of rechargeable batteries such as Sanyo as higher oil prices and growing concerns over climate change prompt car makers to expedite a shift to battery-driven vehicles.

Sanyo said it plans to boost its lithium-ion battery output capacity to above 100 million cells a month by the year ending in March 2011, up from a planned 90 million units in the year starting next April, to defend its No.1 position from Sony Corp and Matsushita Electric Industrial Co Ltd.

Sanyo and Volkswagen AG have been jointly developing auto-use lithium-ion batteries in an intensifying race to provide the key component for the next generation of hybrid cars.

In its non-auto use lithium-ion batteries that go into such devices as PCs cell phones, Sanyo's monthly output capacity will exceed 100 million cells in the year starting in April 2010, keeping a safe lead against its smaller rivals, Sanyo said.

Sony will spend 40 billion yen (US\$367.4 million) to boost its production capacity for lithium-ion batteries by 80 percent by 2010, while Matsushita plans to invest 100 billion yen to build a new lithium-ion battery plant in Osaka to meet robust global demand.

### **77. Living Near Highway Tied to Adverse Birth Outcomes**

Living near a highway may raise a pregnant woman's risk of premature delivery or having a low birth weight baby and, counter intuitively, affluent moms-to-be seem to be more vulnerable to highway pollution than their less well-off counterparts.<sup>5</sup>

Using the Quebec birth registry, researchers analyzed data on nearly 100,000 live births registered between 1997 and 2001 in Montreal, Canada's second largest city where highways run through affluent and poor neighborhoods alike.

They found that among all mothers residing within 200 meters of a major highway were 14 percent more likely to deliver prematurely (before the 37th week of pregnancy) and 17 percent more likely to have a low birth weight baby (less than 2500 grams, or about 5.50 pounds) compared with those residing further away.

However, in the wealthiest neighborhoods, living near a highway was associated with a 58 percent increased odds of preterm birth, an 81 percent increased odds of delivering a low birth weight baby, and a 32 percent increased likelihood of delivering a "small for gestational age" baby, whereas no association was observed in other neighborhood socioeconomic categories.

"We were a bit surprised by these findings," Dr. Melissa Genreux from University of Montreal told reporters. "We initially hypothesized that proximity to a highway would affect less affluent mothers to a greater extent than affluent ones. We thought that less affluent mothers living near a highway would disproportionately suffer from the double burden of economic disadvantage and pollution."

One interpretation of these counterintuitive findings, she explained, is that less affluent mothers are more likely to be exposed to common risk factors for adverse birth outcomes during their pregnancy, including active and passive smoking, poor nutrition, domestic violence, and poor access to prenatal care. "The impact of exposure to additional risk factors, like traffic-related air pollution, among disadvantaged mothers may not be as significant as it is among affluent mothers, who are relatively protected from these well-identified risk factors," she further explained.

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<sup>5</sup> Journal of Epidemiology and Community Health, August 2008.

## **78. UN Says Time Short for Climate Pact, Draft by Mid-09**

Time is short to work out a new treaty to fight global warming as planned by the end of 2009 because drafts of a deal must be ready in less than a year, according to the UN's top climate change official. "Time is short," Yvo de Boer, head of the UN Climate Change Secretariat, told reporters of a timetable meant to end with agreement on a new climate treaty to succeed the existing Kyoto Protocol at a meeting in Copenhagen in late 2009. "If you are going to negotiate something in Copenhagen in December in 2009 the elements of that negotiation have to be available six months before," he said. So far, only vague proposals have been floated at the talks.

De Boer said he did not believe the collapse of the world trade talks last month and an economic slowdown in many rich nations would derail efforts to confront climate change. "Business is still calling for clarity and ambition," he said. Many industries want to know the long-term rules to decide, for instance, whether to build a coal-fired power plant or a wind farm.

He said that the breakdown of the World Trade Organization talks in Geneva illustrated that developing nations needed a stronger voice in international bodies, such as the UN Security Council. "If you are asking major developing countries to engage on a topic like climate change in a serious way, don't they also deserve a serious place in the governance? I think that's something to think about," he said.

De Boer has urged nearer-term goals to force politicians to act now, rather than leave cuts to a future generation. "In order to know if it's a help or not I'd need clarity on a couple of things," he said, saying it was not clear if the vision of halving emissions would be non-binding or a firm goal. And he noted that the G8 text did not name a base year for cuts -- the European Union favors 1990 but Japan wants it to be from current levels. The base year makes a big difference because world greenhouse gas emissions leapt to 49 billion tons in 2004 from 39 billion in 1990, according to the UN Climate Panel.