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EUROPE

1. EU Reportedly Postpones Review of Air Quality Law Limiting NO_x and SO₂

Review of an EU air quality law that was supposed to have been completed in 2005, and was then promised for 2008, may not be finalized until 2013, the European Commission told the press on July 14. Monica Westerén, spokeswoman for EU Environment Commissioner Janez Potocnik, told reporters that no final decision has been made on the review of the National Emissions Ceilings (NEC) Directive (2001/81/EC). But she said the other EU air quality law is due for review in 2013 and that it would be “an appropriate moment to look at all in a coordinated and coherent way.”

The NEC directive requires EU countries to bring emissions of sulfur dioxide, nitrogen oxides, volatile organic compounds, and ammonia below certain limits for 2010. The four types of emissions are the primary pollutants responsible for acidification, eutrophication, and ground-level ozone pollution and are produced largely by agricultural and industrial activities and transportation.

The most recent data published by the European Environment Agency, released in September 2009, showed that about half of EU member states expected to exceed the NEC limits in 2010. However, a separate report released on July 12th by the agency indicated that overall EU emissions levels for many of the pollutants have dropped recently. (See below)

The European Environmental Bureau (EEB), a federation of more than 140 environmental organizations, said delays in upgrading the NEC directive has led to incoherent EU air quality legislation. For example, the Ambient Air Quality Directive (2008/50/EC) requires EU member states by 2010–11 to meet certain limits on air pollutants in urban areas, including sulfur dioxide and nitrogen dioxide, which also are covered by the NEC directive. The Ambient Air Quality Directive is due for review in 2013. The Commission has issued numerous infringement notifications to EU countries for noncompliance with the Ambient Air Quality Directive. However, unless the limits set out in the NEC directive are tightened “member states will continue breaching EU air quality standards,” EEB said.

Separately, on July 12th, EEA published figures showing that emissions of some substances covered by the NEC directive have fallen sharply. In a submission to the United Nations’ Long-range Transboundary Air Pollution Convention, EEA said that overall EU emissions of sulfur oxides in 2008 fell by 20 percent compared with 2007 levels. Emissions of nitrogen oxides fell 6.8 percent and volatile organic compounds dropped 3.2 percent from 2007 to 2008, according to EEA.

The Long-range Transboundary Air Pollution Convention requires parties to meet emission targets by 2010 for nitrogen oxides, volatile organic compounds, sulfur oxides, and ammonia. According to the EEA report, European Union Emission Inventory Report 1990—2008 Under the UNECE Convention on Long-range Transboundary Air Pollution, the European Union was within its limits for most substances under the Convention by 2008. The one exception was nitrogen oxides, which are produced primarily by road transportation and energy generation.

2. EU Emissions of SO_x and Ozone-Forming Pollutants Fall Significantly

The European Union air pollutant emission inventory report compiled by the European Environment Agency (EEA) shows that the EU-27 has cut sulfur oxides (SOx) emissions by 78 % since 1990. The decline was particularly sharp during the latest reporting year, falling 20 % in 2008 compared to 2007. The emissions of three ozone precursors — CO, NMVOCs and NOx — also continued the downward trend.

The annual EU-27 emission inventory reported under the United Nations Economic Commission for Europe (UNECE) Long-range Transboundary Air Pollution (LRTAP) Convention confirms that emissions of most air pollutants continue to decline.

SOx is an important air pollutant that acidifies ecosystems and forms harmful fine particulate matter in the atmosphere. Since the early 1990s a combination of measures has helped reduce emissions, including introducing low sulfur fuels and fitting pollution control equipment in European industrial facilities. Lower emissions from public power plants in Bulgaria, Poland and Spain contributed to the 20 % annual emission reduction in 2008. Spain, for example, reduced its SOx emissions by using less coal to generate electricity and instead relying on natural gas and renewables such as wind, photovoltaics and biomass.

CO, NMVOCs and NOx are main contributors to the formation of ground-level ozone, a harmful pollutant that can trigger respiratory problems, contribute to premature mortality and also damage plants, reducing agricultural crop yields. EU-27 emissions of these ozone precursors fell in 2008 in a number of Member States, including France, Spain and UK, particularly from public power plants. Emissions from road transport also fell significantly in these Member States, partly reflecting reduced freight transport on roads in the second half of 2008 due to economic recession.

Other key findings

- In 2008 EU-27 emissions of fine particulate matter fell by 13 % (PM2.5) and 8 % (PM10) compared to 2000. Emission trends have not improved much in the last five years, with emissions actually increasing slightly (by 0.2 %) in 2008 compared to the previous year.
- NOx emissions from road transport have decreased by 40 % since 1990, mainly due to the introduction of three way catalytic converters in passenger cars and stricter regulation of emissions from heavy goods vehicles across Europe. Road transport nevertheless remains the most important source of the ozone precursors NOx and CO, contributing 41 % and 34 % of EU-27 emissions in 2008.
- In contrast to the road transport sector, NOx emissions from aviation have increased significantly. Since 1990, the share of total EU-27 emissions that derive from domestic and international flights has trebled to more than 5 %.
- For the first time, the annual EU inventory report also presents information on emissions of toxic heavy metals. EU-27 emissions of mercury, cadmium and lead have dropped by 60 % or more since 1990, reflecting improved control of emissions from sources such as electricity production, industry and road transport. However, the rate of decrease in total emissions of these three toxic heavy metals has slowed over the last five years.

3. Court Supports EU Decision on Fuel Additive, MMT

Europe's highest court has rejected a claim from an American company that an EU decision to restrict a potentially risky chemical compound was unlawful. The outcome will be seen as a

vindication of the precautionary principle, the 'better-safe-than-sorry' approach that underpins many EU laws to protect health and the environment.

In a judgment issued on July 8th, the European Court of Justice (ECJ) ruled that an EU law to restrict the fuel additive MMT was lawful. MMT is a manganese compound added to petrol to raise octane levels. Although hardly used in the EU, talk of banning it sparked a high-stakes lobbying battle inside the European Commission in 2008.

The EU imposed restrictions on MMT in 2009, citing the risk of damage to human health and possible damage to car engines. Under the EU's fuel quality law, MMT in fuel shall be limited to 6 milligrams of manganese per liter from 2011, falling to 2mg per liter from 2014.

Afton, the only company that sells MMT on the EU market, said this amounted to a de facto ban, and that the limits were arbitrary and unscientific.

Almost no MMT is used in fuel on the EU market, but the company feared that an EU ban could be copied by other countries. According to Afton, MMT is used in 45 countries.

The ECJ rejected the company's claim that restrictions were unlawful. "In the absence of adequate and reliable data", EU lawmakers were faced with "serious doubts...as to whether MMT was harmless for health and the environment", the court said. Therefore the EU was justified using the precautionary principle "to take protective measures without having to wait for the reality and the seriousness of those risks to be fully demonstrated".

The ECJ also rejected the company's complaint about a legal requirement that all fuel containing MMT bear the label "contains metallic additives". This was an appropriate way to ensure consumers' right to information, the judgment said.

Under the fuel quality law, the European Commission must carry out a risk assessment of metallic additives in fuels and work out a testing process by 2013. This could prove tricky, as officials have struggled to design a testing methodology in the past, following similar legal requirements.

Afton said in a statement: "We look forward to co-operating with all the relevant European bodies to carry out a high level of scientific assessment by the required deadline, and on this basis, revise the current limits."

A spokeswoman for the Commission said: "The Commission welcomes the ECJ's unequivocal endorsement of the legislation adopted by the Council and Parliament and looks forward to its full implementation by the member states."

MMT (methylcyclopentadienyl manganese tricarbonyl) has been used as a fuel additive for more than 30 years, but questions are being asked about potential damage to human health. In 2006, seven scientists signed the Brescia declaration, which declared that MMT was as risky as lead and should be banned from use in fuel. Germany has taken this step and the European Parliament called for an EU-wide ban in 2008. Afton maintains that MMT poses no health risk.

The Canadian government banned MMT in 1997 on public health grounds. The ban was overturned following legal action instigated by Afton, then called the Ethyl corporation.

4. French Parliament Passes Grenelle Law, Covering Emissions, Other Areas

On June 29th, France's Parliament definitively passed the last major legislative component of its comprehensive Grenelle environment program. Culminating a three-year legislative process, the National Assembly, in a narrow party line vote, approved the Bill for National Commitment on the Environment, which includes requirements for companies to report on nanoparticles and carbon dioxide emissions. The bill also addresses energy efficiency of buildings, urban planning, transportation, renewable energy, health, waste, and governance and requires biodiversity protection zones to be created throughout the country.

The Senate passed the measure, known as Grenelle 2 on June 28th.

In both houses of Parliament, the ruling UMP (Union Pour un Mouvement Populaire) party and the Nouveau Centre, both center-right parties, backed the bill. Most Socialists, Communists, and Greens voted against it, complaining that it had been watered down.

Jean-Louis Borloo, the minister of ecology, energy, sustainable development, and the sea, said passage of the Grenelle program puts France among the world leaders in green growth policy. "This [Grenelle] is a monument to lucidity and responsibility in a world that has lost its way a little bit. It is a monument to tenacity and political courage," Borloo said. However, about 190 decrees will be needed to implement the measure.

The passage of Grenelle 2 followed Grenelle 1, an environmental road map that became law in August 2009. The two laws grew out of a package of 268 "commitments" designed to push France toward sustainable production and consumption that were hatched at a national environment summit hosted by President Nicolas Sarkozy in October 2007.

While Grenelle 1 expressed the program's soaring aspirations, Grenelle 2, in 105 articles over 125 pages, supplied the bulk of its laws, regulations, and other legal tools, modifying about 25 environmental codes.

The first law passed both houses nearly unanimously. In contrast, the more technical and legal measures in Grenelle 2 met stiff resistance in Parliament, and the law took longer than expected to pass. Grenelle 2's measures are grouped around six main themes: urban planning, transportation, energy, biodiversity, risks to health, and governance.

Grenelle 2 also requires companies and local governments with more than 500 employees to file reports on their greenhouse gas emissions, and it establishes a legal framework for experimentation on carbon capture and storage. It calls for road use taxes for trucks by 2012.

5. Portugal Approves Decree on Biofuels, Bioliquids

To comply with EU regulations on the use of renewable energies in transportation, Portugal's Council of Ministers (cabinet) on July 9th approved a decree-law establishing sustainability criteria for the production and use of biofuels and bioliquids, and defining the limits of the required incorporation of biofuels from 2011 through 2020. The decree-law will enter into force following publication in the Diário da República, Portugal's national register. The new law will allow for creation of a biofuels certification system, whereby the renewable origin of fuels is proved through the use of tradable biofuel certificates. This new regime will help Portugal to comply with the promotion of renewable energy usage laid out in the European Union's Directive 2009/28/EC, including the directive's rules for calculating the greenhouse gas impact

of biofuels, bioliquids, and their fossil fuel competitors. The government said the new rules could help create green jobs and wealth in rural areas while reducing carbon emissions.

6. Two Pilot Projects in Russian Cities Aim for Sustainable Transport

The Global Environment Facility is working with the Russian government to reduce greenhouse gas emissions in the transportation sector by creating a sustainability model that could be applied to traffic-choked cities across the country. The GEF Council approved the project on June 8th. The program will use external consultants to analyze and make recommendations for changes in the transportation systems of two medium-sized urban areas. Goals include federal enforcement of more rigorous fuel efficiency and emissions standards and a larger market for more efficient automobiles.

On July 19th, John O'Brien of the United Nations Development Program, which implements GEF projects, told the press that meetings with federal and local officials, private industry, and nongovernmental organizations are under way to create the detailed plan for implementation, with full project approval and launch expected in 2011.

The Russian Ministry of Environment and Natural Resources is the lead partner. The government currently has no policy on sustainable transportation systems, and the project is designed to help Russia create a new regulatory framework to that effect. "The government has yet to develop a consistent policy on sustainable transport, which should integrate land use, urban planning, traffic management, and intelligent transport systems," the GEF project report said.

O'Brien said in a telephone interview with the press that the project represents a new engagement with the transportation sector on the part of UNDP. The agency also recently launched sustainable transport projects in Ukraine and Kazakhstan, which are among its first such projects in addition to the project in Russia, according to O'Brien.

The transportation sector is experiencing rapid expansion in many parts of the world, making it one of the fastest growing global sources of greenhouse gas emissions. In Russia, transportation currently accounts for 25 percent of energy use, with that share expected to rise as more people purchase automobiles. Russia is now Europe's biggest car market, with the saturation of private car ownership still far below that of Western Europe or the United States. The likelihood of continued growth is in part fueled by poor public transportation alternatives, according to GEF.

The GEF project aims to produce a national model for sustainable transportation by focusing on Kaliningrad, a western Russian city of 500,000 people that experiences heavy traffic as a transit route between Europe and Russia; and Kazan, a city of 1.2 million in Central Russia that has experienced high economic growth and, as a result, higher congestion. The two medium-size cities were chosen over Moscow and St. Petersburg—where traffic problems are worse—because real progress was seen as more likely in the smaller cities.

The Kaliningrad project will focus heavily on improving the coordination and reliability of public transport, increasing the efficiency of buses, and reforming safety regulations. The plan includes establishing a public transport control center, a rapid transit system for buses, and a public awareness campaign.

In Kazan, the GEF project is leveraging its effort with infrastructure changes related to the city's hosting of the 2013 World Student Games. The focus will be on comprehensive transportation and land-use planning, as well overall coordination of the transportation system.

In addition to public transportation improvements, new rules for private car ownership may be introduced as a result of the project. "By tightening fuel efficiency standards, along with introducing car [efficiency] labeling and public awareness campaigns, the project will speed up efficient renewal of the country's car fleet and drive the desired changes in consumer behavior," according to the project document.

"At the federal level [the] project will focus on designing and introducing new national policies, regulations, and standards to increase fuel efficiency and facilitate integrated approaches to land use, urban development, environment protection and transport planning," according to the project framework. To reduce or prevent private vehicle ownership, the project may also recommend congestion charges or new vehicle taxes.

The GEF grant for the three-year project is \$5.4 million, with an additional \$35.2 million in co-financing from various sources, including the Russian government, multilateral agencies, and the private sector.

7. Belgium Priorities Include EU Agreement on Vehicle Carbon Emissions

Belgium will use its presidency of the Council of the European Union to work to broker deals between the governments of the 27-country bloc on four items of environmental legislation, Flemish Environment Minister Joke Schauvliege said on July 14th. Speaking to the European Parliament's Environment Committee, Schauvliege, who represents the Belgian federal state on environmental matters, said she would seek agreement on draft legislation on electronic waste, hazardous substances in electronics, carbon dioxide emissions from light commercial vehicles, and biocides.

Belgium holds the rotating presidency of the EU Council through Dec. 31, meaning it will chair meetings of EU member state ministers. Once the Council has adopted its position on an item of legislation, it must find common ground with the European Parliament before the law can be finalized.

On carbon dioxide emissions from light duty commercial vehicles, both the European Parliament and the Council are expected to adopt their positions at the end of 2010. The European Commission in October 2009 proposed limits on the amount of carbon dioxide light commercial vehicles may emit, similar to rules agreed to at the end of 2008 for cars.

8. Portugal Publishes Subsidy Rules Designed to Boost Sales of Electric Vehicles

On July 7th, the Portuguese government published rules on subsidies for electric vehicles under the nation's "electric mobility" plan. Ministerial Decree 468/2010 was approved on June 30th by the ministers of finance and public administration; economy; innovation and development; and public works, transportation, and communications.

The order was published in the *Diário da República*, Portugal's national register, for entry into force on July 8th.

The purpose of the order is to help implement Decree-Law 39/2010, which aims to encourage the purchase of electric vehicles, guarantee recharging through an efficient and integrated network, and establish universal access to electric mobility services. Article 38 of that law established subsidies for private purchases of electric cars of €5,000 (\$6,320), to be combined with an additional €1,500 (\$1,900) when a used vehicle is scrapped at the same time.

According to the government, the new order addresses two “concerns” about subsidies. One is that subsidies cannot be too broad and must focus on technologies that serve as “solutions with a sustainable future.” The other is that subsidy recipients must meet certain requirements, such as demonstrating that they are up to date on their tax obligations. Among other requirements, the order says the subsidies will be limited to passenger vehicles for noncommercial use, valued at under €50,000 (\$63,200), with battery power lasting a minimum of 120 kilometers (74.6 miles).

The new rules went into effect after the government on June 29th inaugurated the first in a national pilot network of charging stations.

9. Renault, Istanbul to Build Vehicle Charging Network

On July 19th, French automaker Renault announced that it has signed a memorandum of understanding to help to establish infrastructure for “zero-emission” electric vehicles in Istanbul. The partnership program with Istanbul Enerji, an energy subsidiary of the Istanbul Metropolitan Municipality, is aimed at deploying a charging network for vehicles starting in 2011 along with related services, the company said in a written statement. A working group will make proposals on projects that foster the use of electric vehicles, develop projects for fleets and public spaces, and analyze regulations on installing and operating charging stations, Renault said. The company said it has signed more than 60 agreements worldwide with institutions, governments, and businesses to collaborate on electric vehicle deployment. Istanbul Enerji specializes in projects for increasing energy efficiency, renewable energy use, and other means of reducing energy-related carbon dioxide emissions that contribute to climate change, the statement said.

10. Britain Sets Out Action Plans to Secure Low-Carbon Economy

On July 27th, warning that the “era of cheap, abundant energy is over,” Energy and Climate Change Secretary Chris Huhne set out 32 action plans to help the United Kingdom wean itself from exposure to “volatile oil prices, declining global reserves, and rapidly increasing global energy demand.”

While highlighting the need to secure low-carbon energy, Huhne said that “even as we reduce overall demand for energy, we may need to meet a near doubling in demand for electricity, as we shift industry, transport, and heating onto the grid.”

Huhne made his remarks in Parliament from a so-called Annual Energy Statement, a first for any U.K. government.

In parallel with the statement, the Department for Energy and Climate Change (DECC) published a 2050 Pathways Analysis that included six examples of how Britain can meet its target to reduce greenhouse gas emissions 80 percent from 1990 levels by mid-century.

“The challenge is ambitious but achievable,” Huhne said. “We’re already on track to cut the U.K.’s emissions by 34 [percent] by 2020 and will do more if we can win the case for greater ambition across the whole EU.”

The government will accept public comment on the pathways through October 5th.

Rather than introducing new policies, the Annual Energy Statement pulls into one document most plans to develop a low-carbon economy previously announced by both the new coalition government and the former Labor administration.

The 32 action plans call for, among other things, a swift rollout of smart electricity meters; the fitting of future coal power stations with carbon capture and storage technology; the go-ahead for nuclear power stations, but only supported by private investment; establishment of a levy on carbon dioxide emissions; encouragement of micro energy generation at both domestic and community levels; and extended requirements for energy suppliers to insulate homes beyond 2012.

Huhne said many of the action plans will be incorporated in an Energy Security and Green Economy Bill that is still at a draft stage. He said the measure is expected to be introduced in the next parliamentary session, which begins in October.

He also said public comment will be sought this fall on electricity market reform, with a view to publish a White Paper in spring 2011.

Alan Simpson, an energy expert with the environmental group Friends of the Earth, said in a written statement that the government's strategy "shows that reducing the UK's carbon emissions will save us facing huge bills in the future."

The most novel announcement within Huhne's action plans is the government's decision to take "immediate action to exploit the potential of bio-electricity and energy from waste" by fixing the level of state support for energy generation from biomass, waste, anaerobic digestion, and advanced conversion technologies such as gasification, according to the Annual Energy Statement. The biomass sector has lobbied against the current arrangements, under which state support in the form of green certificates known as Renewables Obligation Certificates for biomass-generated projects is reviewed every four years, while other renewables industries enjoy a 20-year commitment.

Huhne added that the government will publish in the fall a joint industry and government action plan to "deliver a huge increase in energy from waste through anaerobic digestion."

DECC's 2050 Pathways Analysis includes six illustrative pathways showing that meeting the target of 80 percent greenhouse gas emissions cuts is "compatible with keeping the lights on." The analysis includes one other pathway, a scenario in which Britain chooses a path that relies heavily on using oil. "Choosing the high carbon alternative would be high risk," Huhne said.

Although the pathways differ widely, the analysis said they arrive at "common conclusions," such as the ongoing need for fossil fuels in Britain's energy mix, the requirement to develop clean versions of coal-generated power; the need to increase the proportion of renewable electricity generation; and the importance of limiting greenhouse gas emissions from agriculture, waste, industrial processes, and international transportation.

11. UK Hydrogen Cars Are Coming - If You Can Fill Up

Britain's hydrogen fuel cell car fleet may hit top gear within five years, but only if there is enough investment in filling stations, the UK Hydrogen and Fuel Cells Association (UK HFCA) told reporters. Fuel cells convert hydrogen into electricity, with heat and water being the only by-products, with a number of car makers including Toyota, Ford, and Hyundai, pushing to commercialize the low-carbon hybrid fuel cell vehicle by 2015.

"Somewhere around 2015 to 2017 we'll be over threshold and I think we'll see a larger and growing fleet," HFC chairman Dennis Hayter said. "It's all aligned with the rollout of the infrastructure. In order to get to a semi-ubiquitous availability of hydrogen, then yes, you're talking maybe billions of pounds, but it doesn't have to come at once."

Hayter said fuel cell cars only take minutes to refill with a range of around 250 miles range. Plug-in electric vehicles take hours to recharge with a range of around 100 miles.

Existing petrol filling stations could be converted, with hydrogen companies possibly leasing some of the pumps, while current hydrogen production capacity is seen as adequate for the next decade.

"At present, the majority of hydrogen is derived from reforming of natural gas for industrial purposes such as refining and in chemicals. The quantities currently used and likely to be needed for transport in the next five to 10 years would still be minimal alongside hydrogen consumed for industrial use."

For the long term estimates of hydrogen costs, Hayter believes it will be competitive with petrol, or cheaper. Using U.S. hydrogen prices of \$8 a kilogram, it would cost around \$32 to fill up fuel cell car with a 250 mile range, he said. "It's not comparing apples with apples, but if they're the long term costs, then it could be significantly cheaper but it depends on the fuel duty," Hayter added. The UK HFCA is calling for hydrogen not to be taxed as a transport fuel, as petrol is, to help incentivize uptake.

Britain has around 30 hydrogen fuel vehicles, mostly buses and taxis in London, with two filling stations in the city and another four expected by 2012, the UK HFCA said.

Seen as a way to decarbonize the transport sector, Britain's former Labor government planned to subsidize low-carbon vehicle purchases from 2011, with a grant worth up to 5,000 pounds (\$7,584).

12. Review of EU's Environmental Policy Identifies Successes and Shortcomings

The European Union is falling short in many areas of environmental policy despite years of planning and target setting, the European Commission said in a report published on August 10th. The 2009 Environment Policy Review contained measurements of EU environmental progress against 32 indicators and found that there had been "good performance," or that the EU was on track to meet targets, in only four areas. These were reduced emissions of greenhouse gases under the Kyoto Protocol and increases in the share of energy generated from renewable sources, the area of agricultural land being farmed organically, and the recycling of packaging waste.

For a range of other indicators, from energy consumption by transportation and conservation of habitats and species to the presence of pollutants in the environment, the European Union's

performance was either average, with the “overall problem remain[ing] despite some mixed progress,” or poor and “worrying,” the Commission said.

Performance was rated “worrying” for 21 of the indicators, in particular for those related to biodiversity and to environment and health, which covers areas such as exposure to pollution and production of toxic chemicals.

The report also included figures for infringements of EU environmental law by the countries of the 27-member bloc, showing that at the end of 2009 there were 451 ongoing infringement proceedings, slightly down from 481 at the end of 2008. In 60 cases, member states were being pursued for non-implementation of judgments already obtained by the European Commission from the European Court of Justice. In such cases, EU countries risk being taken back to the court and fined. The Commission said that of the ongoing cases, 91 were for breaches of conservation legislation, while 90 related to water, 85 to waste, 72 to air quality, and 52 to environmental impact assessments.

Spain, Italy, and Ireland had the most infringement proceedings against them, with 40, 35, and 34 cases, respectively.

The 2009 Environment Policy Review also included a summary of legislative initiatives taken in 2009 and information on measures being taken through the end of 2010. On the REACH regulation (No. 1907/2006, the registration, evaluation, and authorization of chemicals), the Commission said it expected 4,400 substances to be registered with the European Chemicals Agency by a first deadline of Nov. 30. The first deadline applies to high volume substances and some hazardous chemicals produced or imported in lower volumes. However, the agency's website showed that by August 4th, it had been notified of the formation of industry groups for joint registrations for only 2,670 substances. The Commission's report added that before the end of 2010, it will begin a review of the scope of REACH, to be completed by 2012, and that it would adopt a nanotechnology strategy, setting out measures, including on the risks and hazards of nanosubstances, to be taken through 2014.

13. Peugeot's First Diesel Hybrid Set to Slash Emissions

Peugeot has released further details of the imminent launch of its first diesel hybrid. The 3008 crossover vehicle is the first in the carmaker's range set to benefit from the newly developed diesel hybrid system, which will see the model achieve an impressive 74.4mpg on a combined cycle and emit just 99g/km of CO₂.

Set to be the world's first mass-produced diesel hybrid, the 3008 HYbrid4 benefits from the frugal fuel use capabilities of both hybrid technology and diesel. While petrol hybrids have been popular, a diesel equivalent has been long-awaited as the fuel achieves better economy than petrol. The expense of producing such a system has deterred other carmakers but the French firm- a leader in producing fuel efficient vehicles-decided that, with fuel prices increasing all the time, now is the perfect time to produce such a vehicle.

The 3008-already a popular vehicle for the carmaker- will now feature a 2.0 liter 163 bhp HDi diesel engine teamed with a 37 bhp electric motor, giving it a combined power output of 200 bhp. A maximum torque of 500 Nm is also available, split with 300Nm at the front from the HDi diesel engine and 200 Nm at the rear generated by the electric motor.

To manage the hybrid system, Peugeot also gives the driver a choice of four different driving modes; "Auto" mode, when the entire system (engine and electric motor) is automatically controlled, "ZEV" mode (Zero Emission Vehicle) provides access to an extended all-electric mode, the HDi engine will only work when strong acceleration is required, "Four-wheel drive mode" (4WD) instructs both power trains to operate together as far as possible; the rear wheels are driven by the electric motor and the front wheels by the HDi diesel engine. This gives the vehicle the "all-terrain" capabilities equivalent to those of an SUV. Finally "Sport" mode gives the driver a quicker performance response and more dynamic driving responses.

The new HYbrid4 system teamed with a 6-speed manual gearbox and Ni-MH (Nickel Metal Hydride) batteries even comes complete with stop/start technology helping to boost the fuel saving of the 3008 even further.

The 3008 HYbrid4 will be produced in France and will go on sale in Europe during the spring of 2011. Peugeot is also set to produce a 508 diesel hybrid, although details have yet to be released.

Pricing for the new 3008 HYbrid4 is expected to be released closer to the launch.

14. Emissions Trading Pays for Green Projects in Poland

The Polish government has drawn up plans to finance construction of a variety of energy efficiency projects in the country using \$102 million earned from the sale of greenhouse gas emissions units under the Kyoto Protocol's trading mechanism. The projects are expected to save some 1 million metric tons of carbon dioxide equivalent emissions from being released by 2012, Witold Maziarz, spokesman for Poland's National Fund for the Protection of Environment and Water Management (NFOSiGW), said on August 16th. Maziarz said the Polish government sold some of its surplus emissions units, known as Assigned Amount Units (AAUs), to the governments of Ireland, Japan, and Spain, which can use them to help meet their own obligations under the Kyoto Protocol. According to the plans, \$60 million of the \$102 million will be used to insulate roughly 3,000 buildings, including schools and hospitals. Another \$42 million will be used to help construct biogas generating facilities and biomass-powered plants. The projects are to be completed by the end of 2012.

15. Russian Officials Link Abnormal Heat, Fires to Changing Climate

On August 16th, the Russian president's climate adviser said that the abnormal heat, drought, and wildfires afflicting the country this summer are a consequence of human-caused climate change, a view that one observer said may prompt a more robust effort by Russia to forge an international climate treaty. Alexander Bedritsky said at a press conference in Moscow that the current disaster is the sort of heat wave predicted in reports of the Intergovernmental Panel on Climate Change. Bedritsky said Russian data show the frequency of heat events has increased steadily since their own record-keeping of such occurrences began in 1991, and he predicted more such events at greater frequency.

"Forecasts that have been issued by the [IPCC] and the [Russian Federal Service for Hydrometeorology and Environmental Monitoring] suggest that this kind of heat wave will happen more often," Bedritsky said.

The European part of Russia has experienced two months of intense heat that has not been seen in 1,000 years, according to the Russian meteorological service. Wildfires have destroyed

many villages and killed scores of people, while high levels of airborne particles and carbon monoxide have plagued Moscow and surrounding areas. Officials have said the air pollution doubled the death rate in Moscow in recent days.

The corresponding drought has caused large-scale crop failures that prompted the government to issue a ban on grain exports that began on August 15th. Analysts said the disaster could cripple the country's recovery from the economic downturn and could result in a loss of up to 1 percent of gross domestic product.

Bedritsky's comments could be a signal that the government will become more serious in pushing to address climate change at the international level, according to one industry attorney. Sergei Sitnikov of Baker McKenzie in Moscow told the press that government officials, including President Dmitry Medvedev, have more consistently spoken about the current disaster as resulting from climate change. He said this was one sign that the government may be turning away from climate skepticism and toward greater support for international action.

"I'm sure this resulted in the increase in the number of those who believe in climate change. And that's good, and this is especially good because of the upcoming UNFCCC meeting," Sitnikov said, referring to the 16th Conference of the Parties to the United Nations Framework Convention on Climate Change, scheduled for Nov. 29-Dec. 10 in Cancun, Mexico.

But Sitnikov also pointed to a variety of explanations for the abnormal weather offered by various media. For example, one widely reported article blamed the heat on a climate weapon being deployed from a U.S. research station in Alaska.

Divergent popular views on the issue may mean the government itself is not of one mind either, Sitnikov said. "Unfortunately there is no unified position. And I'm sure even now you would find experts with various opinions on the reasons for this hot summer," Sitnikov said.

16. Putin Ponders Climate Change in Arctic Russia

Russian Prime Minister Vladimir Putin traveled beyond the Arctic Circle to look into evidence for climate change after a record heat wave ravaged central Russia this summer. Putin, who has in the past displayed a light-hearted approach to global warming by joking Russians would have to buy fewer fur coats, flew to a scientific research station in the Samoilovsky Island at the delta of Siberia's Lena River.

"The climate is changing. This year we have come to understand this when we faced events that resulted in fires," Putin told climate scientists working at the station, opened in 1998 to study the melting Siberian permafrost.

The two-month heat wave, Russia's worst on record, killed 54 people in forest fires, destroyed a quarter of the grain crop and shaved at least \$14 billion off the economy.

Putin, who has sought to burnish his action-man image flying firefighting planes and facing angry fire victims, was clearly stunned by the extent of the natural disaster, likening it to Nazi Germany's attack on the Soviet Union.

Though experts say it is impossible to link individual weather events to climate change, the heat wave has shown signs of shifting perceptions of global warming risks among northern nations such as Russia, Canada and the Nordic countries.

Putin, dressed in a warm jacket, told the scientists on the barren tundra that he was still waiting for an answer whether global climate change was the result of human activity or "the Earth living its own life and breathing." He argued that the end of the Ice Age which forced woolly mammoths to seek refuge in Samoilovsky and other Arctic islands ten thousand years ago was not mankind's fault and sought advice on how to handle climate change.

"Which islands should we be fleeing to?" he asked.

Scientists blame global warming on emissions of greenhouse gases from burning fossil fuels. Putin, keen for Russia to retain position as one of the leading exporters of oil and gas, has spoken dismissively of alternative energy sources.

Russia's own greenhouse gases emissions are well within its Kyoto goal of keeping them below 1990 level by 2012, but are set to rise as the country bids to develop manufacturing.

Russia was the fourth biggest emitter of carbon dioxide in 2009, according to energy firm BP, and is a key player in efforts to agree a successor to the Kyoto Protocol, whose first phase ends in 2012.

Scientists say that melting Siberian permafrost which stretches up to 1.5 km into the ground will accelerate the global warming process further, as huge quantities of methane gas are released into the Earth's atmosphere.

17. Report Says French Carbon Emissions Stable Over 17 Years Questioning Goals

France's carbon dioxide emissions remained essentially stable between 1990 and 2007, raising questions about whether the country will be able to meet national and EU targets for reducing emissions by 2020, according to a report released on August 10th by the country's general commissariat for sustainable development. The report, CO₂ and France's Economic Activities: Trends and Contributing Factors From 1990—2007, said technological progress—including greater energy efficiency—during that period allowed France to decrease its emissions per unit of production and consumption. However, an increase in the level of production and consumption largely compensated for that decline, according to the 52-page report.

In 1990, business, industry, and households emitted some 438 million metric tons of carbon dioxide, about 1 ton less than in 2007, it said. Seventy percent of 2007 emissions came from production and 30 percent from consumers, according to the report.

Although manufacturing-sector emissions declined 10 percent during the period and household emissions remained more or less flat, service industry emissions rose 25 percent and transportation-related emissions rose 35 percent, the report said.

The report said the National Accounting Matrix including Environmental Accounts (NAMEA) system was used to calculate France's emissions for the period.

The French government has for several years claimed to be on track to meet its Kyoto Protocol commitments to reduce carbon dioxide emissions between 2008 and the end of 2012. In February, Jean-Louis Borloo, France's ecology minister, said the country reduced its greenhouse gas emissions by 0.6 percent in 2008 on the heels of a 2 percent cut in 2007.

However, the report said the United Nations Framework Convention on Climate Change method for calculating a country's emissions under the Kyoto Protocol fails to account for key sources of emissions. In particular, it said the system does not allow systematically linking emissions with the sectors that are responsible for them. It also fails to full account for the international component of emissions, it said.

For example, it said French imports in 2005 were responsible for 340 million metric tons of carbon dioxide emissions, while its exports generated some 205 million metric tons. About a third of French manufacturing's emissions were due to exports, the report said.

France's Grenelle Environment program requires France to reduce greenhouse gas emissions by 22.8 percent by 2020 compared with 1990 levels. Borloo was one of three EU ministers to jointly call in July for an EU commitment to reduce carbon dioxide emissions by 30 percent by 2020 compared to 1990 levels. Industry has roundly condemned that goal as unrealistic. The European Union's climate and energy package, passed in 2009, calls for a 20 percent reduction.

18. France Sets Guidelines for Aircraft Emissions Reporting Requirements

On August 25th, the French environment ministry established guidelines for monitoring and reporting greenhouse gas emissions and other relevant data for aircraft operators that must participate in the European Union's Emission Trading System starting in 2012. In 2009, the European Commission published a list of about 3,500 aircraft operators required to participate. The 12-article decree issued by the Ministry of Ecology, Energy, Sustainable Development, and the Sea incorporates into French law monitoring and reporting requirements established for the aviation sector by Decision 2009/339/EC, which amended earlier guidelines.

The EU text requires member states to ensure that aircraft operators submit plans to monitor and report annual emissions as well as ton-kilometer data to be used to apply for free allowances. Designated authorities in each country must approve such plans.

Among other things, the French decree says how monitoring should be conducted, what organization may conduct it, and how monitoring results should be reported. Inspectors are tasked with verifying details such as type of flying activity, fuels used and their emissions factors, calculation methods employed, and alternative fuels used, if any.

NORTH AMERICA

19. EPA Proposes 2011 Renewable Fuel Standards

The U.S. Environmental Protection Agency (EPA) has proposed the 2011 percentage standards for the four fuels categories under the agency's Renewable Fuel Standard program, known as RFS2. The Energy Independence and Security Act of 2007 (EISA) established the annual renewable fuel volume targets, reaching an overall level of 36 billion gallons in 2022. To achieve these volumes, EPA calculates a percentage-based standard for the following year. Based on the standard, each refiner, importer and non-oxygenate blender of gasoline determines the minimum volume of renewable fuel that it must ensure is used in its transportation fuel.

The proposed 2011 overall volumes and standards are:

- Biomass-based diesel (0.80 billion gallons; 0.68 percent)
- Advanced biofuels (1.35 billion gallons; 0.77 percent)

- Cellulosic biofuels (5 – 17.1 million gallons; 0.004 – 0.015 percent)
- Total renewable fuels (13.95 billion gallons; 7.95 percent)

Based on analysis of market availability, EPA is proposing a 2011 cellulosic volume that is lower than the EISA target. EPA will continue to evaluate the market as it works to finalize the cellulosic standard in the coming months. Overall, EPA remains optimistic that the commercial availability of cellulosic biofuel will continue to grow in the years ahead.

EPA is also proposing changes to the RFS2 regulations that would potentially apply to renewable fuel producers who use canola oil, grain sorghum, pulpwood, or palm oil as a feedstock. This program rule would allow the fuel produced by those feedstocks dating back to July 1, 2010 be used for compliance should EPA determine in a future rulemaking that such fuels meet certain greenhouse gas reduction thresholds.

The second change would set criteria for foreign feedstocks to be treated like domestic feedstocks in terms of the documentation needed to prove that they can be used to make qualifying renewable fuel under the RFS2 program.

July 1, 2010, was the deadline that major refiners, blenders, and importers had to meet for reporting, registration, and other key compliance requirements under EPA's expanded renewable fuels standard program.

Ethanol and other renewable fuels must account for 7.95 percent of total gasoline sales in 2011 to meet Congress' mandate for 13.95 billion gallons of renewable fuels expected to be produced next year, the U.S. Environmental Protection Agency said.

In 2010, renewable fuels are expected to account for 8.25 percent of total gasoline sales to reach the mandate of 12.95 billion gallons.

As the American economy recovers, gasoline demand will increase and so will the amount of renewable fuels required to be produced. The higher gasoline demand, however, will make renewables a smaller share of total fuel sales.

At the same time, the government will require less cellulosic ethanol that is made from switchgrass, wood chips and other forest waste, which will see higher dependence on ethanol derived from corn to meet Congress' biofuels mandate.

Already, exporters, livestock feeders and ethanol makers are going through the U.S. corn stockpile faster than farmers can grow the crop. The U.S. Agriculture Department has estimated 4.7 billion bushels of corn in 2010/11, an increase of 200 million bushels from a year ago, will go toward ethanol.

The United States still has a long way to go to meet Congress' goal of producing 36 billion gallons of biofuels a year by 2022.

The EPA will take public comment for 30 days on the 2011 renewable fuels standard and other proposed changes.

20. EPA Denies Challenges to Greenhouse Gas Rule

The U.S. Environmental Protection Agency has rejected 10 petitions challenging EPA's 2009 finding that climate-warming greenhouse gas emissions endanger human health and the environment. The EPA received petitions questioning the scientific basis for the so-called endangerment finding -- which cleared the way for the EPA to curb carbon dioxide emissions -- from Texas and Virginia and groups like the Ohio Coal Association.

With the U.S. Senate abandoning climate measures in the energy bill until at least September, the EPA has the authority to regulate emissions from such human activities as coal-fired power plants and fossil-fueled factories and vehicles.

"The endangerment finding is based on years of science from the U.S. and around the world," EPA Administrator Lisa Jackson said in a statement. "These petitions -- based as they are on selectively edited, out-of-context data and a manufactured controversy -- provide no evidence to undermine our determination."

Environmental advocates praised the agency's decision for its reliance on decades of research and the need for action to limit climate-warming emissions.

"Some senators insist Congress should set global warming policy, not the EPA, but ... the Senate has failed to get the job done," said Kevin Knobloch, president of the Union of Concerned Scientists. "Their failure to address climate exposes their attacks on the EPA for what they are -- a blatant attempt to eliminate the primary tool the government has to protect human health."

The EPA received petitions from the Coalition for Responsible Regulation, the Commonwealth of Virginia, the Competitive Enterprise Institute, the Ohio Coal Association, the Pacific Legal Foundation, the Peabody Energy Company, the Southeastern Legal Foundation, the State of Texas, the U.S. Chamber of Commerce, and one private citizen. Some of the petitioners had filed their complaints in federal courts.

21. GM Sets \$41,000 Price for Electric Chevy Volt

General Motors set a price of \$41,000 for its electric Chevrolet Volt -- \$8,000 more than its nearest competitor, the Nissan Leaf. GM said it has begun taking orders for the Volt and would offer a \$350 per month lease option for the much-anticipated vehicle as it launches in a handful of U.S. markets starting with California.

The biggest question surrounding the Volt has been its price and profitability given the cost of the lithium-ion battery pack supplied by Korea's LG Chem and the hundreds of millions of dollars that GM devoted to the project over the past four years. "Every day we've been asked a single question: How much will it cost?" said GM marketing Chief Joel Ewanick on a conference call to announce the pricing. GM executives, including former Vice Chairman Bob Lutz, had previously indicated the Volt would be priced near \$40,000.

By setting a higher price and restricting Volt production, the automaker -- now majority-owned by the U.S. government -- has taken steps to limit its losses on the plug-in vehicle.

GM launched the Volt development project four years ago, in part to shake an association with gas-guzzling trucks and to show it could compete with the likes of Toyota Motor Corp on hybrid technology.

With a price of \$41,000, the Volt will cost as much as some luxury vehicles. The top-selling Cadillac CTS has a price starting at \$35,165.

But the \$350 lease payment on the Volt also makes it competitive with the upcoming Leaf, which has a lease offer of \$349 per month.

U.S. taxpayers who buy a Volt will qualify for a federal tax credit of \$7,500. Some states, such as California, are offering additional tax incentives.

Ewanick said GM marketing would portray the Volt "as a real car," attempting to draw a sharp distinction from pure electric vehicles like the Leaf, which lack a backup source of power once the battery is spent. "People don't want to be stranded on the way home from work," he said. The Volt is designed to be recharged overnight for about 40 miles of electric driving, depending on driving conditions. The car will also have a small gas engine expected to give the vehicle a total range of about 340 miles.

Nissan Motor Co's battery-powered Leaf claims a driving range of 100 miles. It has a U.S. retail price of \$32,780.

Tesla Motors, a Silicon Valley start-up that went public in June, has the only highway-ready electric car now on U.S. roads with the \$109,000 Roadster.

About 600 Chevy dealers in California, Michigan, Washington, D.C., Texas and New York will sell the initial limited production run. GM expects to produce 10,000 Volts for the 2011 model year and about 30,000 for 2012.

Ewanick said it was uncertain how quickly GM could bring down the price of the Volt in future model years, saying that depends on still-uncertain reductions in battery costs. "There's a lot of technology that has to happen for us to lower prices," he said.

22. GM Offers 8-Year Warranty on Volt Battery

General Motors Co will offer an eight-year warranty on the battery that powers the Chevrolet Volt electric car it is rolling out starting this year, the automaker has announced. GM said it will offer an eight-year, 100,000 mile battery warranty on the Volt, which has an expected 40-mile range when running on electricity stored in its lithium-ion battery.

The battery is the most expensive component of an electric vehicle such as the Volt

The warranty on the Volt's 400-pound battery will be transferable at no cost to other vehicle owners and cover all of its components, including the 288 cells manufactured by South Korea's LG Chem Ltd.

GM said it hoped the eight-year warranty -- three years longer than the warranty it offers on the engine and transmission of traditional gasoline-powered vehicles -- would reassure consumers about its electric car technology.

GM's plant in Brownstown Township, Michigan, near Detroit, has been building pre-production battery packs since January and will begin regular production in August.

The Volt has been the most visible symbol of GM's effort to reinvent itself as a competitor in the market for fuel efficient cars and has featured prominently in GM's marketing during the four years of its development.

A limited number of Volts will be produced in 2010 and offered for sale in a handful of target markets, including California and Washington D.C.

The Volt will be equipped with a 1.4-liter, four-cylinder engine that will function as a generator for the vehicle's electric drive system when the battery is depleted.

GM's tests have shown that, on average, drivers should be able to count on a 40-mile all-electric range from the Volt's liquid-cooled and heated battery pack but all-electric range would decline in extremely hot and cold conditions.

Over time, the power available from the Volt's battery pack will decline gradually giving the vehicle a shorter all-electric range. But GM's testing showed the degradation of the Volt battery would be gradual and it should provide at least 28-miles of all electric driving even after 10 years -- 70 percent of its original capacity.

23. US Senate Unveils Revised Energy Bill, Doubts Remain About Passage

Senate Democrats unveiled a slimmed down bill aimed at reforming offshore drilling, as doubts grew that Congress would be able to pass any substantial energy legislation this year. The Senate bill, which Democrats were still refining, would require oil companies to cover all oil spill costs by removing the \$75 million cap on liability relating to economic losses.

The measure would apply retroactively to the April 20th BP oil well disaster in the Gulf of Mexico, which prompted the legislation.

Other provisions in the legislation would provide rebates for purchasing vehicles that run on alternative fuels and making existing homes more efficient, as well as incentives to promote electric vehicles.

The estimated \$15 billion cost of the bill for clean energy initiatives would be paid for, according to Democratic aides, by raising the Oil Spill Liability Trust Fund fee. While a draft of the bill said the fee would rise to 49 cents per barrel of oil, from 8 cents, an aide said that figure was still being reviewed.

In remarks to reporters, Senate Majority Leader Harry Reid said he would bring the legislation to the floor in the coming days. But its fate was uncertain as Reid said he also wanted to pass at least two other bills before a month-long recess set to begin August 6.

Democratic aides would not say whether they will allow amendments to the measure. If not, Republicans might put up procedural roadblocks to quick passage.

Admitting last week they did not have the votes to pass broad climate change legislation, Senate Democrats opted to concentrate their efforts on passing a scaled back bill before the August recess.

U.S. President Barack Obama restated his pledge to work for a bill combating global warming, but few believe there is time to achieve that this year. "If we've learned anything from the

tragedy in the Gulf, it's that our current energy policy is unsustainable," Obama told reporters after meeting with congressional leaders.

Obama's comments were likely seen as a nod to the international community and environmentalists, who are counting on U.S. action to help advance U.N. talks to form an international pact to curb greenhouse gas emissions.

But the White House indicated that climate provisions could be added back into a bill once negotiators from the Senate and the House of Representatives hammer out differences between their respective versions during "conference" talks. The House bill, passed last year, includes climate provisions to cut greenhouse gas emissions.

The revised Energy Bill could be a big boost for the natural gas vehicle (NGV) industry, but natural gas faces hurdles to eroding oil's dominance as a transport fuel in the United States. For one, even as U.S. natural gas production expands to fuel a growing NGV fleet, a national distribution infrastructure is not yet in place.

In an attempt to reduce U.S. reliance on petroleum, the Bill offers \$3.8 billion in rebates to buyers of NGVs, from passenger cars to 18-wheelers. It is the biggest ever incentive for buyers of alternative vehicles, offering subsidies for cars at \$10,000 per vehicle and up to \$64,000 for heavy trucks. Grants and subsidies for refueling stations and manufacturing plants have also been proposed.

The rebates remove one of the major obstacles to increased use of NGVs in the United States - the extra cost of an NGV compared to a gasoline or diesel vehicle.

However, there is concern that the bill does not go far enough to really boost the use of NGVs. Sales of natgas vehicles are waning. According to the EIA, the number of NGVs on U.S. roads fell from 118,532 in 2004 to 113,973 in 2008. And without more government support, the EIA sees only a shallow rise in the use of natural gas for transport to 2020.

Natgas fueling stations are few and far between in the United States, making anything but short, routine journeys possible. There are about 1,000 fueling stations across the United States, but only half of these are open to the public. Many others only allow public refueling after an account has been established.

Reid's Energy Bill offers a \$50,000 grant for building a fueling station, but this is a relatively small donation for a potentially \$2-million venture. And without fueling stations, car sales will not pick up.

Even so, analysts say the potential for increased use of NGVs in the United States could displace large amounts of more expensive gasoline and diesel, if sales of trucks and cars do pick up. The 114,000 natural gas vehicles on U.S. roads in 2008 consumed about 34 billion cubic feet of natural gas, the equivalent of nearly 200 million gallons of gasoline. That figure could rise to between one and two trillion cubic feet (tcf) by 2035 with government support, according to industry reports. Trade group NGV America estimates that NGVs in the United States could displace up to 10 billion gallons of the 50 billion gallons of petroleum expected to be consumed in the United States by 2017.

Even only converting heavy duty trucks could boost natural gas demand significantly, according to a report released in May by the U.S. Energy Information Administration. Natural gas demand

in the heavy truck sector alone could rise to 1.6 trillion cubic feet by 2035, from 0.01 tcf in 2008, the EIA report said. This is about 7 percent of current marketed U.S. gas production. That could displace 670,000 barrels per day of petroleum in 2035, or about 23 percent of U.S. ultra-low sulfur highway diesel consumption in 2008, assuming 1 tcf of natural gas replaces 500,000 barrels per day of petroleum consumption.

The United States is sitting on huge reserves of natural gas thanks in part to the massive growth in shale gas development in recent years. But environmental and political concerns could slow the growth in supply.

Total U.S. natural gas production is currently around 20 tcf and is expected to rise to 23.3 tcf by 2035, according to EIA projections. "In the longer term, increased demand for natural gas in the transportation sector would tend to stimulate increases in U.S. natural gas production and imports, as well as higher natural gas prices in all the end-use sectors," the EIA said.

24. Toyota Pushes Back U.S. Prius Production by Years

Toyota Motor Corp has pushed back plans to build its Prius in the United States by as much as six years, with a top executive saying U.S. production is likely to start only when the best-selling hybrid is remodeled. The world's largest auto maker had previously planned to produce the Prius at its new Mississippi plant but had put those plans on hold indefinitely as the financial crisis hit demand.

Last month, Toyota said it would drop the Prius all together and instead build the Corolla sedan in Mississippi after local production of that model ended with the closure of a California factory formerly co-owned with General Motors Co.

"The main components for the Prius such as the motor and battery are not mature enough for local production," Executive Vice President Atsushi Niimi said. "We expect that they'll be ready with the next remodeling." Niimi, who oversees production as well as regional operations in North America and China for Toyota, said the company would decide in due course where in the United States it would make the fourth-generation Prius, which is expected around 2016.

A more near-term concern was the pace of recovery in the U.S. market, which he said would likely be slow. "If you look at unemployment, housing, and other economic indicators there's not much good news. I think it will take time for the market to recover," he said, adding he did not share views that the U.S. market could recover to above 12 million units next year or to 14-15 million in 2012. A slower-than-expected pickup in U.S. car sales has become a major worry for Japan's top automakers, which traditionally make the lion's share of their profits in North America.

Toyota also faces the urgent task of cutting costs and boosting manufacturing efficiencies in Japan, where it has enough facilities to build 3.9 million vehicles annually, compared with actual output of 3.2 million last year.

Toyota's production in Japan has soared over the past year, recovering from post-financial crisis levels with the help of generous government subsidies and tax incentives on fuel-efficient models. But one of those schemes, providing subsidies to replace cars 13 years or older, ends in September, and automakers expect demand to shrink in Japan in the second half of the business year. Toyota is expected to be the hit the most because the Prius and other hybrids enjoyed the biggest perks.

Toyota has said it is aiming to make its domestic factory lines more flexible and introduce other changes to be able to break even at a dollar rate of 90 yen and capacity utilization of 70 percent, equivalent to daily production of 12,000 units. "We want to be able to reach this goal in about two years in Japan," Niimi said.

25. Canada Permanently Exempts Racing Cars from Pb Limits in Gas

On July 7th, Environment Canada published finalized regulations to permanently exempt competition vehicles from prescribed lead limits for gasoline. The amendments to the Gasoline Regulations are designed to maintain the Canadian racing industry's viability by ensuring compatibility with similar rules for racing vehicles in the United States.

The amendments replace temporary exemptions issued annually. The most recent exemption expired Dec. 31, 2009, the department said in a regulatory impact analysis statement published with the finalized regulations in the July 7th issue of the Canada Gazette, Part II.

"Record-keeping and reporting requirements for producers, importers, and sellers of leaded gasoline remain in effect," it said. "Environment Canada, with the support of Health Canada, will conduct a five-year review and will assess if further action is warranted based on science, technology, and fuel replacement technology. Environment Canada will work collaboratively with the racing industry to encourage a voluntary reduction and phase-out of leaded racing fuel."

The Canadian government also will work with international bodies, including the U.S. Environmental Protection Agency, to encourage a continued transition to non-leaded fuels by racing associations in the United States, Environment Canada said. It will assess any new U.S. policies, industry progress on reducing leaded gasoline use, and any new information on health impacts of lead exposure at Canadian race tracks, it said.

The department noted that three notices of objection to the proposed regulatory amendments were received among comments from 99 parties during a 60-day comment period that followed their April 3rd publication in draft form. All of the objections focused on the health impacts of lead exposure. Two suggested that the racing industry has the capacity to convert to non-leaded fuels, and one questioned the government's decision not to consider posting warning signs at race tracks. "The notices of objection did not provide any new information with respect to the nature and extent of the danger posed by leaded gasoline, or the capacity for a broad and lasting transition to non-leaded fuels by industry. On the question of signage ... Health Canada is focusing on reducing lead exposures in areas where there will be the greatest benefits over the long term. The Minister of the Environment has therefore decided not to convene a Board of Review [on the amendments]," it said.

26. GM to Use Refrigerant with Less Global Warming Potential in Vehicles by 2013

On July 23rd, General Motors announced that it will use a new refrigerant with less global warming potential in the air conditioning systems of Chevrolet, Buick, GMC, and Cadillac cars and trucks in the US beginning with the 2013 model year. The new refrigerant, hydroFluoroOlefin (HFO-1234yf), has an atmospheric life of only 11 eleven days. R-134a (1,1,1,2-Tetrafluoroethane), a refrigerant commonly used in vehicle air conditioning systems, has an atmospheric life of 13 years and a global warming potential more than 1,400 times that of carbon dioxide. By comparison, HFO-1234yf only has a global warming potential four times greater than that of carbon dioxide.

HFO-1234yf was developed to help automakers meet European regulations that go into effect in 2011 requiring that all new car platforms for sale in Europe use a refrigerant in its AC system with a GWP below 150.

HFO-1234yf can be used as a direct drop in replacement for R-134a. This means that automakers do not have to make significant modifications in assembly lines or in vehicle system designs to accommodate the product. HFO-1234yf has the lowest environmental impact of all alternative materials proposed for this application - and the lowest switching cost for automakers. The product can be handled in repair shops in the same way as R-134a.

Shortly after confirmation from automakers that HFO-1234yf would be adopted as a replacement of R134a automotive air-conditioning refrigerant, Honeywell and DuPont announced that they will jointly build a manufacturing facility to produce it. The new plant will be ready to supply commercial quantities of 1234yf sometime in 2011.

The decision to switch refrigerants is consistent with the Environmental Protection Agency's requirement for light-duty vehicles to reduce emissions of greenhouse gases, General Motors said. The final EPA rule, announced April 1st and published in the Federal Register on May 7th, establishes the first greenhouse gas emissions limits for cars and trucks under the Clean Air Act.

27. Governors, Premiers Mull Low-Carbon Fuel Standard

On July 12th, the members of the New England Governors' Conference and five eastern Canadian premiers agreed at a meeting in Lenox, Mass., to consider adopting a regional low-carbon fuel standard. In approving the agreement to study the issue, the leaders said such a market-based, technology-neutral policy could help reduce carbon intensity and the greenhouse gas impact of transportation fuels. The governors and premiers also agreed to set a goal of reducing energy use in buildings by a least 20 percent by 2020 and to adopt the strictest energy efficiency building codes to promote energy savings. Canadian provinces represented were Quebec, Newfoundland and Labrador, Nova Scotia, New Brunswick, and Prince Edward Island.

28. EPA Finds Draft Analysis for Canadian Oil Shale Pipeline Inadequate

The Environmental Protection Agency has concluded that a State Department draft environmental impact statement for a proposed Canadian oil shale pipeline into the United States is "inadequate" and should be reworked with additional information and better analysis.

On July 16th, Cynthia Giles, EPA assistant administrator for enforcement and compliance assurance, sent a letter to State Department officials outlining several deficiencies in the department's draft environmental impact statement.

The State Department, which is the lead agency on the cross-border project known as Keystone XL, plans to draft a final impact statement in the summer and issue the final version in the fall. A presidential permit is required before the project can begin.

EPA suggested that the project, which would bring 900,000 barrels per day of shale oil from western Canada to petroleum refineries on the Texas Gulf Coast, is a "potential candidate" for referral to the White House Council on Environmental Quality if potentially significant impacts are not addressed.

EPA officials said more work is needed on several topics. The State Department should look at a wider range of alternatives and options to the proposed project, EPA said.

The impact from greenhouse gas emissions is limited to the pipeline and refining process, but it does not take into account the production phase in Canada, which would generate most of the greenhouse gas emissions.

EPA estimates total annual emissions from the oil shale project would be 27 million metric tons of carbon dioxide equivalents greater than the emissions from an equal volume of U.S. crude. For comparison, the total increase in carbon dioxide emissions from the oil shale project would be equivalent to the annual emissions of seven coal-fired power plants, EPA said.

The State Department review needs more evaluation on the impact to surface water and groundwater from pipeline leaks or spills, including public water supplies.

The \$7 billion pipeline, proposed by TransCanada Corp., would run approximately 1,700 miles, mostly through the middle of the United States.

EPA also wants more analysis on the impact on human health among minority, low-income, and tribal populations, as well as more research on the impacts on wetlands and migratory bird populations that may be affected.

“We recommend that the additional information and analysis be circulated for full public review in a revised draft EIS,” EPA said.

The EPA critique follows a July 2nd letter to the State Department from House Energy and Commerce Committee Chairman Henry Waxman (D-Calif.), who also raised concerns and asked for a supplemental EIS to further study the project impacts.

On June 29th, the State Department conducted a public meeting on the project, at which environmental groups opposed the project, but business groups voiced support.

29. Mexico Promotes Bill to Tax Carbon Emissions, Add Cap-and-Trade

Mexican President Felipe Calderon's political party is lobbying to pass as early as October a climate change bill that could tax companies for their carbon dioxide emissions, sparking concern from Mexico's industrial sector. The General Climate Change Law would create a permanent commission to decide on an emissions cap-and-trade system, to oversee ambitious mitigation actions, and to fine government officials who do not carry out those actions. The legislation also would phase out extensive fossil fuel subsidies by 2015, leaving gas at international market prices.

Companies are especially concerned about a provision that would have the president present to the Chamber of Deputies—Congress's lower house—a plan to tax each ton of carbon dioxide emitted through fossil fuel consumption. Taxes collected would go to a Green Fund for climate change adaptation efforts.

Under the bill, a Climate Change Commission led by the president would be charged with establishing technical and legal terms for a carbon dioxide emissions market. It would be required to coordinate measures among municipal and state governments and to approve

emissions reduction and greenhouse gas capture programs based on international accords signed by Mexico.

Promoters of the bill said the commission would form carbon markets and would set fines only if those rules are part of a binding international agreement to succeed the Kyoto Protocol—hence no details are laid out in the law.

As for the tax, it is meant to be a nominal sum that would not burden companies, said Miguel Angel Cervantes, adviser to the bill's sponsor, Sen. Alberto Cardenas of the president's National Action Party. He acknowledged, however, that the tax likely would prompt the heaviest opposition.

If no international climate accord requires a tax, the levy could be as low as 10 centavos (\$0.008) per ton of carbon dioxide-equivalent for all emitters, raising 4 billion pesos (\$309.3 million) for adaptation efforts each year and increasing gas prices by only 0.03 percent, Cervantes said.

The bill also would hold government officials responsible for not carrying out important mitigation and adaptation measures, increasing accountability, Cervantes said. Elected officials could be fined for not reaching certain goals, such as reducing the net deforestation rate to 0 percent in three years and creating dedicated lanes for low-emissions buses in large cities. Officials also would be required to double renewable energy generation in 10 years, so that it makes up 40 percent of Mexico's total electricity supply by 2030. Officials also would not be allowed to augment electricity generation using carbon combustion without first applying emissions capture technology.

Adaptation requirements would have states draw up by 2012 maps of areas at risk due to climate change, include in yearly budgets funds to relocate vulnerable settlements, and increase irrigation technology, among other measures.

“Mexico is located in an area that is greatly exposed to climate change impacts,” the bill said. “Effects include reduction in agricultural potential, difficulty in supplying water to the population, coastal plain flooding, increased intensity and frequency of hurricanes, cyclones, hail and frost, as well as greater occurrence of fires and loss of biodiversity.”

Mexico must reduce its greenhouse gas emissions, 60.4 percent of which come from fossil fuels, in order to prevent economic and environmental losses, according to the bill.

Cardenas has held dozens of conferences around the country and has met with academics and political parties to promote the legislation since presenting it on behalf of his party in March. So far, no political party has voiced opposition to the legislation, which is being prepped for a vote in the Senate in September and in the lower house in October, ahead of the U.N. climate change summit to be held in Cancun, Nov. 29–Dec. 10, Cervantes said.

30. Tesla Formalizes Toyota Deal, To Deliver 2 Cars

Electric carmaker Tesla Motors Inc has announced that it signed a memorandum of understanding with Japanese automaker Toyota Motor Corp to deliver two electric vehicles to the world's largest automaker by the end of month. "Since our announcement in May, Toyota and Tesla engineering teams have made a lot of progress in a short amount of time and it is

exciting to start seeing some initial results," Tesla Chief Technology Officer JB Straubel said in a statement. "The prototypes will combine Toyota vehicles with Tesla electric powertrains."

Tesla had announced the partnership to develop electric vehicles with Toyota in May, but revealed in a regulatory filing that it had no formal deal in place with the Japanese automaker.

The MoU was now signed, a Tesla spokesman said, but declined to reveal which Toyota vehicles the company was working on.

Toyota President Akio Toyoda told reporters in Japan that Toyota was interested in experimenting with Tesla's approach to using lithium-ion battery cells developed for the electronics industry as a potential alternative to developing batteries tailor-made for its own vehicles.

"We'll see which better meets the needs of consumers. We're taking a multi-faceted approach," Toyoda told a group of U.S. reporters invited to tour Toyota's facilities.

Engineering teams from the two automakers have been meeting and working on the prototypes, Tesla said.

The comments represent the most detail the two companies have provided about the scope of a still-developing partnership with Tesla announced in May by Toyoda and Tesla Chief Executive Elon Musk.

Meanwhile, Toyota is also continuing work on a battery-powered small car the Japanese automaker plans to launch in 2012, senior executives said.

Toyota invested \$50 million in Tesla in a private placement after the electric vehicle maker's initial public offering in June. After zooming 40 percent on their first day of trading on June 29, Tesla shares have come back to earth and are trading around their initial public offering price of \$17.

Toyota Executive Vice President Shinichi Sasaki said the world's largest automaker was open to other partnerships like its Tesla deal as it believes a number of alternatives to traditional gas engines could find a market in the next few years. "It's hard for a single company to take on environmental technology all alone because of the need for infrastructure. I think cooperation is going to be increasingly important," Sasaki said.

Toyota's tie-up with Tesla was seen as a strong endorsement of the seven-year-old start-up and credited with driving investor interest in the company best known for its \$109,000 electric Roadster.

Musk has said Toyota would be a customer for Tesla, which also has a deal to supply battery packs to an electric version of the Smart mini-car for Germany's Daimler AG.

But in the absence of a contract, it had been less certain what Toyota aimed to gain from the tie-up, which was negotiated in about a month after Toyoda met Musk for the first time in Los Angeles.

Toyota will assemble a team of engineers from its U.S. research and manufacturing arm to work with Tesla on the joint prototype the companies will develop, a Toyota spokesman said.

The Roadster is powered by more than 6,800 laptop battery cells and can accelerate to 60 miles per hour from a standing stop in less than 4 seconds, faster than all but a handful of luxury sports cars.

Toyoda said he was impressed by the car and by Tesla's start-up culture, which he said he hoped would contribute to his effort to revitalize Toyota after a safety crisis earlier this year marked by the recall of about 8 million vehicles.

Sasaki said he considered Tesla's approach to using off-the-shelf battery components "shocking," but suggested that it could open the door to lower costs for Toyota if the Tesla battery system holds up to quality standards. "At Toyota we have a lot to learn from this partnership. We've just begun working with Tesla but I believe that we've taken an important first step," Sasaki said.

A team of Toyota engineers is continuing to work on a small, urban car powered by batteries for launch in 2012, company officials said. Toyota showed off a prototype of that car based on its IQ mini-car in 2009.

Toyota dominates the market for traditional hybrids with its Prius and had been less enthusiastic about the size of the developing market for pure electric cars than rivals led by Nissan Motor Co.

Environmental justice activists are gaining influence, taking on the San Pedro Bay ports over contamination of their neighborhoods along transportation corridors. Soot and nitrogen oxides from ships, trains and trucks are linked to asthma, cancer and heart disease. The ports pledge to cut pollution by 45% by 2012.

Ships: Last year, 5,339 ships docked at the two ports. New rules are forcing them to switch to low-sulfur fuel within 24 nautical miles of the coast and to plug into electrical outlets while they are docked.

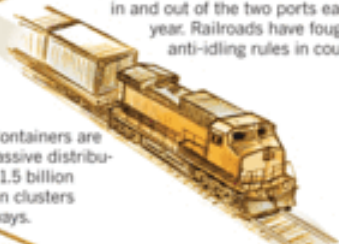
Trucks: Some 11,000 trucks serve the two ports, and thousands more fan out from warehouses. By 2012 the ports will ban the dirtiest pre-2007 models.



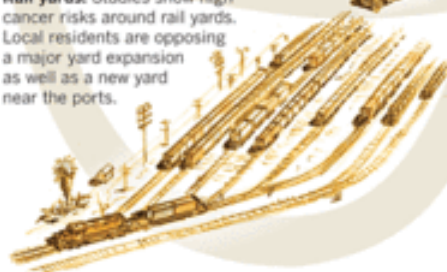
Trains: Some 13,000 trains travel in and out of the two ports each year. Railroads have fought anti-idling rules in court.



Warehouses: Containers are unloaded at massive distribution centers — 1.5 billion square feet — in clusters along the freeways.



Rail yards: Studies show high cancer risks around rail yards. Local residents are opposing a major yard expansion as well as a new yard near the ports.



31. L.A. Clean Trucks Program Upheld In Court

After a 16-month injunction, a federal judge has ruled that the Clean Trucks Program can move forward at the Port of Los Angeles. U.S. District Court Judge Christina Snyder ruled Thursday that the Port of Los Angeles' Clean Trucks Program can require trucks coming in and out of the port to meet diesel emissions standards. Adopted in 2008, the Clean Trucks Program sets strict diesel emission standards for port trucks and requires trucking companies to hire their drivers directly. The program has already proven effective, garnering honors and setting the paradigm for programs nationwide. But the American Trucking Association (ATA) sued the Port, arguing against the employee mandate and citing a federal law prohibiting local entities from regulating interstate trucking services.

Judge Snyder said that even though some parts of the port's regulations were pre-empted by the federal government, the port should be able to regulate air pollution to stay competitive in the marketplace. Air pollution has "interfered with port growth and jeopardized the port's continued viability as a commercial enterprise," she wrote.

The Coalition for Clean Air (CCA) and the Sierra Club, represented by the Natural Resources Defense Council (NRDC), served as interveners in defense of the Port's right to regulate trucks at its facilities.

The ATA has already announced plans to appeal the decision; but environmentalists, elected officials and a broad coalition of supporters of the Clean Trucks Program also announced their intention to continue to fight for the protection of clean air at the ports and beyond.

In its first year alone, the Clean Trucks Program reduced port truck pollution by more than 70 percent—the equivalent of taking 200,000 cars off the road. The U.S. Environmental Protection Agency (EPA) in 2009 honored CCA as a central member of the group that helped shape the program.

32. Cummins Produces 26,000 EPA 2010 Engines

After seven months' production of its EPA 2010 certified and compliant engines, Cummins announced that it has built and shipped over 20,000 Heavy-Duty and MidRange engines with Selective Catalytic Reduction (SCR) exhaust aftertreatment, and at the end of August, this number will crest at 26,000. These engines are delivering on the company's promises of better fuel economy, better reliability and better performance.

"Our technology experience and our own testing of the alternatives to meet the EPA 2010 emissions levels give us great confidence in our SCR solution, and we are confident that SCR is the right technology for now and for the future," said Rich Freeland, President -- Engine Business. "The fact that SCR is the right technology is being proven in the marketplace every day with our industry-leading engines. To date, the reliability data show that this has been our best launch ever. Our 2010 products are delivering up to 6 percent better fuel economy and lower CO2 emissions, and they are meeting the near-zero emissions levels required by EPA 2010 standards," Freeland said.

Cummins has a history of technology leadership in diesel emissions controls and has been on a long-term path to provide a stable, reliable product architecture for its customers. Cummins was first to certify to the EPA 2002 on-highway standards using cooled Exhaust Gas Recirculation (EGR) and added Diesel Particulate Filters (DPFs) for 2007. Perhaps most significantly, Cummins was the first to meet the 2010 emissions standards -- a full three years early -- with both the Ram Turbo Diesel and the Cummins Westport ISL G. During this time, Cummins was already producing Selective Catalytic Reduction (SCR) systems for Europe and is now the leading manufacturer worldwide.

Cummins has developed and certified 13 engine families to the EPA and California Air Resources Board (ARB) regulations to serve over 60 OEM customers in 180 vehicle installations. The ISX15 Family 1 engines feature On-Board Diagnostics (OBD) with improved emissions control warnings and alerts to the vehicle operator. OBD will be required by the EPA and will be featured on all engine families beginning in 2013.

33. EPA Delays Release of Final Ozone Standards

U.S. EPA won't meet its goal of releasing new nationwide standards for ground-level ozone this month, the agency has told a federal court. Finishing the standards has taken longer than expected, EPA said in a filing with the U.S. Circuit Court of Appeals for the District of Columbia. The agency will now move forward "on or around the end of October," according to the filing.

The revelation confirms weeks of rumors about a delay in the release of the ozone rule, which is expected to be one of the Obama administration's most ambitious -- and costly -- efforts to address smog and other types of conventional air pollution. Though EPA is expected to set stricter limits when it finishes reconsidering the George W. Bush administration's 2008 ozone standards, the decision to wait on a final rule could signal some hesitation, experts say.

In a draft rule released last January, the agency proposed lowering the air quality standard for ozone to between 60 and 70 parts per billion (ppb), which was the range suggested by the agency's scientific advisers during the George W. Bush administration. Under his watch, EPA lowered the standard from 85 ppb to 75 ppb.

As the main ingredient in smog, ozone is linked to breathing problems and poor visibility. The American Lung Association, which sued EPA for setting looser standards than recommended by scientists, criticized the agency for missing its self-imposed deadline.

States implementing the rule would meet the tougher standard primarily by limiting releases of nitrogen oxides (NOx) and volatile organic compounds (VOCs), which mix in the atmosphere and form ozone when exposed to sunlight. Through the ozone standards and EPA's newly proposed Clean Air Transport Rule, the agency intends to reduce NOx emissions 52 percent from 2005 levels by 2014.

The ozone reconsideration has drawn heavy criticism from businesses, some of which would be required to control emissions of those ozone precursors. EPA has estimated that a standard between 60 and 70 ppb would offer health benefits ranging from \$13 billion to \$100 billion at a cost of between \$19 billion and \$90 billion.

In a meeting with EPA Senior Policy Counsel Robert Sussman on August 2nd, representatives of API said the agency should conduct a new scientific review and release a new ozone standard in 2013. New studies suggest the public health impacts of ozone are overstated and that emissions from Asia are having a greater impact than previously thought, according to the group's presentation. "Do not change the standards without a full review of the new health studies and without correcting background ozone levels," API said.

The high cost of compliance has also prompted a backlash on Capitol Hill. Last month, the House Appropriations subcommittee that funds EPA voted down a rider that would have barred the agency from spending federal funding on reconsideration of the Bush-era ozone standard. In one letter, sent earlier this month, Sens. Evan Bayh (D-Ind.) and George Voinovich (R-Ohio) urged EPA to scrap its reconsideration of the Bush-era ozone rule. The letter, which was also signed by Sens. Kit Bond (R-Mo.), Mary Landrieu (D-La.), Claire McCaskill (D-Mo.), Richard Lugar (R-Ind.) and David Vitter (R-La.), raised concerns about the economic impacts of the rule. "Given the absence of new or different scientific data, EPA should maintain the current ozone standards," the letter said. "Moving to change the standard again, outside of the Clean Air Act's normal five-year review process, as local communities are struggling to meet the existing standard, would be unfair and unwise."

34. U.S. Farmers Oppose EPA's Proposed PM Standard

American farmers have been ridiculing a proposal by U.S. regulators to reduce the amount of dust floating in rural air. "If there's ever been rural America, that's what rural America is," said Nebraska hog farmer Danny Kluthe. "You know? It's dirt out here, and with dirt you've got dust."

The Environmental Protection Agency is looking to tighten standards for the amount of harmful particles in the air, facing opposition from U.S. farming groups who call it an unrealistic attempt to regulate dust.

The EPA is reviewing its air quality standards to comply with the Clean Air Act that prescribes reevaluation every five years. The agency's scientific panel proposes either retaining or halving the current standard for coarse particles, commonly containing dust, ash and chemical pollutants--particles 10 microns or smaller in diameter, about one-tenth of human hair. In scientific terms, the EPA is looking to either keep the standards at 150 micrograms per cubic meter or revise it down to 65 to 85 micrograms per cubic meter.

Environmental groups say these tiny elements could be harmful if not deadly for people, causing cardiovascular or respiratory problems. "They are small enough that they bypass the natural defenses of the body and can be inhaled deeply into the lung," said Janice Nolen, the American Lung Association assistant vice president.

But for Kluthe, who lives a quarter of a mile away from any community, the health aspects mean little weighed against the possibility of costly dust control measures he may have to take, such as watering gravel roads or tilled soil. "They need to get real," he said, echoing the messages the National Pork Producers and the National Cattlemen's Beef Association have been sending to the EPA.

Lawmakers from both parties also have been complaining about the reach of EPA farming regulations. In a recent manifestation, Richard Lugar, a senior Republican Senator from Indiana, sent EPA Administrator Lisa Jackson a letter pleading for "common-sense" on dust regulations.

But technically, EPA is obligated to rely on science when making its decisions, said John Walke, clean air director at the National Resources Defense Council. "The EPA doesn't care where the pollution is coming from, and our lungs don't care," he said.

EPA will issue final proposed standards in late fall and at least until then, "it is too soon in the process to know" how EPA will enforce them, spokeswoman Cathy Milbourn said.

35. States, Industry Sue EPA Over SO2 Air Quality Standards

Texas and North Dakota filed lawsuits in federal court recently over U.S. EPA's newly tightened limits on sulfur dioxide (SO₂) pollution, joining industry groups in challenging the rule before the deadline. The states, as well as several businesses and trade groups, are asking the U.S. Circuit Court of Appeals for the District of Columbia to review the health-based standards for SO₂, which were updated in June for the first time since 1971. EPA established a new limit of 75 parts per billion (ppb) averaged over an hour while revoking the previous daily limit of 140 ppb and the annual limit of 30 ppb.

Although SO₂ emissions are better known for their contribution to acid rain and outdoor haze, they also help form fine particulate matter, which is linked to respiratory problems. Upon releasing the final rule, EPA said it would provide \$15 billion to \$37 billion in annual health benefits at a cost of \$1.5 billion through 2020.

Other petitions were filed by copper company Asarco LLC, Montana Sulfur & Chemical Co., the National Environmental Development Association and the Utility Air Regulatory Group. The utility group's petition was joined by the SO₂ NAAQS Coalition, which described itself as "a coalition of not-for-profit trade associations whose member companies represent a broad cross-section of American industry."

The petitioners are primarily concerned about EPA's decision to require emissions modeling. Because that decision was not included in the proposed rule, the states and businesses were not given the chance to comment, according to petitions for reconsideration sent to EPA Administrator Lisa Jackson.

"Because EPA did not propose making -- nor did the agency suggest it was considering making -- any changes to the way in which the agency had historically expected states to make their [attainment] designations, petitioners did not provide comments on that important issue," the Utility Air Regulatory Group wrote.

Texas, which has not challenged the tighter emissions limit, worries that the modeling would unnecessarily raise compliance costs.

"With this air modeling, you would use a worst-case emissions rate and worst-case meteorology to determine a worst-case possible concentration, and that's not the real world," said Susana Hildebrand, chief engineer at the Texas Commission on Environmental Quality. "If you're trying to figure out whether a county is meeting the standard or not, you should be looking at what the public is exposed to, and what's really going on."

Based on monitor data alone, EPA estimates that Jefferson County, home to the cities of Beaumont and Port Arthur, Texas, would exceed the new SO₂ limit with an hourly emissions level of 99 ppb in 2020. Adding modeling to the mix could push other Texas counties into nonattainment, Hildebrand said.

To accommodate the addition of modeling, EPA has scaled back the total number of required monitors, the agency said in a statement upon the release of its final rule.

"For a short-term 1-hour SO₂ standard, it is more technically appropriate, efficient, and effective to use modeling as the principal means of assessing compliance for medium to larger sources, and to rely more on monitoring for groups of smaller sources and sources not as conducive to modeling," EPA said. "Such an approach is consistent with EPA's historical approach and longstanding guidance for SO₂."

All new and relocated air monitors would need to be operational by the start of 2013.

36. Administrator Jackson Announces EPA's International Priorities

U.S. Environmental Protection Agency (EPA) Administrator Lisa P. Jackson has announced the agency's international priorities at a meeting of the Commission for Environmental Cooperation in Guanajuato, Mexico. The international priorities echo Administrator Jackson's priorities for

EPA, which she announced earlier this year, and aim to promote citizen engagement, improve public health and increase government accountability on environmental enforcement.

“Pollution doesn’t stop at international borders, and neither can our environmental and health protections. The local and national environmental issues of the past are now global challenges,” said EPA Administrator Lisa P. Jackson. “This document sends a strong message to our partners in the international community that our challenges are shared challenges, and that we are eager to work together on solutions. Along with the seven EPA priorities I issued earlier this year, these six international priorities will guide our work during the months and years ahead.”

When EPA was established 40 years ago, Americans were concerned about lakes and rivers burning and air pollution in their own cities. In 2010, the environmental challenges are global, with pollutants from around the world ending up in America’s backyards. EPA is working collaboratively with our international partners to protect human health and our shared environment.

EPA’s bilateral and multilateral partnerships have taken on new significance in the face of shared environmental and governance challenges, such as global climate change and improving children’s environmental health outcomes. The agency’s international priorities will guide EPA’s collaboration with CEC and all international partners.

The priorities include:

- **Building Strong Environmental Institutions and Legal Structures.** Countries need adequate governmental structures to enforce environmental protections. EPA will work with countries such as India, Ghana, Kenya and Brazil to develop and support the promotion of good governance, improve judicial and legal structures and design the regulatory systems necessary for effective environmental protection around the world.
- **Combating Climate Change by Limiting Pollutants.** EPA has taken important steps to reduce greenhouse gas emissions at home, but the global challenge of climate change requires a global solution. To make significant progress in reducing the effects of climate change, pollution must be cut throughout the world. EPA will promote global strategies to reduce greenhouse gas emissions and other pollutants such as methane from landfills and black carbon from cookstoves. These pollutants are damaging especially vulnerable regions such as the Himalayan glaciers and the Arctic.
- **Improving Air Quality.** Much of the pollution that contributes to climate change and increases cases of asthma and other respiratory diseases is concentrated in urban areas, which are growing in the U.S. and around the world. EPA will work with organizations and local and national governments, such as Jakarta, Indonesia, to improve urban air quality in rapidly developing cities and communities.
- **Expanding Access to Clean Water.** Water bodies in the United States and throughout the world remain imperiled. EPA will support global partners and regions, such as the Caribbean, in creating safe and efficient drinking water and wastewater treatment systems. The agency also will help in providing long-term, sustainable and high-quality drinking water and sanitation systems for overburdened and underserved communities such as those along the U.S.-Mexican border.

- **Reducing Exposure to Toxic Chemicals.** Chemicals are prevalent in everything from food to baby bottles. As children develop, they are especially vulnerable to these chemicals, particularly mercury and lead. While EPA works closely with Congress to strengthen our chemical laws, the agency also will work with our global partners to provide protections for people and consistency for industry. In working with partners like the United Nations Environment Program, EPA will strive to reduce or eliminate the impact of pesticides and other toxic chemicals.
- **Cleaning Up E-Waste.** The electronics that provide us with convenience often end up discarded in developing countries where improper disposal can threaten local people and the environment. EPA recognizes this urgent concern and will work with international partners to address the issues of E-waste. In the near-term, EPA will focus on ways to improve the design, production, handling, reuse, recycling, exporting and disposal of electronics.

37. California Steps Up Gross-Polluter Vehicle Retirement Program

According to a rule proposed by the California Bureau of Automotive Repair, fully "75 percent of vehicular pollution is caused by just 25 percent of the vehicle fleet" in the state. The state has more than 3 million pre-1995 cars registered, some with failing emissions control systems, many owned by low-income drivers. Removing these "gross polluters" from the roads when they fail their biannual smog checks (required for cars six years old or more) is one of the most cost-effective ways available to the state to reduce vehicle emissions. California also offers financial assistance to low-income owners that is restricted to repairs that bring the car into compliance with the emissions limits for its model year.

Now, under proposed rules issued late last month, the state is proposing to expand its Fleet Modernization Program, which currently offers bounties for owners to retire cars that fail their smog checks. The expanded program would add trucks, sport-utility vehicles, and vans. It would also expand eligibility to more than 10,000 vehicles that are in between smog checks. It would be relatively cheap, as these things go: \$12 million in the first year, \$14.4 million a year thereafter. Roughly 22,000 vehicles a year are now scrapped under the program.

It operates similarly to the Cash For Clunkers program, which offered bounties for trading in older vehicles with low fuel efficiency for new, higher-mileage ones. Owners of gross polluters can apply to the Bureau of Auto Repair (BAR) for a letter of approval to scrap the vehicle. When they turn in the vehicle at a BAR-approved dismantler and receive proof that it has been scrapped, they receive a payment of \$1,000 to \$1,500. Air-quality advocates hope the bounty can be raised to \$2,000 per car. Early retirement programs have long raised fears among car collectors that the state would target collector cars--there's no argument that Sixties muscle cars are highly polluting--but California consistently stresses that the program is voluntary. No smog checks are required in California for cars built before 1976, when the first catalytic converters were installed on new cars. Nor are they required for hybrid cars, motorcycles, diesel cars built in 1997 or earlier, large diesel trucks, or cars with two-stroke engines or engines smaller than 0.8 liters.

38. JM SCRT® System Verified by EPA for On-Road Vehicle NOx Reduction

The U.S. Environmental Protection Agency (EPA) has verified Johnson Matthey's SCRT® System as the first 4-way emission control technology for on-road vehicles. Applicable to 1994-

2002 model year engines, the SCRT system is verified to reduce NOx emissions by 70% and cut CO, HC and PM emissions by more than 90%.

Johnson Matthey combined two of its catalytic technologies to develop the SCRT system. They include a urea-based SCR system, which has been used successfully for some 30 years on a wide range of stationary engines and other industrial applications, and the patented CRT® particulate filter, which was introduced in the 1990s and was also the first particulate filter to be EPA/CARB verified.

Johnson Matthey has more than 50 demonstration units running in California and Texas and after thousands of hours of operation, the SCRT system retrofits on both EGR and non-EGR engines has reduced NOx emissions by as much as 84%.

39. US Crackdown on Highly Polluting Trucks Proceeding

Tough new U.S. rules governing greenhouse gas (GHG) emissions from large trucks and buses edged forward when the Environmental Protection Agency (EPA) sent draft proposals to the White House recently. The agency has been working with the U.S. Department of Transportation (DOT) since May to craft improved emissions standards after President Barack Obama announced that he wanted new rules to come into effect for medium and heavy-duty trucks between 2014 and 2018.

The White House said at the time that it was confident haulage firms could cut GHG emissions from heavy trucks by about 20 percent using existing technologies. Now the EPA and DOT have lodged draft standards with the White House Office of Management and Budget (OMB) for review.

The OMB provided no details on the nature of the proposed rules, signaling only that it has received a draft proposal for "commercial medium- and heavy-duty on-highway vehicles and work truck fuel efficiency standards." However, the move suggests the administration remains on track to meet its target of finalizing the new regulation by July of next year. "This action would set national emission standards under the Clean Air Act to control greenhouse gas emissions from heavy-duty trucks and buses," the OMB explained in a brief statement on its website. "This rulemaking would significantly reduce GHG emissions from future heavy-duty vehicles by setting GHG standards that would lead to the introduction of GHG-reducing vehicle and engine technologies."

The proposed standards are part of a wider campaign from the Obama administration to curb emissions from vehicles, which saw the White House introduce tough new emissions standards covering cars and light vans earlier this year that are expected to cut carbon emissions from new vehicles by 30 percent by 2016.

ASIA-PACIFIC

40. Motorbikes Used For Over 10 Years in Vietnam to Undergo Exhaust Inspection

Vietnam's new regulations on vehicle emissions will focus first on motorbikes more than 10 years old, then new motorbikes and remaining vehicles, says Registration Administration chief Trinh Ngoc Giao. Giao told reporters that his agency is elaborating a scheme to control exhaust from motorbikes to submit to the government for approval.



Its objective is to ensure that eighty to ninety percent of motorbikes in Hanoi and HCM City meet standards on exhaust by 2015. At present, less than half the bikes in circulation in these cities meet standards so, says Giao, this goal is very ambitious.

Giao says emissions controls will be implemented in various stages. From 2010-2013, the scheme will concentrate on media activities, developing an exhaust testing system, technical facilities and staff. During this stage, only 20 percent of motorbikes in Hanoi and HCM

City will be checked and reach standards on exhaust.

In the second phase (2013 to 2015), the scheme will be scaled up to control most motorbikes in Hanoi and HCM City and spread this program to other big cities.

Vehicles that meet exhaust standards, Giao said will be granted a one-year certificate. Exhaust verification stamps will be also stuck on checked vehicles.

Vehicles that fail to meet exhaust standards will have to be repaired to meet the standards.

41. Official Signals 'Reasonable' Exceptions to Hong Kong's Motor Vehicle Idling Bill

On July 26th, following months of opposition from taxi and other commercial drivers to a proposed bill requiring them to shut off their engines while idling, a Hong Kong official signaled that some exemptions could be granted.

In its current form, the bill would prohibit drivers from idling for more than three minutes during any 60-minute period, though it does include language allowing certain classes of drivers an exemption based on the final decision of the committee. A fixed penalty of HK\$320 (\$41) would be imposed for disobeying the proposed law.

The bill would exempt drivers idling at taxi stands. Lawmakers have discussed other possible exemptions for all commercial drivers that could include when the temperature is above 27 degrees Celsius (80.6 Fahrenheit), during rainstorms, or for a specific summer period written into the law.

According to a transcript of his statements posted on the Environmental Protection Department website, Edward Yau, secretary for the environment for the Hong Kong Special Administrative Region, said he hoped a consensus could be reached in upcoming Legislative Council (LegCo) debates on the Motor Vehicle Idling (Fixed Penalty) Bill "without undermining the intention of the bill"—to reduce roadside air pollution. "It is important to reach a consensus as to what extent we can agree that this bill will make a norm of switching off idling engines with reasonable exceptions," Yau said. "I think that is the crux of the matter and I expect the committee to seriously look into it and the government will certainly be willing to work together with them."

Yau made the remarks after the LegCo bill committee that is drafting the idling bill visited several districts in Hong Kong on July 26th and sat in hot taxis while they were shut off.

LegCo has ended its legislative year and gone into summer recess. It is expected to resume discussions on the bill when it reconvenes in September, though no date has been scheduled for the measure's next reading.

Taxi drivers have staged several public protests since the bill was introduced to LegCo in April.

42. Japanese City Proposes Business Use of 'Eco Cars'

On July 14th, the city of Kyoto posted for a one-month comment period a draft ordinance to introduce a greenhouse gas emissions reduction program requiring local businesses to use environmentally friendly automobiles such as electric vehicles and plug-in hybrids. The draft ordinance was presented to the city government by the Kyoto City Environment Council, an independent lobbying group. After the comment period and possible revisions, it will be submitted to the Kyoto City Assembly, Tamaki Morioka, a manager in the city's Environment Policy Department, said on July 20th. Since the measure already has been shown to all 67 assembly members, it is expected to pass smoothly, he said. The city plans to make the ordinance effective in April 2011, albeit with a one-year grace period so businesses can make preparations to comply, Morioka said. The measure also would urge residents to walk, bike, and car-share, and calls for reduced waste disposal and efforts to increase forested areas. Kyoto, which hosted the 1997 U.N. summit on climate change that produced its namesake protocol, has set a target to reduce greenhouse gas emissions by 25 percent by 2020 and 40 percent by 2030, both compared with 1990 levels.

43. Australian Ministers to Review Air Standards

On July 5th, Australia's federal environment minister, Peter Garrett, and his state counterparts agreed to shortly release a discussion paper on a review of the national air quality standard, which is known as the air quality National Environment Protection Measure (NEPM). The air NEPM discussion paper includes information on the health effects of air pollution and on international trends in air quality standards, the ministerial communiqué said.

Ministers also agreed to:

- release national wind farm development guidelines for 12 months of public comment;
- review national guidelines on groundwater protection that date from 1995;
- publish national guidance on managing acid sulfate soils; and
- Introduce minimum water efficiency standards for washing machines and water efficiency labeling for combined washer-dryers.

44. Japan to Consider New Regulations for Diesel-Powered Trucks, Ethanol

Japan's Ministry of the Environment will consider ways to implement a recommendation from an air pollution policy panel to toughen limits on tailpipe emissions from heavy-duty, diesel-powered vehicles, a ministry official told the press on August 3rd. The Atmosphere Environment Subcommittee of the ministry's Central Environment Council also proposed what would be Japan's first regulations on emissions from vehicles powered with E10, or fuel containing 10 percent ethanol, and the content of the fuel itself. The recommendations were presented on July 29th by the subcommittee, whose members are mostly from academia.

The advisory panel urged the Ministry of the Environment to apply the tougher regulations by 2016.

Seiji Takai, deputy general manager of the Environment Management Technology Office in the ministry's Water and Atmosphere Environment Bureau, told the press that the ministry will start coordinating amendments to relevant laws and regulations with the Ministry of Land, Infrastructure, and Transport and the Ministry of Economy, Trade, and Industry over the next two years. Takai said the diesel-related recommendations are expected to be adopted. He said the recommendations are being coordinated globally by the World Forum for Harmonization of Vehicle Regulations (Working Party 29), a body of the United Nations Economic Commission for Europe.

The E10 regulations also are likely to be supported by the transport and economy ministries, he said.

The policy panel, which has been meeting for two years, recommended that the ministry set the maximum tolerance level for emissions of nitrogen oxides at 0.4 gram per kilowatt-hour (g/kWh) for diesel-powered trucks and buses with gross weight exceeding 3,500 kilograms. That is more stringent than the current level of 0.7 g/kWh.

For measuring emission levels, it said Japan should adopt the World Harmonized Transient Cycle, so that the government and manufacturers would not need to subject vehicles to both a Japanese and an international testing mode. The panel also urged the Ministry of the Environment to introduce a cold start testing mode, in addition to the hot start testing mode.

The panel recommended that new emissions standards be developed for tractors and small trucks and buses, to go into effect at the end of 2017 and 2018, respectively.

It also said that about three years after 2016, the ministry should require that trucks and buses be equipped with onboard diagnostics that allow vehicles' emissions reduction equipment to be analyzed, Takai said.

The panel urged the government to set the maximum ethanol content of E10 fuels at 3.7 percent by weight or 10 percent by volume. However, the panel said the weight limit could be more flexible to support municipal efforts to produce bioethanol from wood, grass, and other sources and consume it locally.

The panel said E10-powered gasoline motor vehicles should be required to clear emissions regulations applied to 100 percent gasoline-powered vehicles regardless of the levels of ethanol content.

The panel also urged that stricter emissions regulations be applied to motorcycles, but provided no details or suggested time line. It mentioned a need for proactive regulations on fine particulate matter—2.5 microns in diameter or smaller (PM-2.5)—but did not set a numerical target.

45. Recent Developments in China

A. Guangdong Province Calls on Cities to Adopt Vehicle Emissions Standards Early

The Environmental Protection Bureau of south China's Guangdong province has directed nine cities to begin implementing China IV motor vehicle tailpipe exhaust emissions standards (equivalent to Euro IV requirements) ahead of the national deadline, the Guangdong provincial government said in a notice posted to its website on June 8th. The notice called for municipal governments in Dongguan, Foshan, Guangzhou, Huizhou, Jiangmen, Shenzhen, Zhuhai, Zhongshan, and Zhaoqing to “step up” their implementation of level IV vehicle emissions standards and to publish new guidelines “as soon as possible.”

The national standards, which take effect in 2011, set limits for the amount of carbon monoxide, hydrocarbons, nitrogen oxides, and particulate matter emitted per kilometer driven. The provincial notice says the nine cities were told to have implemented the standards by June 1, 2010.

China's State Council and the Ministry of Environmental Protection (MEP) issued implementation guidelines to municipalities in Guangdong on May 17th, according to the notice on the Guangdong provincial website. Those guidelines called for the cities to allow the sale of only those light and heavy-duty vehicles that meet China IV vehicle emissions standards as of June 1 and to halt sales and registration of vehicles that do not meet those requirements.

The specific standards being implemented are GB18352.3-2005 for light duty vehicles and GB17691-2005 for heavy-duty diesel vehicles. Nationwide, the regulations apply only to heavy-duty vehicles sold after Jan. 1, 2011, and to light duty vehicles sold after July 1, 2011.

The guidelines issued by the State Council and MEP call on Guangdong province to “strengthen and standardize” emissions testing and monitoring of sales of vehicles to “ensure that the emission control performance meets national emissions standards.” The guidelines also state that the “actual situation” regarding availability of diesel and other fuels that can be used in the China IV vehicles should determine how quickly the rules are implemented in these municipalities.

The implementation guidelines also call for cities in Guangdong to start using a yellow and green sticker system to identify older vehicles. The MEP issued nationwide guidelines last year on its yellow and green sticker labeling system. Under the program, gasoline-powered vehicles that meet China I emissions standards or better may display green stickers. Diesel vehicles can use the green stickers if they meet China II emissions standards or better. All other vehicles weaker than these two standards are allowed to display only yellow stickers.

B. Beijing Enforces Auto Emission Standards with Monitoring Along City's Perimeter

Environmental authorities in Beijing have launched a month long enforcement action against vehicles that emit high levels of carbon monoxide, hydrocarbons, nitrogen oxides, and particulate matter, prohibiting them from entering inside the city's 5th ring road, according to a report from the state-run Xinhua news agency. Under the program, the Beijing municipal Environmental Protection Bureau is monitoring vehicles entering the 5th ring road, which circles the Chinese capital about 25 kilometers (15.5 miles) from the city center. Starting on June 17th, the EPB began blocking any heavy-duty vehicles, construction vehicles, or yellow sticker passenger cars that do not meet China I tailpipe exhaust emissions standards—equivalent to Euro I standards. Vehicles not registered in Beijing also are turned away, Xinhua reported.

Beijing uses a yellow and green sticker system to identify vehicles. Gasoline-powered vehicles that meet China I emissions standards or better may display green stickers. Diesel vehicles may

use the green stickers if they meet China II emissions standards or better. Vehicles that fall below these standards can display only yellow stickers.

Li Kunsheng, director of the vehicle emissions management department of the city's Environmental Protection Bureau, said 100 remote sensors placed around the city are monitoring vehicle emissions during the inspection. Vehicles that do not meeting emissions rules will be told to go outside the 5th ring road "immediately."

Environmental Protection Bureau officials estimated that there will be 5 million cars registered in Beijing by the end of 2010. They said monitoring checks like this one will increase in frequency.

In addition to the yellow sticker system, Beijing has a policy in place where even green sticker vehicles are not allowed to enter within the 5th ring road on a rotating basis every five days, depending on the first digit of their license plate. Officials told Xinhua that this "no-car-day ban" could be expanded to include the first digit of two numbers on each day if air pollution worsens.

C. Carbon Trading In Pipeline in China

China is set to begin domestic carbon trading programs during its 12th Five-Year Plan period (2011-2015) to help it meet its 2020 carbon intensity target. The decision was made at a closed-door meeting chaired by Xie Zhenhua, deputy director of the National Development and Reform Commission (NDRC), and attended by officials from related ministries, enterprises, environmental exchanges and think tanks, a participant told China Daily on condition of anonymity.

"The consensus that a domestic carbon-trading scheme is essential was reached, but a debate is still ongoing among experts and industries regarding what approach should be adopted," the source told the newspaper.

The meeting reportedly concluded that such efforts are self-imposed and should be strictly separated from ongoing international negotiations for a successor to the Kyoto Protocol to fight global warming. As a developing country, China does not shoulder legally binding responsibilities to reduce carbon emissions, according to the basic principle set by the United Nations Framework Convention on Climate Change.

Putting a price on carbon is a crucial step for the country to employ the market to reduce its carbon emissions and genuinely shift to a low-carbon economy, industry analysts said.

China has mostly relied on administrative tools to realize its 20 percent energy intensity reduction target from 2006 to 2010. To that effect, the country's top 1,000 energy consumers have signed contracts with the central government to improve their energy efficiency. But with rising domestic energy demand, administrative measures are too expensive for the country to meet its future energy conservation targets - something that was also agreed at the meeting, said Tang Renhu from the low-carbon center at China Datang Corporation who also joined the discussion.

Although China has refuted the International Energy Agency's label of being the world's top energy consumer, its energy consumption for 2009 stood at 2.132 billion tons of oil equivalent, according to the National Bureau of Statistics.

"The market-based carbon-trading schemes will be a cost-effective supplement to administrative means," said Yu Jie, an independent policy observer who previously worked for several international climate-related institutes.

Tang also said the differences are centered on whether the pilot carbon trade projects should start from a selected industry, or a certain area. Possible sectors for piloting carbon trade projects include carbon-intensive industries such as coal-fired power generation, Tang said.

One of the proposals includes setting an absolute cap on carbon dioxide emissions in a certain area or industry. Others argue that the country's carbon intensity target can be converted to some carbon-related allowances for trading schemes.

China has pledged to cut its carbon emissions per unit of economic growth by 40 to 45 percent by 2020 from 2005 levels.

Yu said it would be very complicated to work out a trading scheme that allocates the carbon-related emission permits among the enterprises in an open and fair manner. "My suggestion is that the number of participating enterprises should be limited, as the goal of pilot trading is to try out the rules and establish a mechanism especially suitable for China," Yu said.

China has been testing the waters with voluntary carbon trades, aimed at developing the necessary financial systems and policy tools. The country's first voluntary carbon trade was sealed last August, with a Shanghai-based auto insurance company buying more than 8,000 tons of carbon credits generated through a green commuting campaign during the Beijing Olympics. The trade was carried out through the China Beijing Environment Exchange.

Sun Cuihua, an official from the NDRC's climate change department, earlier said the government is also working out rules to guide voluntary carbon trade projects in China.

D. Chinese Environment Ministry to Punish Two Cities, Six Companies for Emissions

On July 23rd, China's Ministry of Environmental Protection said that two cities will not be allowed to conduct environmental impact assessments on new projects as punishment for their failure to meet water discharge and pollutant emissions targets, state-run media reported. The suspensions mean the cities will not be able to sell or lease land for new development projects, which is a major source of income for them.

The ministry also said six companies—three in the Guangxi Zhuang Autonomous Region, two in Sichuan province, and one in Shanxi province—face unspecified "economic punishments" for violating emissions reduction regulations, the Xinhua news agency reported on July 24th. The companies that either failed to operate desulfurization facilities or falsified emissions reports will receive fines, ministry spokesman Tao Detian told Xinhua without elaborating.

The ministry also said 10 other companies had been ordered to rectify violations of environmental regulations by an unspecified date. No companies were named in the Xinhua report.

The cities whose environmental impact assessments were suspended for new projects were Shuangyashan in the northeastern province of Heilongjiang and Wenzhou in the eastern coastal province of Zhejiang. They exceeded quotas for chemical oxygen demand—a measure of water

pollution—and sulfur dioxide emissions in the first half of 2010. The ministry spokesman did not say how long the suspensions would last.

Meanwhile, the vice president of Zijin Mining Group Co., China's largest gold mining company, was detained by authorities in Fujian province as part of an investigation into a serious pollution incident at a copper plant, according to Xinhua reports on July 29th.

On July 3 and 4, about 9,100 cubic meters of toxic wastewater spilled from a containment reservoir at the Zijin copper plant and flowed into the Tingjiang River in Fujian province, leading to the death of about 1,900 metric tons of fish in the river and downstream in neighboring Guangdong province. The company was ordered to restrict its mining activities and to suspend trading for two days on the Shanghai Stock Exchange as of July 29.

Three executives from the Fujian plant also were detained on July 15th, according to Xinhua.

E. Winners and Losers in China's Car Market

China's car market is booming. With sales up by 45% during the first seven months of 2010, there are no losers in China's passenger car market – at least not yet. This year's growth is due to an economy that is still growing at double-digit rates, rising incomes and the switch from “unconventional vehicles” to more conventional mini and small trucks and buses. But, what happens when growth slows, and the government removes incentives for China's farmers to trade in their “inkfish” for cars and trucks?

For the first seven months of this year, China-based assemblers sold 6.2 million passenger cars. Of this total, 4.1 million, or 67%, were foreign brands, and 2.1 million, or 33%, were homegrown models. Volkswagen, with a market share of just over 16%, and General Motors, with a nearly 10% share, lead the foreign companies. Toyota, Honda, Nissan and Hyundai follow closely behind at approximately 6% each. Meanwhile, BYD and Chery lead the locals with roughly 5% each, and Geely is close on their heels with an almost 4% market share.

Although the foreign-invested enterprises dominate the market at the moment, the local brands, as a group, are rapidly gaining ground. Through July, cars sold by the local assemblers increased by 59% compared to the previous year. By way of contrast, the foreign brands grew by a still impressive, but a significantly lower, 39%.

Unlike trucks, which have been produced in China since 1956 when First Auto Works (FAW) was founded, very few passenger cars were made in China when demand for cars began to grow in the 1990s. As FAW, Nanjing Automobile Works, and Second Auto Works (now known as Dongfeng) were busy turning out trucks, not many cars were being manufactured in the country. FAW unveiled the nation's first domestically-produced passenger car, the Hong Qi, in 1958, but demand for cars was limited to government officials.

With little to use as a foundation, China's passenger car industry has been built instead on imported foreign technology. Tiny American Motors (later acquired by Chrysler) was the first in when it established its Beijing Jeep joint venture in 1984. Volkswagen followed the next year with its joint venture in Shanghai, and General Motors established Shanghai GM in 1997. Until the country's economy, and demand for passenger cars, moved into high gear after China joined the World Trade Organization in late 2001, cars made by Shanghai Volkswagen, Shanghai GM and other foreign-invested joint ventures dominated sales. Since then, the local manufacturers have been coming on strong.

Going forward, the foreign brands will be driving into some pretty strong headwinds. First, the local assemblers get better each year, and the technology and quality gap between the local and foreign brands continues to close. Second, the biggest part of unit growth in the years ahead is likely to be in smaller, economy models where affordability is the key consideration and where local assemblers have a decided cost advantage. Finally, foreign companies are prohibited from owning assembly operations outright and must settle for a 50% share or less of their China operations. That makes the foreign assemblers dependent upon their joint venture partners for further expansion. Meanwhile, those very same partners are designing and producing their own models independently of their joint ventures with the foreign companies.

F. China Says Air Quality Deteriorated Slightly in First Half of Year

China's year-on-year air quality readings worsened in the first half of 2010 for the first time since 2005, according to a report released by the Ministry of Environmental Protection on July 26. The report also said that one-quarter of China's surface water is not fit for human consumption. Overall, however, the report said that air and water quality in the country has improved over the past five years. The report included environmental figures through the first half of 2010.

In the 113 major cities where air quality is monitored, readings were within the benchmark "blue sky day" air quality standard 91 percent of the time in the first half of 2010. That is a 0.3 percentage point drop compared to the first half of 2009, according to the report. China considers days with an Air Pollution Index (API) reading under 101 as "blue sky days." An API above 101 is considered by the government to be unhealthy.

Economic growth was partly to blame for the slight decline in the amount of time city air quality met the governmental standard, ministry spokesman Tao Detian said in a written statement on the ministry website. However, he said, higher particulate matter readings due to sandstorms in the first half of the year helped contribute to poor air quality readings. Overall air quality is still better compared to five years ago, Tao said.

Sulfur dioxide levels were 30.2 percent lower in the first half of 2010 compared with the same period in 2005. Particulate matter was 12.1 percent lower and the level of nitrogen oxides in the air was 5 percent lower.

Problems with acid rain—which contains higher than normal amounts of nitric and sulfuric acids—are "still serious," Tao said, and eight cities or districts had acid rain during 100 percent of their rain occurrences. These included Guang'an in Sichuan province, Lishui in Jiangsu province, the Nanhui district in Shanghai, the cities of Yingtian and Ruijin in Jiangxi province, Taizhou and Wenzhou in Zhejiang province, and Xiamen in Fujian province.

In the south China city of Shenzhen, acid rain occurred 65.1 percent of the time, an increase of 6.7 percentage points over the same period in 2009, according to the city's environmental protection bureau.

Overall, 189 of 443 cities monitored for acid rain had occurrences in the first half of 2010. The regions hardest hit by acid rain include Zhejiang, Jiangxi, Hunan, Fujian, and Guangdong provinces, as well as Shanghai municipality, the Ministry of Environmental Protection said.

G. China Orders 2,087 Facilities to Close Because of Outdated Production Practices

On August 8th, China's Ministry of Industry and Information Technology announced that since June it has ordered 2,087 facilities in 18 industrial sectors to shut down by the end of September because of outdated production practices. The ministry said that the move was part of State Council efforts announced in May to speed up elimination of high-energy-consuming and polluting facilities.

Of the more than 2,000 facilities, 762 were involved in cement production, 279 in paper production, 201 in printing, 192 in coking, 175 in iron, 143 in alloys, and 84 in leather production.

Central China's Henan province will have the most shuttered facilities at 230, followed by Shanxi (226), Zhejiang (180), Hebei (165), Yunnan (165), and Guizhou (128).

Provincial and local governments have been told by the National Development and Reform Commission to oversee the closures by revoking operating permits and production licenses, notifying financial institutions that they can no longer extend credit or approve investments to the facilities, and telling land bureaus not to approve new land acquisitions for the facilities. Failures to close could result in businesses having their electricity shut off and business licenses revoked, the ministry said.

H. Devil Is In the Details of China's New Energy-Cutting Drive

There might be less than meets the eye to Beijing's demand that more than 2,000 companies close down obsolete, energy-guzzling plants by the end of next month. On paper, the recent order raises the specter of a sharp cut in industrial output growth, even as the robust economy shows modest signs of cooling. In practice, several firms on the government's black list said they had either already shut the offending facilities or were planning new, bigger replacements.

Tianjin Tiangang United Steel Corp has two furnaces on the list of 2,087 factories targeted for closure by the Ministry of Industry and Information Technology (MIIT) as part of a government drive to meet its energy-intensity goals. But a manager, who gave only his surname, Wu, said the firm had already dismantled the two furnaces in 2009 and built two new larger ones in their place.

"Any furnace with capacity above 400 (cubic meters) is in line with state policy," Wu told Reuters.

Under its five-year plan that runs out at the end of 2010, China wants to reduce the amount of fuel that goes into each unit of economic output by 20 percent. Energy efficiency improved nearly 16 percent in 2006-2009, but then stalled. In the first half of 2010, China used 0.09 percent more energy per unit of gross domestic product, prompting Premier Wen Jiabao to demand an all-out effort to meet the goal.

Ren Aimin, owner of the Xinyuan Iron Plant in the northern province of Shanxi, also has a furnace on the list drawn up by MIIT. It, too, is already long gone. "My plant went bust, and the furnace was dismantled in January," Ren told Reuters.

In the adjoining province of Shaanxi, Dragon Steel Group is under instruction to close three small furnaces. One is already shut and the other two will follow soon, said Wang Yuhua, a production manager. But there is a catch. Dragon Steel is building four larger furnaces, each with capacity of 1,280 cubic meters. "Two of them have already started production and another two are under construction," Wang told Reuters.

Depending on how efficient it is, the new plant could improve China's energy consumption. But the expansion will exacerbate a related problem of excessive capacity in an array of heavy industries, including steel.

Apart from the questions it raises about China's energy targets, the string of stories shows the difficulties the central government can encounter in implementing economic policy. Local authorities are particularly reluctant to apply the brakes to capital investment, a rich source of revenues and jobs.

China's vast manufacturing sector shrank in July for the first time since the global downturn in March 2009 as government steps to slow bank lending and property speculation hit home, according to a recent HSBC survey.

I. Chinese Ministries Draft Pilot Project to Tax Nitrogen Oxide

Several Chinese ministries have jointly drafted plans for a pilot project to impose environmental taxes on certain pollutants, and possibly carbon dioxide emissions, to be included in the forthcoming 12th Five-Year Plan (2011-2015), according to state media reports. On August 6th, National Business Daily, a newspaper owned by Liberation Daily, a publication of the Chinese Communist Party of Shanghai, reported that the National Development and Reform Commission, the Ministry of Environmental Protection, the Ministry of Finance, and the State Administration of Taxation have circulated the proposal to other ministries for review and intend to submit it to the State Council for inclusion in the next five-year plan.

The pilot taxes would target emissions of pollutants designated for reduction in the next five-year plan in four provinces—Hubei, Hunan, Jiangxi, and Gansu—and could be implemented as soon as 2013, National Business Daily and other state media reported.

Over the past several months, senior officials have signaled that in addition to the sulfur dioxide and water pollution targets included in the current national plan, China will focus on nitrogen oxides as air pollutants and ammonia nitrogen levels in water for reduction in the next five-year plan. The category of nitrogen oxides include nitrogen dioxide, which results from emissions from fossil fuel combustion as well as from vehicles and off-road equipment. It contributes to the formation of ground-level ozone and fine particle pollution and is linked with a number of adverse effects on the respiratory system. High ammonia nitrogen levels in water can be toxic to fish. Sources of ammonia in freshwater include agricultural practices, stemming from accidental releases of fertilizer during transport and from livestock waste; industrial processes such as the conversion of coal to coke; and sewage treatment plants.

On August 11th, Yang Fuqiang, an expert on China's pollution control policies with WWF in Beijing, told the press that it is still uncertain what the environmental taxes will look like but that the pilot projects in the four provinces will help the government “learn better how to impose, collect, and make these taxes work.”

Yang also said he expects China to start a pilot program for carbon taxes on energy-intensive industry, possibly as early as the end of 2012, but that these levies would likely be offset by the removal of other taxes or the lowering of income taxes so the burden would not be so great on those industries.

J. Athletes to Get Cleaner Air in Guangzhou

Guangzhou is using a variety of high-tech measures to ensure air quality is up to scratch for the upcoming Asian Games. As of September 1, owners of large-sized vehicles, such as limousines, are ordered to use the highest national standard of gasoline (50 ppm sulfur), which pollutes less. The city's environmental protection bureau has set up 29 checkpoints to monitor automobile emissions along with four mobile units. Since August 1, the bureau has also carried out checks on vehicles' emission control systems to make sure they are working correctly.

About 30 percent of the total 9,300 government cars and the city's police officers' cars will be off the road from October 12 to December 22, in order to decrease pollution emissions, said Li Zhuo, director of the motor pollution control office at the Guangzhou environmental protection bureau.

Meanwhile, all construction sites in the city, except those with special authorization, will be asked to stop building from the end of September to the end of December, said Zhang Guangning, secretary of Guangzhou Party committee.

In November, the city usually registers its worst air quality due to the colder weather, which makes it more difficult to control pollution.

Jian Jianyang, director of the pollution control division at the environmental protection bureau, said factories that pollute excessively will have to limit their production during the Games and will not be allowed to return to normal production levels until December 20.

K. Calls In China to Tackle Rising Oil Imports

China, which is set to import more than 55 percent of its oil needs this year, should seek greater diversification of oil imports, build more stockpiles and improve conservation to enhance energy security, said analysts. The country will see a continuous increase in oil imports, as domestic production cannot keep pace with the fast growing economy, said Zhou Dadi, a researcher with the Energy Research Institute under the National Development and Reform Commission.

"We should have long-term plans to address oil security," he added.

Besides increasing exploration and development domestically, the country must make continuous efforts to diversify imports, he suggested. Improving energy conservation will also help ensure oil security, he added.

As the world's two leading energy consumers, China may learn from the US to protect its oil security, said Lin Boqiang, director of the China Center for Energy Economic Research at Xiamen University. "The two large economies both import more than half of their oil needs. The US experience is worth studying," he said. US petroleum imports rose sharply in the 1970s as reliance on petroleum from the Organization of the Petroleum Exporting Countries (OPEC) grew.

To many Chinese officials at the county and city levels, the newly released half-year evaluation reports on energy consumption per unit of gross domestic product (GDP) make for grim reading.

Sun Yunyao, head of Shaoxing County Government in east China's Zhejiang Province, a developed coastal region which consumes a large amount of energy for manufacturing, has had to introduce a series of tough measures to curb high energy usage in this decisive year. Just

days ago, Sun signed a letter of commitment with Shaoxing city government to shut down inefficient enterprises in his county. By Sept. 15, major energy-guzzling factories -- from paper mills to leather makers -- must all be closed down.

The Chinese government has promised to cut the country's energy consumption by 20 percent per unit of GDP in the five years from the start of 2006. This year is the final one in the period. Although the past four years saw the national energy consumption figure decline by 14.8 percent, the recovering economy disrupted the positive trend, according to the National Bureau of Statistics.

Zhejiang set the target for energy reduction per unit of GDP at 3.2 percent for 2010. However, only a 1 percent was achieved in the first half of the year. "This means we have to take a tougher approach in the days left in the year," said Cong Peijiang, official with Zhejiang Economic Information Technology Commission.

The dilemma is not unique to Zhejiang. Saving energy is a huge task testing most parts of the country. As statistics from the Ministry of Industry and Information Technology show, energy consumption has risen per unit of GDP in 12 provinces and autonomous regions.

In the less developed Guangxi Zhuang Autonomous Region, energy consumption per unit of GDP in the first quarter of the year rose by 6 percent, far in excess of the year's 3 percent reduction target.

Analysts have attributed the rise to the strong rebound of the Chinese economy. Because of stimulus measures and confidence in the economy, capital has poured into the economy -- creating and expanding businesses.

"Many of those (business) projects are the high-energy consuming ones, which are the chief culprit for the increased energy consumption," said Cheng Huifang, professor with Zhejiang University of Technology.

In the coal-dependent Xinjiang Uygur Autonomous Region, the local government has failed to meet energy consumption targets for four consecutive years. "No matter how well other economic indicators perform, if we fail to meet the energy consumption target, our economic achievements during the 11th five-year-period will be reduced to nothing," said Lu Zushan, governor of Zhejiang Province. He urged all relevant governmental departments to introduced measures to ensure the annual energy saving target is met.

As a part of efforts to save energy, China shut down small coal-fuelled power plants with a total generating capacity of 54.07 million kilowatts from 2006 to the end of June this year, according to the National Energy Administration.

Earlier this month, the National Development and Reform Commission, China's top economic planner, scrapped all preferential electricity rates granted by 22 provincial governments to high energy-consuming enterprises.

Cheng Huifang warned that there was no way back for officials and entrepreneurs at any level. They must push for energy conservation as there are less than five months left. "It is quite a long-term obligation for China to restructure its economy. The country must replace energy-intensive industries with low-energy-consuming and high-value-added ones," said Professor Cheng.

L. China Says Still Only No.2 Energy User: Xinhua

China has recently reiterated that it remained the world's No.2 energy user with last year's consumption more than 200 million tons of standard oil equivalents below that of the United States, the official Xinhua news agency reported. China consumed 2.146 billion tons of oil equivalents last year, versus 2.382 billion tons used by the United States, according to U.S. energy department figures, Xinhua said, citing a joint statement from China's top energy agency and statistical bureau.

"China is in the process of rapid industrialization and urbanization. Total energy consumption growth has slowed year by year, thanks to energy conservation and emission reduction measures," the report said.

However, the figure differed from the 2.265 billion tons of oil equivalent reported last month by the International Energy Agency, which said China had already outpaced the U.S. by 4.4 percent. The IEA estimated U.S. consumption at 2.169 billion tons.

According to the latest IEA figures, China's energy use has doubled since 2000, while that of the United States has fallen slightly.

M. More Old Cars Need To Be Junked

As China's automobile count continues to soar, the scrapping of old cars has become an urgent issue for major Chinese cities to ensure traffic safety and reduce automobile pollution.

More old cars need to be junked



Workers disassemble a “yellow label” car — those that fail to meet the European No 1 standard for exhaust emissions — in a dismantling plant in Beijing’s Shunyi district. More than 30,000 “yellow label” vehicles have been scrapped in the capital as of Aug 13.

According to a study by the China Automobile Dealers Association, more than 2 million motor vehicles need to be scrapped each year. However, only a quarter of those vehicles are typically junked, the Beijing-based Economic Information Daily reported.

The country produced and sold 13.6 million automobiles in 2009, Ying Aibin, vice president of the Society of Automotive Engineers of China, said in the report. China now has more than 70 million vehicles. In November 2009, the country became the biggest auto market in the world, which made the liquidation of old used cars more critical for total quantity control of automobiles.

"The car owners do not want to sell their retired cars to the recycling company," Wang Laiyun, manager of a Beijing-based car dismantling factory, told China Daily. "They can sell the car at a

secondhand car market for a higher price, compared with our offer." Beijing is home to nine qualified car-dismantling factories. None of them are getting good business, Wang said.

Automobiles traded in secondhand markets are normally sold to other cities or the countryside, making it difficult for the government's vehicle management agency to keep track of them. Most of the used cars continue on the road without a license tag.

"If the used car is worn out and in poor shape, it is quite likely to cause traffic accidents," Wang said. "They are hard for the police to track if they flee the scene of an accident."

The Chinese government already took actions to boost the scrapping rate of used vehicles. A policy that subsidizes car owners who turn in their old used cars to buy a new one has been established to encourage car junking. In June, China's Ministry of Commerce extended this policy to the end of 2010. The subsidy offers as much as 18,000 Yuan (\$2,651) per vehicle in Chongqing municipality in Southwest China.

N. China Alliance Drives Promotion of Electric Cars

An alliance of sixteen of the largest State-owned companies wants to accelerate development of electric vehicles in China, a move which underscores the country's ambition to be a world leader in new energy vehicles. The alliance is gearing up to invest 100 billion Yuan (\$14.7 billion) on electric vehicles by 2012, according to media reports.

Guided by the State-owned Assets Supervision and Administration Commission of the State Council (SASAC), the alliance was formed by almost all the major players in the related sectors, including the country's top three oil majors, top two power grid operators, and two major automakers - China FAW Group Corp and Dongfeng Auto Corp.

The alliance aims to speed up research and development in vehicles, fuel cells and charging systems, as well as setting some unified standards, said SASAC Minister Li Rongrong. China has already made some progress in areas like auto parts and fuel cells, and should take further steps to build internationally competitive Chinese electric car brands, Li said.

Early in 2008, the central government launched a national campaign aimed at getting 1,000 electric vehicles on the roads in at least 10 cities each year to encourage people to buy electric cars. In June, the Ministry of Finance kicked off an incentive policy in five pilot cities - Shanghai, Shenzhen, Hangzhou, Changchun and Hefei - providing subsidies of 60,000 Yuan for a pure electric vehicle, and 50,000 Yuan for a plug-in hybrid vehicle.

Chinese automaker and battery maker BYD, a company which Warren Buffett has invested in, launched its first battery-powered car in 2008 and formed a joint venture on electric cars with German automaker Daimler in March.

The consulting firm McKinsey & Company said the US is the most likely to spearhead a movement toward electric cars from gasoline-driven cars. McKinsey ranked the US first in its electric-vehicle index, ahead of France, Germany and China. Many western European countries have invested heavily in the development of green energy technologies.

Use of cleaner energy vehicles is in line with China's aim at improving energy efficiency and cutting pollution, said Dai Yande, deputy director of the Energy Research Institute (ERI) affiliated with the National Development and Reform Commission. "It is hard for the country to

achieve its energy and environment targets without environmental friendly cars," he said. Use of cleaner energy vehicles not only reduces China's reliance on imported oil, but also helps the country cut greenhouse gases emissions, he added.

China has pledged to reduce its carbon intensity by 40 to 45 percent in 2020 from the 2005 level. The country has also set a target of raising the use of non-fossil energy to 15 percent of total energy consumption.

Car sales in China are expected to reach 17 million this year, up 30 percent from last year, China Passenger Car Association said in July.

The alliance will help promote the use of electric cars in China, and the establishment of industry standards will be of immense benefit, said Wang Liusheng, an analyst at China Merchants Securities. However, the alliance should include more automakers, such as China's biggest auto manufacturer SAIC Group and BYD, he said. "Otherwise, the effect will be limited across the total automobile industry."

Li said the alliance is open to other companies, both domestic and overseas.

O. SAIC, GM to Develop Powertrain Technologies

SAIC Motor Corp and General Motors Co have announced that they will jointly develop new powertrain technologies, including high-technology engines and gearboxes, according to a statement from the companies. This will help the two automakers to further reduce the energy consumption and carbon emission of their products.

The new technologies will be used for the global market, and the two companies will share the intellectual property of the new technologies, Hu Maoyuan, chairman of SAIC, said after the signing ceremony held in Shanghai.

P. China Plans Charging Standards for Electric Cars: Report

China plans to issue new standards to regulate the charging infrastructure needed for electric cars, the official Shanghai Securities News has reported. The government plans to introduce three standards in October that would cover technical requirements, among others, for the charging facilities for electrical vehicles, the Securities News said, citing an unnamed source from the State Electricity Regulatory Commission.

The regulator is currently talking with power grid operators and crude oil producers for five other standards that it aims to establish this year, the newspaper added.

Q. Shanghai Declaration Could Be 'Roadmap' To Tackle Climate Change

The United Nations has high hopes that the Shanghai Declaration will become a "useful roadmap" for tackling climate change and other environmental, urban and social issues, Awni Behnam, assistant secretary-general of the UN, said recently. The declaration, the key document of Expo 2010 Shanghai, aims to set a new milestone in the history of World Expos by issuing a set of proposals for using clean energy, an area in which China is emerging as a world leader, building greener communities and dealing with aging populations, among other issues.

"This has been a serious Expo, an Expo that has touched on this important theme," Behnam said. "The declaration will give us a useful roadmap for dealing with climate change and many other pressing issues. It has a moral value that depends on the political goodwill of its signatories to implement it."

The declaration, which is being closely supervised by the UN and the Bureau of Shanghai World Expo Coordination, aims to summarize six months of forums and discussions featuring input from the Expo's 246 participating countries, regions and international organizations.

It will be released when the Expo ends on Oct 31, just weeks before the UN's climate talks resume in Cancun in December after last year's meeting in Copenhagen ended in a frustrating stalemate. Organizers of the document hope it will serve as a stepping-stone toward constructive policy making forged in the spirit of goodwill and collaborative effort, which have become hallmarks of the World Expo.

"We have to get a hold of climate change, lower our carbon emissions, stop our destruction of the seas and learn to live in a sustainable fashion with and from the resources at our disposal," said Behnam. Behnam, who as commissioner-general of the UN Pavilion placed a statue of a polar bear outside its gates to press home the importance of conserving the environment, said China was leading the charge to build a greener economy.

"I believe there's a commitment from China (to new energy) that's remarkable. It's doing a lot more than other nations in this field," he said.

Last year China emerged as the world's biggest spender on new energy, a trend that looks set to continue this year as policymakers map out electric bus networks in Shanghai, and use the Expo as a test ground for the commercialization of vehicles powered by fuel cells.

Such moves are welcomed by the 44 UN agencies operating for the first time under one roof at a World Expo in Shanghai. Some 35 percent of them address problems related to climate change. The UN Pavilion recently welcomed its 1.5 millionth visitor.

R. Three China HFC Projects Face U.N. CO2 Offset Probe

A UN panel will review carbon offset issuance requests by three Chinese greenhouse gas destroying projects, according to a UN spokeswoman, a sign the most lucrative projects under the Kyoto Protocol may face more scrutiny. The Shandong Dongyuen, Zhejiang Dongyang and China Fluoro projects, which destroy a potent gas, hydrofluorocarbon-23, and are approved under Kyoto's \$2.7 billion Clean Development Mechanism (CDM), had requested 4.5 million offsets, called Certified Emissions Reductions (CERs), from the UN's climate change secretariat.

The CDM funds clean energy projects in emerging economies.

"There has been a request for review of the request for issuance," a UN spokeswoman told Point Carbon News in an email. Issuance to these three projects will now likely be delayed for at least two months as the board investigates the requests further, a move which could tighten CER supply further and drive up prices.

HFC projects approved under the CDM were accused by green groups earlier this year of intentionally upping their emissions in order to destroy them and collect more CERs. The CDM's executive board last month asked a working group to investigate the claims further.

There are around 20 HFC projects registered under the CDM and they account for around half of the 428.5 million CERs issued by the UN to date.

According to UN data, the three HFC projects' CER buyers include Italian utility ENEL, Britain's Natsource and Japan's Mitsubishi, Sumitomo, Mitsui & Co., Tokyo Electric and Nippon Steel.

The three projects have received 45 million CERs to date.

S. China Chooses Five Provinces, Eight Cities to Pioneer Low-Carbon Development Plans

On August 10th, China's National Reform and Development Commission said that it has designated five provinces and eight cities to implement a pilot project for low-carbon development during the 12th Five-Year Plan (2011-2015) to help the country cut its carbon intensity. The commission has chosen the provinces of Hubei, Guangdong, Liaoning, Shaanxi, and Yunnan and the cities of Baoding (Hebei province), Guiyang (Guizhou province), Hangzhou (Zhejiang province), Nanchang (Jiangxi province), Shenzhen (Guangdong province), and Xiamen (Fujian province) along with the municipalities of Chongqing and Tianjin as areas that will include low-carbon development segments in their individual 12th Five-Year Plans, the statement said.

The low-carbon plans will include procedures for adjusting industrial and energy structures, increasing energy efficiency, introducing carbon sinks, and controlling greenhouse gas emissions.

The areas will be encouraged to use market mechanisms to control greenhouse gas emissions, as well as economic incentives for businesses to reduce energy use and carbon emissions, the national commission said in a written statement.

The adoption of low-carbon technologies in industry and transportation will be a key component of development plans for these areas, the statement said.

Each province and city will be responsible for creating systems to manage, measure, and report greenhouse gas emissions and to cooperate with international organizations for capacity building, according to the national commission.

The development and reform departments of the provinces and cities must submit their "low-carbon development plans" to the commission committee overseeing implementation of the pilot program by August 31st. Although the national commission announcement about the pilot programs was not posted on its website until Aug. 10, the commission released it internally to governments at all levels on July 19.

Alvin Lin, who works with the climate program at the Natural Resources Defense Council in Beijing, said the plans due Aug. 31 will not be the final version for each area. "It's a long process," he said.

Lin said it was surprising how "broadly geographic" the final list of cities and provinces was and that those chosen were probably notified at the beginning of July. "For the cities and provinces that have been selected, it's good because they'll get more support from the government for low-carbon development," he said. "But they'll also be under more scrutiny from the central government. Special communications channels will be set up between these areas and the

central government to evaluate their progress. The central government really wants these provinces and cities to succeed with this.”

T. Petrochina First Half Profit Surges 29.4 Pct To 9.6 Billion USD

PetroChina Company Limited, China's largest oil and gas producer, has announced that its first half profit jumped 29.4 percent year on year thanks to high crude oil prices and rising oil and gas output. In the first half, PetroChina's net profit totaled 65.33 billion Yuan (9.6 billion U.S. dollars), with a turnover of 684.8 billion Yuan, soaring 64.9 percent from the same period of last year, PetroChina Chairman Jiang Jiemin said in a filing with the Shanghai and Hong Kong stock markets.

Basic earnings per share were 0.36 Yuan, an increase of 0.08 Yuan, or 29.4 percent, from a year earlier, said the Beijing-based energy giant.

Soaring turnover in the first six months was "primarily due to the increase in the selling prices and sales volume of major products including crude oil, natural gas, gasoline and diesel," Jiang said.

Stimulated by global economic recovery and a recovery of real demand, international crude oil prices rose sharply in the first half of 2010 from a year earlier, Jiang said in a market review. The average prices for West Texas Intermediate and North Sea Brent crude oil were 78.3 U.S. dollars per barrel and 77.3 U.S. dollars per barrel, soaring 51.7 percent and 49.5 percent respectively, from a year earlier.

In the first half, China's net crude oil imports amounted to 117 million tons, up 32.5 percent year on year. The country produced 98.02 million tons of crude oil, a year-on-year increase of 5.3 percent.

The volume of crude oil processed in China was 187 million tons in the first half, rising 17.1 percent year on year. China's consumption of refined products amounted to 110 million tons, up 12.5 percent year on year.

In the first half of 2010, China made two adjustments to the prices of refined products. The benchmark prices of gasoline and diesel in aggregate rose by 90 Yuan per ton and 100 Yuan per ton, respectively. The price trend of China's refined products was fundamentally consistent with that in the international oil market, PetroChina said in the statement.

Also, the government raised the benchmark factory price of onshore natural gas produced in China by 230 Yuan per 1,000 cubic meters on June 1 this year, and further improved relevant price policies and supporting measures.

PetroChina said it had placed emphasis on resources as a strategy in the first half, pushed forward venture exploration in new oilfields, and made significant progress in the Tarim Basin, Erdos Basin, Sichuan Basin, Junggar Basin and Qaidam Basin.

In the first six months, PetroChina's crude oil production stood at 424.7 million barrels, up 1.7 percent from a year earlier, reflecting a gradual upward trend in the midst of steady growth in crude oil production, said the statement. On natural gas, the company said its marketable natural gas output amounted to 32.65 million cubic meters, a year-on-year increase of 12.9 percent.

The company said it had also pursued cooperation in overseas oil and gas projects and the scale of international business continued to expand in the first half. It had made strategic entry in jointly acquiring coal-seam gas assets in Australia with Shell, secured significant breakthroughs in the heavy crude oil business in South America and achieved notable progress in the Canadian oil sands project. In the first half of 2010, PetroChina's overseas oil and natural gas equivalent output amounted to 55.2 million barrels, up 8.3 percent from a year earlier, it said.

PetroChina said its operating profit from the exploration and production segment amounted to 73.37 billion Yuan in the first half, jumping nearly 95 percent year on year. But it also admitted rising production cost in the first half. Lifting cost for oil and gas operations was 9.23 U.S. dollars per barrel, up 7.5 percent from a year earlier.

Regarding refining and chemicals business, PetroChina said its refineries processed 439.1 million barrels of crude oil in the first half, with 70.9 percent of crude oil supplied by its own exploration and production. It also produced about 38.38 million tons of gasoline, diesel and kerosene in the first six months. Operating profits from refining and chemicals business stood at 5.46 billion Yuan in the first half, plunging by 68.3 percent year on year, according to PetroChina.

In the first half, PetroChina said it had sold 59.52 million tons of gasoline, kerosene and diesel, up 26.6 percent from a year earlier. Domestic sales of gasoline, kerosene and diesel amounted to 49.25 million tons, representing an increase of 17.6 percent year on year.

Operating profit generated by the marketing division amounted to 7.53 billion Yuan, up 3.3 percent year on year, it said.

The company also said construction of the Sino-Russia Crude Oil Pipeline came close to completion, paving the way for the production launch in the second half of 2010 as scheduled. And Line B of the Central-Asia China Gas Pipeline was in the close-out phase.

Looking into the second half of this year, Jiang said China's economy was expected to maintain a rapid growth, and demand in petroleum and petrochemical markets was expected to rise accordingly.

He also warned international crude oil prices may fluctuate drastically with high frequency over the near future, owing to such factors as exchange rate fluctuations of the U.S. dollar, regional political uncertainties and speculative activities.

He said the company would continue to implement its three key strategies on "resources, marketing and internationalization", place emphasis on the quality and profitability principles and fully leverage on its integrated operations advantage.

Regarding exploration and production operations in the second half, PetroChina would place great emphasis on large-scale, efficient and scientific exploration and carry out exploration at key basins and major projects.

On sale of refined products, the company said it would make further efforts to increase its market share and improve its retailing capability by strengthening market analysis and research, adjusting its marketing strategy based on market changes and making comprehensive arrangements for allocation of resources.

PetroChina also said it would also accelerate construction of reserve oil depots for refined products in order to establish an efficient and stable supply support system with flexible dispatch ability.

Regarding international operations, PetroChina said it would “further enhance its capability in optimizing resources globally, continue to expand its international energy co-operation for mutual benefits, ensuring optimal operations of the existing overseas projects and implementation of new projects”.

U. Refining Margins' 51% Decline May Worsen as China Slows

The combination of slowing Chinese economic growth and expanding refineries means this year's 51 percent decline in profit margins from turning crude into gasoline, diesel and kerosene is poised to worsen.

China National Petroleum Corp. says the amount of oil the nation can process will rise to 490 million metric tons this year from 429 million in 2009. The world's biggest energy consumer is likely to generate a surplus as much as 15 million metric tons (110 million barrels) this year, possibly boosting second-half net exports by 68 percent to 9.4 million tons from the first six months, Gong Manying, a market-research director at PetroChina Co., said in an August 16th press interview.

Asian refining profits fell the most in nine months since reaching the 2010 high in March as Chinese fuel demand waned amid government attempts to cool economic growth and reduce pollution.

The following table shows expansion plans of Chinese oil refineries by 2015.

Name	Existing	Adding	Start-up Time
Sinopec Anqing	5.5	2.5	Sept. 2012
Sinopec Changling	5	6	May. 2011
Sinopec Kuwait Guangzhou	0	12	2013
Sinopec Jiujiang	6.5	3.5	2013
Sinopec Maoming	13.5	12	2012
Sinopec Wuhan	8	1	Sept. 2012
Sinopec Shijangzhuang	5	3	2012
PetroChina Huhehot	1.5	3.5	2012
PetroChina Jilin	7.5	2.5	Oct. 2010
PetroChina Ningxia	0	5	end 2011
PetroChina Qinzhou	0	10	2010
PetroChina Sichuan	0	10	2012
PetroChina PDVSA Guangdong	0	20	2013
CNPC Rosneft Tianjin	0	10	2012
Cnooc Group Huizhou	12	10	2013

Note: capacities are in million tons.

V. 'Straddling Bus' Offered as a Traffic Fix in China

To address China's problems with traffic and air quality, Shenzhen Huashi Future Parking Equipment has developed a decidedly odd-looking, extra-wide and extra-tall vehicle that can carry up to 1,200 passengers.



Though it is called the “straddling bus,” Huashi’s invention resembles a train in many respects — but it requires neither elevated tracks nor extensive tunneling. Its passenger compartment spans the width of two traffic lanes and sits high above the road surface, on a pair of fencelike stilts that leave the road clear for ordinary cars to pass underneath. It runs along a fixed route.

Huashi Future Parking’s outsize invention — six meters, or about 20 feet, wide — is to be powered by a combination of municipal electricity and solar power derived from panels mounted on the roofs of the vehicles and at bus stops.

A pilot project for the vehicle is in the works in Beijing, and several other Chinese cities have shown interest.

The company says the vehicle — which will travel at an average speed of 40 kilometers an hour, or about 25 m.p.h. — could reduce traffic jams by 25 to 30 percent on main routes. The straddling bus could replace up to 40 conventional buses, potentially saving the 860 tons of fuel that 40 buses would consume annually, and preventing 2,640 tons of carbon emissions, said Youzhou Song, the vehicle’s designer.

The design highlights a range of issues that have come with China’s explosive economic growth.

- The nation’s urban population has expanded rapidly in recent years. In a report last year, the consulting firm McKinsey estimated that an additional 350 million people — more than the population of the United States — would move to the cities by 2015. More than 220 cities will have more than one million people. By comparison, Europe has 35 such cities now. All this has caused a vast need for urban infrastructure, with McKinsey estimating that 170 new mass transit systems could be built in China by 2025.
- At the same time, rising affluence has caused the number of cars — and traffic jams — to soar. China is the world’s largest polluter, and Beijing is eager to reduce carbon emissions. The authorities have been pushing solar power and fuel-efficient transportation.

Huashi’s invention appears to have received a preliminary seal of approval from Beijing. The capital’s Mentougou district is testing the technology and plans to start building nine kilometers of route at the end of this year. If the test is successful, about 116 miles would be put in place.

The vehicles will be built by the China South Locomotive and Rolling Stock Corporation starting at the end of this month. The cost of construction — 50 million renminbi, or \$7.4 million, for one bus and about 25 miles of route facilities — is roughly one-tenth what it costs to build a subway of the same length.

46. Recent Developments in India

A. Major Air Pollution Remains Serious in India with Vehicles A Major Culprit

More than half of 130 Indian cities being monitored for air pollution are at critically polluted levels. However, this pollution has been proved to be reversible, with improvements in public transport or changing over to greener fuels, reducing pollution levels. Unfortunately, with industries being relocated to the peripheries of cities, growing urbanization and poor scrutiny outside big cities, small towns are emerging as India's pollution hotspots.

Exposure to air pollution causes both short-term and long-term health effects, from eye irritation and headaches to reduced lung capacity and lung cancer, with vehicular pollution being particularly harmful. The poor are the worst off, facing higher exposure and being unable to afford high healthcare costs. A 2005 World Bank report estimated that 13,000 lives and \$1279 million were saved annually between 1993 and 2002 in five cities Delhi, Kolkata, Mumbai, Chennai and Hyderabad — as a result of measures taken to improve air quality.

A look at data for 2008 recorded by the Central Pollution Control Board (CPCB) shows that Indian cities are choked. Of the 130 cities monitored, 70 have hit levels defined as critical for the presence of PM₁₀, tiny particles regarded as the most dangerous pollutant as they can go deep into the lungs. However, the top five cities are Ludhiana, Khanna (both in Punjab), Ghaziabad, Khurja and Firozabad (all in UP). Delhi, the city where judicial activism for cleaner air has led to the ejection of polluting industries, comes in at sixth place.

The improvements in some major cities and the simultaneous emergence of several smaller towns as pollution hotspots shows that what we are seeing is national policy failure, says Anumita Roychowdhury, associate director of the CSE.

Northern India is far more polluted than the south, with Gobindgarh (Punjab), Kanpur (UP), Indore (MP) and Raipur (Chhattisgarh) rounding out the top-10 list. Some cities in the south are showing rising PM₁₀ trends — Hyderabad, Tuticorin, Bangalore and Coimbatore in particular. While particulate matter comes from a variety of sources, PM₁₀ is largely from vehicles.

Eastern India, meanwhile, shows high levels of nitrogen dioxide which is fast emerging as a national challenge, according to the Centre for Science and Environment. In 1998, only five cities exceeded the national standards for presence of NO₂. In 2008, 15 cities showed violations, most of them in eastern India: Howrah, Asansol, Durgapur and Kolkata have India's highest NO₂ levels. Increasing numbers of diesel cars, particularly in Delhi, is also a major cause of rising NO₂ levels, according to the CSE.

The pollution control efforts in Indian cities show, however, that air pollution is not irreversible and this is not a lost battle. Public and judicial activism have resulted in eight cities — Delhi, Kanpur, Lucknow, Ahmedabad, Hyderabad, Bangalore, Chennai, and Sholapur being directly monitored by the Environment Pollution (Prevention and Control) Authority under Supreme Court orders. Mumbai and Kolkata are under the scrutiny of their high courts. According to a

CSE report, Ahmedabad has reduced its PM₁₀ levels by nearly 50%, Solapur (Maharashtra) by 57% and Chennai, Pune and Kolkata have stopped its growth.

Pollution levels have stabilized to some extent in some of these cities, but in the absence of aggressive action, these gains are in danger of being reversed. In Delhi, for example, the significant gains made from decades of public activism have been reversed and PM₁₀, NO₂ and ozone levels are rising fast according to CPCB data.

At the heart of the matter lies the fact that the bulk of pollution in Indian cities is caused by cars, and despite changes to greener fuels and improvements in public transport, direct curbs on number of cars on roads seems to be inevitable to manage pollution. In Delhi alone, 1100 vehicles are being added to the city's five million every day, with car ownership growing at 10% annually since 1995.

Public ridership, meanwhile, has dropped from 60% in 2000-1 to 43% in 2008. In addition to investing in public transport, restraints on car ownership and usage are unavoidable if pollution is to be brought down to acceptable levels, says Roychowdhury.

B. Indians Remain Concerned About Air Pollution

Concerns over climate change have dropped globally, but in India worries over global warming are rising. Over 54 per cent of the Indians surveyed continue to be 'very concerned' about global warming, a study says. According to research by the Nielsen Company and the Oxford University Institute of Climate Change, concern for climate change has declined globally in the past two years with many countries recording double digit fall. But in India worries have increased by one per cent in the period.

"Global recession and economic woes temporarily knocked the climate change issue off the top line agenda, but as the recession is now beginning to recede, we expect the Copenhagen Summit may push this important issue to the forefront again," the Nielsen Company business insights director Europe Jonathan Banks said.

Giving details the study said Indians are most concerned about air pollution (62 per cent), water pollution and water shortages concerns come next with 61 per cent. With 54 per cent, global warming is third on the list of concerns for Indians.

Moreover, in line with global sentiments in India too majority of consumers believe that the main responsibility for solving climate change should lie with the government.

Around 28 per cent Indians feel that there should be major government-led initiatives for research into scientific and technological solutions like low-emission cars, houses and renewable energy. Besides, 23 per cent of Indians said the government should invest in improving public transport systems and there should be incentives for non-polluting behavior.

The most concerned nations about climate change are Philippines (78 per cent), Indonesia (66 per cent), Thailand and Mexico (62 per cent), the survey said.

The Philippines posted the highest increase in climate change concern in the past two years (14 per cent), followed by Vietnam (9 per cent).

Globally 37 per cent of consumers said they were very concerned about climate change. The highest level of concern was expressed in Latin America (57 per cent) and Asia Pacific (42 per cent). North America lagged behind global regions with only a quarter of respondents expressing their concern.

The survey further said 35 out of the 54 countries surveyed recorded a decline in their concern for climate change, led by Poland (23 per cent) and Canada (22 per cent).

Climate change concern also fell by 18 per cent in Portugal and 17 per cent in Taiwan, Spain and Sweden.

"It's not surprising that water and air pollution top consumers' environmental concerns as these are measurable and visible to the population compared with the concept of climate change, which unfortunately many people only take seriously when human lives are endangered through freak weather patterns," said Banks.

C. Air Monitoring System for Commonwealth Games to Be Ready By End of July

By the end of July the air quality monitoring system developed for the Commonwealth Games will start providing real time pollution data at 11 key locations in the city - and will continue to do so long after the October 3-14 mega event is over. Scientists from the Pune-based Indian Institute of Tropical Meteorology (IITM) are in the process of installing air quality monitoring stations at the 11 locations near the Games village and venues.

The air quality stations will provide information on level of pollution within a four-kilometer radius on an hourly basis and forecast about air quality 24 hours in advance through wireless color digital display panels which will be installed in various parts of the capital.

The monitoring stations are part of the System of Air Pollution Forecasting and Research (SAFAR) developed by the IITM at a cost of Rs.100 million (\$2 million).

"The system will tell us about the quality of air at any given moment and also what it will be 24 hours later, thus alerting people and helping them avoid immediate exposure to unhealthy air," Gufran Beig, SAFAR scientist and project director, told reporters.

The IITM has already started receiving data from air quality monitoring stations installed at the Palam meteorological office near the Indira Gandhi International Airport, the IITM office in West Delhi and the National Centre for Medium Range Weather Forecasting (NCMRWF) in Noida on the national capital's outskirts.

At eight other places - Delhi University, Jawaharlal Nehru Sports Complex, Thyagaraj Sports Complex, Indira Gandhi Sports Complex, Dr. S.P. Mukherjee Swimming Stadium, Major Dhyan Chand National Stadium, Siri Fort Sports Complex and Yamuna Sports Complex - it will be operational by the end of July.

A team of IITM experts has been stationed in the capital since mid-June to complete the installation work after their receiving clearance from the Commonwealth Games Organizing Committee.

"The air monitoring system will be housed in a walkway shelter made of glass-reinforced material to make it water- and fire- proof," said Beig.

The monitoring system comprises instruments like ozone and carbon monoxide analyzers, particulate matter analyzers and real time analyzers for recording other pollutants.

“The institute has already begun the trail run of SAFAR. We are now validating the data of October 2008 and 2009 by putting in parameters like temperature, pressure and humidity and matching the forecast made by the system with the real weather during that time. As of now, the accuracy level is 90 to 95 percent,” Beig said.

Explaining how the generated data will come handy for air quality forecasting, Beig said: “If on a particular day it is found that the pollution level is high, we will recommend to the Delhi government to shut some industries or divert traffic near the venues.”

The monitoring system is important as some athletes have hinted at skipping the Games as they fear that Delhi’s air is unsafe to breathe. But the Games Organizing Committee says it is committed to ensuring clean air as the event has been dubbed the first-ever Green Games.

The organizers are confident that the existing traffic density can be reduced drastically by providing quality public transport by way of more Metro trains and green buses.

The Indian capital is among the most polluted cities in the world and the ever-growing number of cars, two-wheelers and three-wheelers occupy a staggering 75 percent of road space, although only 20 percent of the commuting public uses them.

Delhi has over five million vehicles and another four million come to the metropolis from towns in adjoining states in the National Capital Region (NCR).

The Games organizers are keeping their fingers crossed, hoping the scientific methods to improve the quality of air in the capital will succeed.

China had a tough time battling air pollution during the Olympic Games last year and there are doubts whether Delhi can be as effective as Beijing in enforcing traffic curbs, raising emission standards and stopping Games’ construction work well in time to improve air quality. But India is hard at work to ensure a pollution-free event.

D. India Launches Green Urban Transport Project

The Ministry of Urban Development launched a novel Rs 1400 crore green urban transport project called Sustainable Urban Transport Project (SUTP). The project has been launched with assistance from Global Environment Facility (GEF), the World Bank and UNDP. Under the project green urban transport will be introduced in selected cities to overcome the pollution and other hazards of existing urban transport including traffic congestion impedances for pedestrians.

Four such demonstration projects have already commenced in Pimpri-Chinchwad and Pune (Maharashtra), Indore (Madhya Pradesh), Naya Raipur (Chhattisgarh) and Mysore (Karnataka).

Urban Development Minister Jaipal Reddy said that there is urgent need to shift from personalized transport to public transport. He said that the government has given very high priority to improved urban transport since the launching of JNNRUM. More than 12,000 buses

have been sanctioned for select 60 cities under the mission for the improvement of public transport; efforts for capacity building for the better public transport are also being made.

He said that an independent transport authority should be set up in each major city for the better governance and planning of public transport; the sustainable urban transport project aims at a long term strategy to empower planners, decision makers and other professionals by building their capacity, in planning and implementation of Green Urban Transport Projects.

Under the project a Unified Metropolitan Transport Authority will be developed in the cities besides a public transport help line, a traffic information management control centre, BRT junction operations, bike sharing schemes and some other innovative transport modes.

E. Industry, Transport Drive Increase In India's CO2 Emissions

India's greenhouse gas emissions grew 58 per cent between 1994 and 2007, official figures recently released showed, underlining the country's growing importance in the fight against climate change. Emissions rose to 1.9 billion tons in 2007 versus 1.2 billion in 1994, with the industrial and transport sectors upping their share in Asia's third largest economy and confirming India's ranking among the world's top five carbon polluters.

By way of comparison, between 1994 and 2007, India added more than the entire emissions produced annually by Australia.

Figures in the government report, released by Environment Minister Jairam Ramesh at a conference in New Delhi, show India is closing in on Russia, now the world's third largest greenhouse gas emitter, at nearly 2.2 billion tons in 2007.

Russia's emissions have been growing at a slower pace than those of India, whose energy-hungry economy has been expanding at about 8 percent a year as it tries to lift millions out of poverty. This has propelled investment in coal-fired power stations, steel mills, cement plants and mining, as well as renewable energy.

"Interestingly, the emissions of the United States and China are almost four times that of India in 2007", Ramesh told the conference. "It is also noteworthy that the energy intensity of India's GDP declined by more than 30 percent during the period 1994-2007 due to the efforts and policies that we are proactively putting into place. This is a trend we intend to continue," he said. Energy intensity refers to the amount of energy used per unit of gross domestic product.

India has also set a carbon intensity reduction target of 20 to 25 percent by 2020 from 2005 levels.

F. Mahindra & Mahindra Gets US Environmental Approval for Pick-Up Truck



Auto major Mahindra & Mahindra (M&M) has announced that it received environmental clearance from the US authorities for its diesel pick-up trucks, a step which could bring it closer to launching the vehicle there. Currently locked in a lawsuit with its US dealer,

Global Vehicles, over the delay in launching the vehicle, M&M said it is the first Indian automobile manufacturer to receive a Light Duty Diesel Federal Tier-2 BIN-5 & OBD II Compliance Certificate, which was granted by the Environmental Protection Agency (EPA) of the USA on August 17, 2010.

"With this certification, Mahindra has joined a select group of global automobile manufacturers who have received this certification for a diesel-powered light duty vehicle (LDVs)," the company said in a statement.

The company had planned to launch its diesel pick-up in the US by the end of 2009, but has missed two deadlines since, due to regulatory issues. It has now set 2010-end as the possible time for launching the vehicle in the US.

As a result, its exclusive American distributor – Global Vehicles (GV) -- slapped a lawsuit against the company in June, citing inordinate delays in the launch of the pick-up. However, terming GV's allegations as without merit, M&M countered the case with a dismiss motion in a US court. In the lawsuit filed before an Atlanta District Court, GV alleged there was an inordinate delay in the launch of the truck, which is based on the platform of M&M's sports utility vehicle, Scorpio. The two firms had entered into an agreement on September 28, 2006. GV claims to have made an overall investment of \$103.5 million (about Rs. 480 crore) along with franchisees towards the launch of the pick-up truck.

The company currently sells its pick-ups in Europe, Africa and South America.

Mahindra would offer the only compact diesel pickup truck available to consumers. The modestly sized TR20 and TR40 pickups are powered by 2.2-liter four-cylinder engines designed by Bosch, which use high-pressure common-rail fuel injection. The trucks reputedly get 30 miles per gallon and have a 2,600-pound payload and 5,000-pound towing capacity.

G. Maruti to Launch Limited Edition of Ritz

The country's largest car maker Maruti Suzuki India has announced it will launch a limited edition of its compact car Ritz, which will cost about Rs 16,000 more from the existing version. The firm will introduce about 5,000 units of the limited edition, which is based on the current Vxi and Vdi versions, over the next three months in both petrol and diesel options.

The new variants of Ritz will be priced at Rs 4.52 lakh and Rs 5.31 lakh (ex-showroom, Delhi), as against the existing Rs 4.36 lakh and Rs 5.15 lakh for Vxi and Vdi versions, respectively.

'Ritz Genus' will offer various new features such as key less entry, tilt steering and integrated music system.

Launched in May 2009, Ritz has clocked total sales of over 86,400 units so far. The car is available in 1.2 liter petrol and 1.3 liter diesel options.

MSI has been introducing new options, including five CNG variants of its different models such as Alto and SX4, in order to strengthen its position in the Indian car market after its share dropped below 50 per cent this fiscal year.

H. Hyundai Plans to Set up Diesel Engine Plant

Hyundai Motor India plans to give its cars a diesel push. The second largest carmaker, which manufactures petrol engines in Sriperumbudur near Chennai, is looking at building diesel engines in the country.

“We are doing a feasibility study on building a diesel engine plant in the country. The study will be completed by the end of the year, when a decision is expected,” managing director and chief executive Hyundai Motor India HW Park said at Siam’s (Society of Indian Automobile Manufacturers Association) 50th annual general meeting. “We are currently importing diesel engines from Korea,” Park said, declining to give any further details.

Hyundai’s highest seller, the i10 hatchback, doesn’t have a diesel variant. “We don’t plan to introduce the i10 with diesel option as of now,” Park said.

Hyundai, however, exports the i10 fitted with a diesel engine from the country, but didn’t see it conducive to launch it with an imported engine, as it would cost too high in the domestic market.

The rest of Hyundai cars i20, Verna and Sonata Transform are powered by imported diesel engines, which don’t contribute much to Hyundai’s overall sales. Accent and Santro don’t have diesel variant options.

Rival carmakers Maruti Suzuki, General Motors and Tata Motors build diesel engines in the country. Hyundai Motor India also announced a 1.2 per cent price hike across all its cars from September 1, owing to higher input costs.

I. Electric Vehicles for Sustainable Transport Under Review in India

In March this year, Delhi chief minister Sheila Dikshit discussed a plan to promote electric vehicles (EVs) as a mode of transport. Along with promoting efficient public transport, this could be an appropriate solution to increasing urban air pollution and severe congestion, which is also driving up greenhouse gas emissions and turbo-charging India’s fossil fuel import bill.

Given the Indian economy’s unhealthy dependence on fossil-fuels, over 70% of which has to be imported, any technology that helps phase out oil-dependent forms of transport should be seriously considered. EVs not only provide cleaner environment, but also reduce the dependency of the transport sector on imports and price volatility of fossil fuels. The energy efficiency of EVs is 46% higher than internal combustion engines (ICEs). They also have the potential to reduce carbon dioxide emissions by 13-68% compared to ICEs. With the help of advanced V2G (vehicle-to-grid) technology, deployment of electric vehicles can directly decrease the emissions of carbon dioxide and other pollutants within a vehicle’s lifecycle, which will significantly relieve air pollution in cities. Through peak-shaving (sending power back to the grid when demand is high), EVs can also indirectly reduce carbon dioxide emissions.

Key technologies such as batteries, electric motors and motor controllers are still undergoing improvements, along with manufacturing techniques of lithium-ion batteries, including material, battery design and process control. The key performance indicators of batteries, such as power output, longevity, consistency and safety, can still be further improved, and the apprehensions of electricity shortages can be managed by ensuring that cars are charged at off-peak hours.

Given the uncertainty around the global economy and, post-Copenhagen, political direction on climate change many are advocating a wait-and-watch policy. However, India’s auto market is

showing robust growth of over 20%. Can it afford to slow down as the world searches for sustainable and low carbon solutions to a fuel guzzling pathway?

The Indian government has initiated moves towards a policy on EVs. In April this year an inter-ministerial group was created to conduct a feasibility study and frame a policy by the end of the current fiscal year. At present 4% excise duty is levied on production of EVs, while components attract 10%. Imported EVs are charged 14% duty. Despite the constraints, electric scooters and small buses, much more than cars, are becoming popular in Indian mega-cities like Delhi & Bangalore. Many auto manufacturers have either already launched or gearing up to launch EVs in India.

Given India's abundant sunlight, the electricity required for EVs has the potential to be produced from various natural sources like solar energy. India's established auto component manufacturing infrastructure, modest manufacturing and R&D costs, high urban congestion and the presence of a large domestic market could make it a significant global player in electric vehicles.

J. Indian Government to Soon Notify Fuel Efficiency Standards

After wrangling between the power and transport ministries, the government has now decided to notify fuel efficiency standards for auto makers under the Energy Conservation Act which will come into force from January next year. "The standards will be notified under the Energy Conservation Act 2002 by the Bureau of Energy Efficiency and not under the Motor Vehicle Act," environment minister Jairam Ramesh said at the Society of Indian Automobile Manufacturers (SIAM) summit here. This has been decided, he said, "after considerable wrangling between different ministries and inhibition by the automobile sector.

"And since technical work has been done. Only fine-tuning is remaining. I would urge SIAM to work with the power and surface transport ministries to work with the clear objective of moving towards mandatory fuel standards from January next year."

For quite sometime, the matter had been a bone of contention between the power and the road transport and highways ministries.

The SIAM has agreed to move towards voluntarily labeling from October this year under which all of its members declare mileage of their vehicles certified by the Automotive Research Association of India.

However, Ramesh felt that it was high time that the automobile industry move at the earliest from the voluntary regime to the mandatory fuel efficiency standards regime in the absence of which it is expected to be a major contributor to the country's total green house gas emissions.

"I had been fighting all along that we must move from voluntary to mandatory regime of fuel efficiency standards. If the US could do it... President Obama has done it even though he had legislation problem, he used the Environment Protection Act to move into the regime of mandatory fuel efficiency standards. Let's also quickly do that," he said.

Presently, the transport sector contributes about 15 to 20% of the country's total greenhouse gas emissions. "But the rate at which the automobile sector is growing our own estimations are that by the year 2025-30 it could account close to 25% of our GHG emissions."

"Hence not only because of the air pollution point of view but also the climate change point of view, environment-friendly transportation assume special importance," the minister said.

K. Subsidy Fuels Indian Oil Company Stocks; Diesel Deregulation Coming?

Analysts say with the easing of crude prices, the government is in a position to deregulate diesel prices without increasing retail prices significantly. India oil marketing companies were buoyant after the firms received subsidies from the government to offset selling losses and on expectations that the government may deregulate diesel prices soon.

State-run oil marketers like Indian Oil Corp., Bharat Petroleum Corp. Ltd. and Hindustan Petroleum Corp. Ltd. sell auto and cooking fuels at government-set discounted prices to help control inflation. The companies are partly compensated by the government with cash subsidies and discounts on crude oil purchases from upstream companies.

Bharat Petroleum soared 11.9% recently to an all-time high of 781.05 rupees (\$16.75), while Hindustan Petroleum jumped 7.2% to a 52-week high of 545.80 rupees. Indian Oil rose 4.3%, while the benchmark Sensex was up 0.2%. Upstream companies such as Oil and Natural Gas Corp. and Oil India were trading up 2.8% and 2.4%, respectively.

A spokesman for Bharat Petroleum told Dow Jones Newswires that all three oil marketing firms together have received a cash subsidy of 140 billion rupees (about \$3 billion) recently for the fiscal year that ended March 31, 2010, with Bharat Petroleum alone receiving a subsidy of 29 billion rupees (\$622.3 million).

Analysts say the stocks are extremely sensitive to any news related to subsidies given that the companies incur huge revenue losses on the government-set prices. Hopes that diesel prices will soon be deregulated are driving stock prices as well, they say.

India in late June lifted state control on gasoline prices and allowed them to be market-determined, leading to an increase of about 3.50 rupees a liter in the price of gasoline. The price of diesel was increased by 2 rupees a liter and the government said the fuel will eventually be market-driven as well.

Analysts say with the easing of crude prices, the government is now in a position to deregulate diesel prices without increasing retail prices significantly; a key concern given the country is already battling rising inflation driven initially by food prices. And Bharat Petroleum is best placed to benefit from the deregulation, if it happens, as the company has plans to significantly expand its exploration and production portfolio.

Petrol may become costlier by 50 to 70 paise very soon as state-owned oil companies get ready to exercise their pricing freedom for the first time after the government decontrolled petrol prices on June 26th. As noted above, petrol prices went up by Rs 3.50 a liter with the decontrol, but for further increases oil companies were to devise a transparent and market-linked pricing system.

"Petrol price may go up by 50 paise if oil PSUs take a 15-day average of international prices and up to 70 paise if a one month average is taken," an oil ministry official said. "The new rates will be announced only after August 31st after the Parliament session ends," he said, requesting anonymity.

The three public sector oil marketing companies (OMCs)—Indian Oil, Bharat Petroleum, and Hindustan Petroleum—will meet to work out a mechanism to peg pump prices of petrol to international prices, chairman of a state-owned fuel retailing firm said. Ideally, petrol price revision should be done every fortnight to capture global oil price fluctuations, he said. “But, a final call will be taken after the meeting”.

The pricing mechanism of the three PSUs, which control over 90% of the fuel retail market, will also impact private oil companies—Reliance Industries (RIL), Shell India and Essar Oil. “The PSU cartel will dictate the market price; we will be forced to follow their rates,” an executive working for a private oil company said. “Cartelization will restrict competition,” he said, requesting anonymity.

Private retailers are also unhappy with the government’s reluctance to free diesel prices. Petrol pricing freedom alone makes no sense as real business volume comes from diesel sale, pricing for that is still restricted, he said. Diesel constitutes 40.8% of the total sales of petroleum products in the country.

Since 2002 private oil companies are free to charge market rates for petrol and diesel but are unable to compete with their public sector counterparts who sell fuel often below cost under government dictate. On June 26th the government had announced freeing both petrol and diesel pricing from its control but allowed state-owned oil companies to fix petrol prices only.

The government continues to control diesel prices sold through pumps of public sector oil companies. As a result, state-owned oil companies are losing about Rs 2.50 on every liter of diesel sold from their pumps.

47. World's First Solar-Diesel Plant Opens

THE world's first solar-diesel power station has opened in Western Australia's Pilbara region at Marble Bar, known for its record high temperatures. WA's Mines and Petroleum Minister Norman Moore opened Horizon Power's Pippunyah Solar Diesel Power Station today.

The new \$34 million station is powered by the biggest sun-tracking solar panel farm in Australia.

"Marble Bar is significant for many reasons; the three billion year-old rock on which it was based, the world record it held for the most consecutive days of maximum temperatures and, now, a world-first in power generation technology," the minister said.

The power station will generate 1048 megawatt hours of solar energy a year and provide 65 per cent of daytime energy demand from solar power. It is estimated it will save 1119 tons of greenhouse gas emissions a year and save between 35 and 40 per cent of diesel consumption a year.

The station began powering Marble Bar in May but the testing period was only completed at the end of July.

Horizon Power managing director Rod Hayes said the traditional custodians of the 45,373 square kilometers east Pilbara region, the Njamal people, were consulted during the development of the new station. "The group chose the name Pippunyah, which is the name of the river that runs below the power station," he said.

The project is supported by the Federal Government through the renewable remote power generation program and is implemented by WA's Office of Energy.

48. Many Indonesian Cities May Lose Out On Adipura Award

Many of the cities that were awarded the Adipura prize may not be able to retain their crown as the cleanest and greenest cities after the government tightened the rules for the award by assessing water and air pollution. Environment Minister Gusti Muhammad Hatta said the addition of new criteria would make for tougher competition for cities to win the Adipura award, which had been contested since 2002.

"Many cities that were regularly awarded this prize will, not surprisingly, not be recipients again given the new parameters," he said when unveiling the new criteria.

With the new criteria, the cities would be assessed based on efforts to deal with air and water pollution and the total area of green spaces available to the public. Prior to this, the ministry only awarded winners based on waste management. This year, 140 cities, including all five regencies of Jakarta, won the award, up from 126 cities in 2009.

Critics have said the award was not an effective way of raising environmental and health issues as the level of air and water pollution remained high.

The new rules take effect this year and will determine the 2011 winner to be announced in June.

Acting Deputy Minister for Pollution Monitoring Hermien Roosita said the revitalization of the Adipura award would be a starting point to creating environmentally friendly cities. She insisted that teams would assess the total area of green space open to the public because it was a crucial public health issue. "If the city allocates less than the required 30 percent to green spaces — such as the 11 percent in Jakarta — they would not win the award,"

The ministry added that it would also provide air quality monitoring systems to measure air pollution. "Air pollution monitoring will only apply to metropolitan and large cities," she said.

Hermien added that in the first phase, the ministry would assess the total number of posts needed to run emission tests on vehicles in each city.

49. Camacho Signs Clean Diesel Bill For Guam

Gov. Felix Camacho has signed a bill into law that will stop the importation of diesel fuel that doesn't meet the ultra-low-sulfur diesel standard starting next January. Camacho signed Bill 414 at Adelup, making ultra-low-sulfur diesel the legal standard for diesel fuel on Guam. This standard refers to fuels containing less than 15 parts per million of sulfur content, which is the U.S. Environmental Protection Agency's standard for ultra-low-sulfur diesel.

In January, gas companies will be given time to deplete their on-island inventories of diesel fuel that doesn't meet the new standard before tanks are replenished with ultra-low-sulfur diesel, according to a release from Senator Telo Taitague's office. Taitague, who is seeking re-election, is the bill's author.

Taitague said the signing of the bill is an important milestone for Guam, the environment and for economic sustainability. She added that the standard was passed in the U.S. more than four years ago and it was time Guam had it in place.

"Now that this bill is law, local companies and government agencies can upgrade their existing fleets of diesel-powered vehicles to include those newer vehicles that require the use of (ultra-low-sulfur diesel) in their engines," Taitague stated in the release.

Taitague also told the Pacific Daily News that the use of ultra-low-sulfur diesel fuel could result in fewer breakdowns of the island's ambulances and maybe even newer school buses for the Guam Department of Education. Pacific Daily News files show that nine of 15 ambulances were out for repair in June because some of the vehicles are more than 10 years old, and the Guam Fire Department is using low-grade diesel fuel in them when it should be using ultra-low-sulfur diesel.

The business community and government agencies are welcoming the new law.

ABOUT BILL 414

- Effective Jan. 1, 2011, all diesel fuel imported to Guam for sale and distribution will have to meet the U.S. Environmental Protection Agency's standards for ultra-low-sulfur diesel fuel.
- The standard is defined as fuels containing less than 15 parts per million of sulfur content.
- A task force will be established to conduct research on the issue of Guam's transition to the use of ultra-low-sulfur diesel.
- The task force will analyze the information from the research on issues such as cost to suppliers, individuals paying at the pump, GovGuam agencies, and the Marianas region to name a few.

50. Imports of Two-Wheelers Increase, Four Wheelers Decrease in Nepal

The imports of two-wheelers into Nepal through the Birgunj customs point have been witnessing a continuous rise for the last three years. Some 90 percent of the total vehicles imported in the country make their entry via this point.

During the fiscal year (FY) 2065/66, 82,458 motorbikes worth more than Rs 3.63 billion had been imported through this point while in the last FY 2066/67, 108,185 motorbikes amounting to more than Rs 6.88 billion made their way into the country. During the FY 2064/65, 51,213 motorbikes worth more than Rs 2.4 billion were imported in the country through the Birgunj customs point.

The imports of light four-wheelers have been affected with bank and financial institutions (BFIs) adopting strict lending policies to cope up with liquidity crisis in the banking system. However, the imports of two-wheelers continue to rise due to aggressive promotional schemes launched by the dealers of such vehicles in the country.

Yamaha, Bajaj, Honda, Hero Honda, Suzuki are amongst the most preferred motorbike brands in Nepali market. nepalnews.com

The import of four-wheelers through the Birgunj Customs have fallen down during the last fiscal year (FY) 2066/67 compared to that of the previous FY. According to the Birgunj Customs Office, the imports of light and passenger vehicles have gone down last year even though there has been some growth in the imports of heavy vehicles.

Entrepreneurs have attributed the strict lending policy adopted by Bank and Financial Institutions (BFIs) due to liquidity crisis to the decline in the imports of light and passenger vehicles. Some 80 percent of the small and medium size vehicles, which are traded in Nepali automobile market, are purchased through the loans floated by BFIs.

During the last FY, some 10,500 units of light and passenger vehicles as well as trucks worth approximately Rs 10.98 billion were imported. The previous FY had seen the imports of 11,118 units of such four-wheelers amounting to Rs 8.64 billion.

Similarly, during the last FY 2066/67, 5,500 units of light vehicle worth tentatively Rs 5.38 billion were imported while the previous FY 2065/66 had witnessed the imports of 5,700 units of cars, jeeps and vans amounting to around Rs 3.80 billion. nepalnews.com

SOUTH AMERICA

51. São Paulo State to Issue More Stringent Standards for Pollutants by End of 2010

São Paulo state plans to issue more rigorous air quality standards by year's end that will be in accordance with the most recent guidelines recommended by the World Health Organization, an official with the state Environmental Secretariat (SMA) told the press on June 22nd.

A 1976 law set statewide, mandatory air quality standards for a variety of pollutants, including sulfur dioxide, nitrogen oxides, carbon monoxide, particulate matter, and volatile organic compounds, SMA official Claudio Alonso said. That law said the air quality standards had to be reached gradually, "but didn't set a deadline," he said. When issued by the end of 2010, Alonso said, the new standards will include a deadline.

The state's 1976 mandatory air quality standards also required industrial firms in state—the country's industrial hub responsible for 33 percent of Brazil's gross domestic product—to reduce pollutant emissions by investing in cleaner technologies. "When the SMA sets new mandatory, air quality standards by the end of 2010, it will do a sector-by-sector analysis to determine which industrial sectors most need to gradually reduce their emissions, as well as an analysis of which industrial firms most need to reduce their emissions," Alonso said.

Companies with emissions of any of these pollutants that are above the new standards will be required to invest in cleaner technologies to bring their emissions levels into compliance.

Alonso is an adviser for a working group now drafting the air quality standards for the state. The group includes representatives from SMA; the state health secretariat, FIESP; the state's largest industrial federation; and environmental nongovernmental organizations.

SMA will monitor compliance with the new standards when companies renew their environmental licenses, Alonso said. Companies will be required to submit their current, independently certified pollutant emissions levels. Smaller industrial firms must renew their licenses every five years, while larger companies must do so every three years, he said. "The SMA will not renew the environmental operating licenses of industrial firms that don't reduce their ... emissions unless they make technology upgrades needed to reduce those emissions and comply with the new standards," Alonso said.

A central goal of the new standards is to reduce tropospheric ozone levels in the state. There are 50 to 90 days per year when ozone levels in the city of São Paulo are higher than the 1976 standard of 160 micrograms per cubic meter, Alonso said. But reducing tropospheric ozone is complicated, he said, because it "is not produced by a specific emissions source, but is caused by a photochemical reaction between nitrogen oxides and volatile organic compounds." The goal is that the new standards will help reduce levels of these emissions and "that this will also gradually reduce tropospheric ozone levels."

Since 1976, the air quality of São Paulo state has improved for various reasons. Resolutions by the National Environmental Council (CONAMA) have set increasingly lower vehicle emissions levels, thus requiring automakers to install catalytic converters and other emission-reducing controls in newer models. CONAMA has also required the state oil company Petrobras to produce cleaner-burning fuels, including lower-sulfur diesel for buses and trucks.

52. Sao Paulo Issues Decree to Implement Climate Law, Emissions Targets

On June 24th, Alberto Goldman, governor of São Paulo State, issued a decree implementing the state's climate change law and its target for the state to reduce its greenhouse gas emissions 20 percent from 2005 levels by 2020, an official at the state's Environmental Secretariat told the press. The decree (No. 55,947), which took effect immediately, requires the state's Environmental Secretariat (SMA) to set down criteria for establishing voluntary emissions reductions targets for various sectors, including the industrial, ranching/agricultural, energy, and transport sectors. Those targets must be established by April 2011, Casemiro Tércio Carvalho, the coordinator of environmental planning for SMA, told the press.

SMA's criteria in setting those voluntary targets will be based on the potential of each sector to reduce its greenhouse gas emissions. Potential will measure the efficiency, or amount of emissions per good produced, in each sector, Tércio Carvalho said. The first set of emissions data will come from a 2010 greenhouse gas inventory, based on 2005 emissions that likely will be ready by September.

After this year's initial inventory, the climate change law (No. 13,798), finalized in late 2009, requires the state to conduct an updated greenhouse gas emissions inventory every five years. With each new inventory, the state also can set intermediate reductions necessary to arrive at the 20 percent reduction target by 2020.

"As the energy and transport sectors are those most responsible for greenhouse gas emissions in the state, SMA will likely set voluntary emissions reductions targets for those sectors at over 20 percent by 2020," greater than the statewide target, Tércio Carvalho said. "The transport sector alone could reduce emissions by up to 40 percent by 2020."

“[T]he chemical and petrochemical sectors already have good emissions standards,” Tércio Carvalho said. For those sectors, he said SMA will likely set emissions reductions targets of less than 20 percent.

The June decree also focuses on sustainability issues, requiring different parts of the government to come up with plans to make various sectors more efficient and environmentally friendly.

Under the decree, the State Transportation Secretariat must draft plans to increase sustainable transport. The secretariat plans to do so by creating public/private partnerships to build railways and waterways to reduce the majority of cargo now being transported by truck.

The decree also requires the State Energy Secretariat to draft plans to increase the percentage of renewable energy in the state's energy matrix, mainly through the use of more wind and biomass energy projects, which would be eligible for government credit lines and tax breaks.

Low-interest, government credit lines were created under the decree for industries that emit cleaner and/or more efficiently-generated energy in their production lines. For example, the decree allows industries to receive government loans to replace fuel-oil-powered boilers and furnaces with cleaner, natural-gas-powered ones.

An inter-secretarial commission will approve the sustainability plans from each secretariat as well as the sector-by-sector emissions reduction targets to be set down by SMA.

SMA can determine if a company is meeting its emissions-reduction obligations based on its registry of emissions per goods produced. SMA inspectors may also visit companies to verify compliance.

Although the targets under the state law are voluntary, the decree does include penalties for noncompliance. For example, the state may refuse to renew operational licenses of companies that do not sufficiently reduce their emissions.

The state law is more rigorous than Brazil's national climate change law (No. 12,187), which was issued in December 2009, in part because the state has the power to decline license renewals for companies that do not sufficiently reduce emissions.

The national law adopted “as a voluntary national commitment, actions to reduce emissions between 36.1 percent and 38.9 percent from projected 2020 emissions levels.” It will be implemented by a 2010 presidential decree that “will establish emissions reductions, on a sector-by-sector basis” and will “detail the actions” to be taken to reach them.

53. Argentina Boosts Biodiesel Content Required In Fuel to 7%, Hopes to Hit 10%

On July 5th, Argentina's Ministry of Federal Planning, Public Investment, and Utilities issued a resolution requiring diesel fuel for vehicles to contain at least 7 percent biodiesel, up from the current 5 percent requirement. One day later, Planning Minister Julio de Vido said the country, already one of the world's top biodiesel producers, likely would raise the amount of vegetable oil it requires in diesel to 10 percent by the end of the year.

While the government in the past cited the need to protect the environment as a major reason to promote the use of biofuels, this time de Vido said the main impetus was Argentina's difficulty in

selling its soybean oil due to a trade dispute with China, its main customer. Argentina is the world's top exporter of soybean oil.

The move "will break with our dependence on soy oil exports and free up that oil to boost our fuel reserves," the minister said. The Argentine Biofuels Chamber recently estimated that 2010's biofuel exports would exceed 2009's 1.15 million tons.

De Vido made the announcement at the opening ceremony for a biodiesel injection plant at a major electricity facility owned by U.S. energy company AES. The plant has an installed capacity of 2.83 megawatts, or about 10 percent of Argentina's total. The injection plant will add biofuel to power a natural gas and diesel fuel combined-cycle electricity generator in San Nicolas, 240 kilometers (150 miles) northwest of Buenos Aires. The minister said the government was in talks with other utilities to promote the use of biodiesel at their generation plants as well.

54. Cosan: Biofuels JV Deal with Shell to Close Soon

Brazil's Cosan, the world's biggest cane sugar and ethanol producer, should soon finalize a deal with oil giant Royal Dutch Shell over a \$12 billion joint venture in biofuels, Cosan's chief executive has announced. "It's a complex deal. There are 50 contracts and the execution is complicated," said Marcos Lutz, Cosan's CEO, in a conference call on the company's quarterly earnings released recently.

"The deal is very advanced, but I can't give you an exact date" for the closing.

The two companies signed a memorandum of understanding in February. At that time it was estimated the deal could be concluded in up to 180 days.

Lutz expects Cosan's debt ratings to rise quickly once the deal with Shell is finally sealed, allowing the company to raise funds in bond markets at better terms. The company is rated BB- by Standard & Poor's and Fitch Ratings and Ba3 by Moody's Investors Service, three notches below investment grade.

Once the deal with Cosan is completed, it will mark the biggest-ever foray into biofuels by an oil major. The venture, which would create the No. 3 fuel distributor in Latin America's largest country, underscores cane ethanol's lure as an alternative to gasoline.

The 50-50 joint venture, with almost 4,500 filling stations nationwide, will better position Cosan and Shell to compete with the two top players on the Brazilian fuel distribution market, state oil giant Petrobras and Ipiranga, a unit of Brazil's Grupo Ultra.

AFRICA

55. OECD Advises South Africa to Use Tax Policy to Reduce GHG Emissions

South Africa should consider instituting a carbon tax and raising fuel taxes to change consumer behavior in a bid to reduce its carbon dioxide emissions, according to a report released on July 19th by the Organization for Economic Cooperation and Development. The Economic Survey of South Africa 2010 advised South Africa to accelerate efforts to reduce its "relatively large" emissions of greenhouse gases.

"In particular, there has as yet been no concrete action toward pricing carbon emissions in the economy via a carbon tax or cap-and-trade system, and South Africa has made relatively little use of green taxes generally," the report said.

The organization said that while green taxes generally should not be viewed as revenue-raising measures, "given South Africa's substantial cyclically adjusted budget deficit, revenue considerations reinforce the environmental case for taxing emissions."

In South Africa's case, a carbon tax is likely the best way of putting a price on carbon emissions, as it is relatively simple, OECD said. The report also called for higher taxes to raise the country's gasoline prices, currently among the world's lowest.

Starting in September, South Africa's vehicle tax will vary by emissions category, penalizing cars with higher carbon dioxide emissions. OECD called this a positive step. However, "fuel taxes would be preferable, as with the vehicle tax the cost per kilogram of emissions is quite different for two owners of a given type of vehicle who drive widely varying distances," the survey said.

56. South African Light Trucks Carbon Tax Delayed Until March

A national tax on carbon dioxide emissions from new passenger vehicles that is expected to take effect in September will be expanded to include light commercial vehicles (LCVs), South Africa's National Treasury confirmed on August 3rd. "Including double cabs in the CO₂ vehicle emissions tax net is also in line with the original intent of this proposed tax: the taxation [of] high engine capacity vehicles to discourage the use of vehicles are not fuel efficient and encourage the shift to the more fuel efficient ones," the Treasury said in a written statement on the carbon tax.

Starting September 1, new passenger vehicles will be subject to a one-time tax at the time of sale, based on their certified level of carbon dioxide emissions. The tax would add 75 rand to the vehicle price for every gram of carbon dioxide emitted per kilometer above a 120 g/km threshold, or just under \$0.60 for every ounce of carbon dioxide emitted per mile above a level of 6.8 ounces per mile.

About one-third, or 2.4 million, of the nation's estimated 7.4 million vehicles fall into the LCV category, according to the National Association of Automobile Manufacturers of South Africa. LCVs include pickup and sport utility trucks, or bakkies as they are known in South Africa, as well as delivery vans weighing 3,500 kilograms (7,716 pounds) or less. Treasury spokesman Jabulani Sikhakhane has said that large commercial vehicles, those over 3,500 kilograms in weight, will not be subject to the tax, at least not initially.

Following a meeting between Finance Minister Pravin Gordhan on August 19 and CEOs of the seven motor vehicle manufacturers in South Africa, as well as a delegation from Business Unity SA, it was decided that the emissions tax on double cab vehicles will only be applied from March 1, 2011, says the Treasury. "To allow manufacturers and importers sufficient time to test and determine the CO₂ vehicle emissions of all double cabs, the tax on double cabs will only be applied from March 1, 2011," it said in a statement.

"One of the industry's concerns about the inclusion of light commercial vehicles was based on the fact that reliable data on CO₂ emissions by light commercial vehicles (including double cabs)

was not available, and that there was no internationally applied test method to measure the emissions of light commercial vehicles."

The Treasury said that the National Regulator for Compulsory Specifications (NRCS) had, however, confirmed that its testing facility in East London measured CO₂ emissions for all vehicles tested there, including light commercial vehicles. The industry responded that not all vehicles were tested at the NRCS facility.

The CO₂ emissions tax on passenger vehicles would come into effect September 1st.

The meeting also agreed on the need to expedite the availability of cleaner fuels in South Africa. "Emerging economies such as China, Brazil and India have made significant progress with the introduction of cleaner fuels, which are especially necessary to help improve local air quality." The Treasury said although cleaner fuels did not directly reduce CO₂ emissions, the need for cleaner fuels to improve fuel efficiency was important.

The meeting further agreed that industry and the Treasury would encourage motor dealers to show the CO₂ vehicle emissions tax separately on invoices. "Environmental taxes are based on 'the polluter pays' principle and they seek to influence and change behavior. Transparency of the tax to the polluter is therefore important."

According to Sikhakhane, the decision to include LCVs is in line with the Value Added Tax (VAT) Act, which recognizes that certain types of light trucks are frequently used as passenger vehicles.

The carbon tax, which will be collected from motor manufacturers and importers, will generate an estimated 450 million rand (\$61.8 million) annually, according to the Treasury.

In its 2010 economic survey of South Africa unveiled on July 19th, the Organization for Economic Cooperation and Development called the carbon tax a "positive step" but added that "fuel taxes would be preferable." (see above) The Paris-based group said that under South Africa's tax, two owners of the same vehicle would pay the same carbon tax. But the two may travel unequal distances, resulting in one vehicle emitting more carbon dioxide than the other.

The government, however, views a fuel tax as regressive, taking a heavier toll on those with lower incomes. Cleaning up the country's vehicle fleet must be done in such a way that any measure has a limited impact on the nation's poor, Treasury communications director Singh said. "While higher fuel taxes may also help achieve environmental and other social objectives (e.g. reduced traffic congestion), there are equity reasons why we cannot have a fuel tax that is disproportionately high," she said.

She also noted that a fuel tax could hurt the majority of South Africans who still travel en masse from townships to their places of work in the cities. Workers pay \$1.25 per person for a one-hour trip crammed in vans, known as taxis, filled with 10 or so people. "Until we have a decent and improved public transport system, taxis will remain an important part of our transport network," Singh said.

Singh added that the Treasury is expected to release a discussion document on carbon taxes that will provide further detail on "the issue of other environmental taxes," although she did not specify when the document would be released.

57. South Africa's Petrol Price to Drop by 10 Cents a Liter

The price of all grades of petrol will drop by 10 cents a liter, the energy department said. The wholesale price of diesel with 0.05 percent sulfur content would remain unchanged, while the price of diesel with 0.005 percent sulfur content would increase by two cents a liter, the department said. The wholesale price of illuminating paraffin would decline by five cents a liter, while the single maximum national retail price for illuminating paraffin would drop by seven cents a liter.

The maximum retail price for liquid petroleum gas (LPGAS) would decrease by 26 cents per liter only in Gauteng. A liter of 95 ULP in Gauteng would now cost R8.07 per liter.

The department said that during the period under review—July 30 to August 26 -- the average international product prices of petrol, diesel and illuminating paraffin had increased.

CLIMATE

58. BASIC Countries Find No Common Approach for Emissions Reduction

Ministry-level officials from Brazil, South Africa, India, and China failed to agree on a way to fairly share the burden of reducing greenhouse gas emissions, the theme of their climate change meeting in Rio de Janeiro on July 25–26th.

“We talked a lot about equity but didn't arrive on a common formula for establishing it,” Indian Minister of Environment and Forests Jairam Ramesh said at a July 26 press conference held by the so-called BASIC group of countries. “Brazil and South Africa's approaches are based on historic responsibility for climate change, with South Africa emphasizing, in particular, the capacity of each country to reduce emissions. India and China share the approach of per capita emissions reductions, those based on their respective population levels.”

At three previous meetings, BASIC nations have said that because the Western world is historically responsible for most greenhouse gas emissions, industrialized countries need to take on quantified greenhouse gas emissions reductions through a second commitment period under the Kyoto Protocol. The protocol requires 36 industrialized countries to cut their greenhouse gas emissions by an average of 5.2 percent compared with 1990 levels during the 2008–2012 compliance period.

The four BASIC countries have argued that developing nations should not adopt specific post-Kyoto reduction targets, but instead should undertake “ambitious nationally appropriate mitigation actions,” meaning that each should take on commitments commensurate with both its historical emissions and its ability to take action.

The Copenhagen Accord that came out of U.N. climate change talks held in the Danish capital in December 2009 also referenced nationally appropriate mitigation actions for less developed nations. The accord said that such actions “will be subject to international measurement, reporting and verification in accordance with guidelines adopted by the Conference of the Parties [to the United Nations Framework Convention on Climate Change].” The next conference of the parties will be held in Cancun, Mexico, Nov. 29–Dec. 10.

Xie Zhenhua, vice chairman of China's National Development and Reform Commission, said at the July 26th press conference that “BASIC countries need to find common climate change

policies, but this issue is linked to politics, economics, and survival.” “Our expectations, in general, about any climate change accord happening in Cancun are humble,” he said.

Brazilian Environment Minister Izabella Teixeira said the countries “expect to have a greater convergence of dialogue regarding equity” at the next BASIC meeting. However, BASIC nations have said that industrialized countries must agree on common climate change mitigation efforts if any headway is to be made in Cancun and that the United States, with the highest level of historical emissions, should have a fairly lofty target.

Delays by the United States and Australia in implementing schemes to cut carbon emissions has added to gloomy sentiment about possible results from the Cancun meeting. “If by the time we get to Cancun (U.S. senators) still have not completed the legislation then clearly we will get less than a legally binding outcome,” said Buyelwa Sonjica, South Africa's Water and Environment Affairs minister. “For us that is a concern, and we're very realistic about the fact that we may not” complete a legally binding accord, she said.

Ramesh expressed concern that “\$30 billion in fast-track financing [to help developing countries adapt to climate change], promised by industrialized countries at Copenhagen, between 2010–2012 to fund climate change mitigation efforts by developing nations is on a very slow track.” “Most of this money is supposed to go to Africa, small island states, and the least-developed countries,” Ramesh said. “And so far, only \$6 billion has been released, \$4 billion of it going to Brazil, mainly to fund REDD [Reducing Emissions from Deforestation and Forest Degradation] projects. This is not encouraging.” In a joint statement issued at the conclusion of the BASIC meeting, ministers agreed that the fast-start financing will be the key for an effective result at Cancun.

The ministers did not discuss cooperation on clean energy or energy-efficient technologies because that was not a theme of the meeting, Luiz Eduardo Figueiredo, the chief climate change negotiator at Brazil's Foreign Ministry, said at the press conference.

At the Rio meeting, BASIC members put into practice two recently discussed format changes: allowing each delegation to bring technical experts and opening up the meeting to other developing countries. Each BASIC nation brought two technical experts and Claudio Salerno, Venezuela's special envoy for climate change, attended.

59. U.N. Climate Negotiators Lay Out Options for When Kyoto Protocol Expires

On July 20th, negotiators working toward an international climate change treaty released an outline of options for a contingency plan in case a new agreement is not in place when the Kyoto Protocol's commitment period for reductions in greenhouse gas emissions expires at the end of 2012. The 1997 protocol's first compliance period requires 36 industrialized countries to cut emissions by an average of 5.2 percent compared with 1990 levels between 2008 and 2012. But the protocol offers no guidance for the post-2012 period.

The paper, titled “Legal considerations relating to a possible gap between the first and subsequent commitment periods,” explored several possibilities for creating a second compliance period, including:

- “an ‘opt-out’ or tacit acceptance procedure” or a simpler “opt-in procedure” that would govern the post-2012 period and that could perhaps be agreed to by a plenary vote;
- a set of amendments to the existing protocol that would require the approval of three-quarters of all parties to the Kyoto Protocol, or 143 states; or

- A “provisional application of an amendment to the Kyoto Protocol” that could be passed under expedited terms.

The outline was produced by one of the two main negotiating tracks in the United Nations Framework Convention on Climate Change process and will be one of the main focuses of attention at inter-sessional negotiations set to take place near Bonn, Germany, Aug. 2–6.

The paper said that ratifying a successor agreement should be far easier than ratification of the Kyoto Protocol because the new agreement would consist largely of amending existing emissions reduction targets.

The text, produced in negotiations of the Ad-hoc Working Group on the Kyoto Protocol (AWG-KP), assumes that the post-2012 period would be modeled substantially on the Kyoto Protocol. Most significantly, that means it would require emissions reduction commitments only from wealthier industrialized states, referred to as Annex I countries in the text of the protocol. It also means the post-2012 agreement would be based on greenhouse gas emissions reductions compared to a 1990 base year rather than on some alternative plan, such as emissions per unit of gross domestic product or a different baseline year.

Additionally, it would exclude the possibility of some other requirement, such as contributions by wealthy nations to an adaptation program or funding of a technology transfer regime.

The United Nations-sponsored climate change summit held in Copenhagen in December 2009 failed to produce a post-2012 agreement. And with many delegates and leaders saying an accord is unlikely to result from a summit in Cancun, Mexico at the end of 2010, it has become increasingly likely that the 2008–2012 compliance period will end without a follow-up agreement in place.

If an agreement is reached at next year's summit, the 2011 Conference of the Parties to the United Nations Framework Convention on Climate Change in South Africa, for example, there would be a scant nine months for it to be ratified before Kyoto's first commitment period ends. U.N. rules require ratification 90 days before an agreement can go into effect, meaning any new deal would have to be ratified by Oct. 4, 2012, to have the agreement in force by Jan. 1, 2013. In comparison, ratification of the Kyoto Protocol took nearly seven years.

The AWG-KP track is expected to take center stage at the Aug. 2-6 talks in Bonn. That negotiating track, which is backed by most developing countries, is separate from the Ad—hoc Working Group on Long-term Cooperative Action (AWG-LCA) track, which seeks to increase the number of countries that would take on binding commitments in the post-2012 period.

Negotiations in the AWG-LCA tract, which are backed by the United States and many other wealthy countries, are expected to be the centerpiece of a later round of negotiations to take place in late September or in October at a yet-to-be determined location.

60. Study: Emissions Rise in China, India Offsets Decreases in Developed Countries

Global carbon dioxide emissions remained stable in 2009, as increases in China and India offset decreases in industrialized countries, the Netherlands Environmental Assessment Agency said in a study released on July 1st. According to the study, No Growth in Total Global CO₂ Emissions in 2009, emissions from fossil-fuel combustion fell 7 percent in industrialized

countries, while in China and India, they increased by 9 percent and 6 percent, respectively. "Strong increases in carbon dioxide emissions from fast-growing developing countries such as China and India have completely nullified carbon dioxide emission reductions in the industrial world," the agency said in the study.

The study contrasted with last year's forecast by the International Energy Agency, which estimated a 3 percent year-on-year drop in global emissions for 2009.

According to the Dutch study, the drop in emissions from industrialized economies that were members of the Organization for Economic Cooperation and Development was due to the recent economic downturn. "The recession in OECD countries has led to large drops in output of heavy, energy-intensive industries, such as steel and basic chemicals production, oil refineries and power generation," it said.

In India, however, the study found that three-quarters of demand came from the national economy, leaving it relatively unscathed by the credit crunch.

China, meanwhile, introduced a large economic stimulus package, funding swathes of transport infrastructure and reconstruction after the 2008 Sichuan earthquake, it said. The study found that emissions from these sources had more than offset China's intensive roll-out of low-carbon technologies. China had doubled its wind capacity for the fifth year straight, it said.

Even if emerging economies such as China are investing in wind and solar power, Brookes said the study showed "there is not currently a decoupling of economic growth and emissions growth."

Thanks to the recession, industrialized countries should meet their collective emissions-reduction commitments under the Kyoto Protocol. Under the protocol, signed Dec. 11, 1997, 37 industrialized countries pledged to cut emissions of greenhouse gases by an average of 5 percent from 1990 levels over the 2008–2012 period. However, once the recession is over, "greenhouse gas emissions could rapidly increase toward pre-recession levels," the study said.

61. Ten Key Indicators Show Global Warming "Undeniable"

Melting glaciers, more humid air and eight other key indicators show that global warming is undeniable, scientists said, citing a new comprehensive review of the last decade of climate data. Without addressing why this is happening, the researchers said there was no doubt that every decade on Earth since the 1980s has been hotter than the previous one, and that the planet has been warming for the last half-century.

This confirms the findings of the U.N. Intergovernmental Panel on Climate Change, which reported in 2007 with 90 percent certainty that climate change is occurring. The IPCC also said that human activities contribute to this phenomenon.

Released by the U.S. National Oceanic and Atmospheric Administration as "The 2009 State of the Climate Report," the new report draws on the work of 303 scientists from 48 countries, including data from last year.

The 10 key planet-wide indicators of a warming climate identified by the report are:

- Higher temperatures over land

- Higher temperatures over oceans
- Higher ocean heat content
- Higher near-surface air temperatures (temperatures in the troposphere, where Earth's weather occurs)
- Higher humidity
- Higher sea surface temperatures
- Higher sea levels
- Less sea ice
- Less snow cover
- Shrinking glaciers

The seven indicators expected to rise in a warming world rose over the last decade, the report said; the three indicators expected to decline did so over that same period.

With an almost daily flood of data on climate change, Peter Thorne of the Cooperative Institute for Climate and Satellites in Asheville, North Carolina, saw the need for a comprehensive look at the information to pick the most obvious signs of planetary warming.

"These are indicators from the top of the atmosphere to the bottom of the ocean that we would expect to be changing in a warming world," Thorne said at a telephone briefing for reporters.

"Each indicator is changing as we would expect if the world truly were warming," he said. "Not a single analysis disagrees that the global climate is changing. The bottom line conclusion that the world's been warming is simply undeniable."

62. World Simmers in Hottest Year So Far

The world is enduring the hottest year on record, according to a U.S. national weather analysis, causing droughts worldwide. For the first six months of the year, 2010 has been warmer than the first half of 1998, the previous record holder, by 0.03 degree Fahrenheit, said Jay Lawrimore, chief of climate analysis at the federal National Climatic Data Center.

"We had an El Nino episode in the early part of the year that's now faded but that has contributed to the warmth not only in equatorial Pacific but also contributed to anomalously warm global temperatures as well," Lawrimore said.

Abnormally warm temperatures have been registered in large parts of Canada, Africa, tropical oceans and parts of the Middle East. Northern Thailand is struggling through the worst drought in 20 years, while Israel is in the middle of the longest and most severe drought since 1920s. In Britain, this year has been the driest since 1929.

Also, Arctic sea ice has melted to its thinnest state in June.

However, as cooler temperatures may set in later this year, it remains to be seen whether 2010 will overtake 2005 as the hottest year overall.

"This year the fact that the El Nino episode has ended and is likely to transition into La Nina, which has a cooling influence on the global average temperature, it's possible that we will not end up with the warmest year as a whole."

63. Car Industry Urged To Use HFC-Free Refrigerants

Pro-CO2 refrigerant group BeyondHFCs has criticized a decision by US car maker General Motors to use HFC-1234yf, a HFC refrigerant with a lower climate impact, in mobile air conditioning systems, calling it a "very worrying" move.

The group has repeatedly argued that the refrigerant is not safe. General Motors has said it will use it in its Chevrolet, Buick, GMC and Cadillac models from 2013. In May, German trade body VDA said that it would also be using HFC-1234yf despite an earlier commitment to the CO2-based substance R744.

In the EU, the MAC directive requires carmakers to stop using refrigerant HFC-134a from 2011. BeyondHFCs urges the car industry to consider the safety impacts of alternatives such as HFC-1234yf before replacing HFC-134a. According to BeyondHFCs, tests by different independent bodies point to results that have found HFC1234yf to be not only flammable at low concentrations in air but also encompassing incalculable risks for humans if vented into the vehicle compartment. The environmental impact of HFC1234yf comes when, vented into the atmosphere, it decomposes into trifluoroacetic acid (TFA) which, leached out from the atmosphere by the rain, develops an herbicide effect.

BeyondHFCs argues that the development of toxic and corrosive hydrofluoric acid from HFC1234yf in case of a car accident would not only entail dangers for passengers and rescue personnel but would also form dangerous decomposition products.

According to BeyondHFCs, natural refrigerant technologies based on CO2 and hydrocarbons have proven to be reliable, safe for passengers and the environment. On top of this, DuPont and Honeywell hold the patents for this substance in all major markets, which gives them the power to dictate the price and makes car manufacturers totally dependent on them.

HEALTH

64. Study Links Decline in Air Pollution and Health of Elderly Women

While adverse effects of exposure to air pollutants on respiratory health are well studied, little is known about the effect of a reduction in air pollutants on chronic respiratory symptoms and diseases. We investigated whether different declines in air pollution levels in industrialized and rural areas in Germany were associated with changes in respiratory health over a period of about 20 years.¹

Methods: We used data from the SALIA cohort study in Germany (Study on the influence of Air pollution on Lung function, Inflammation and Aging) to assess the association between the prevalence of chronic obstructive pulmonary disease (COPD) and chronic respiratory symptoms and the decline in air pollution exposure.

In 1985-1994, 4874 women aged 55-years took part in the baseline investigation. Of these, 2116 participated in a questionnaire follow-up in 2006 and in a subgroup of 402 women lung function was tested in 2008-2009.

¹ Tamara Schikowski, Ulrich Ranft, Dorothee Sugiri, Andrea Vierkotter, Thomas Bruning, Volker Harth, Ursula Kramer in *Respiratory Research* 2010, 11:113, Published on: 2010-08-22

Generalized estimating equation (GEE) models were used to estimate the effect of a reduction in air pollution on respiratory symptoms and diseases.

Results: Ambient air concentrations of particulate matter with aerodynamic size <10 μ m (PM₁₀) declined in average by 20 μ g/m³. Prevalence of chronic cough with phlegm production and mild COPD at baseline investigation compared to follow-up was 9.5% vs. 13.3% and 8.6% vs. 18.2%, respectively.

A steeper decline of PM₁₀ was observed in the industrialized areas in comparison to the rural area, this was associated with a weaker increase in prevalence of respiratory symptoms and COPD. Among women who never smoked, the prevalence of chronic cough with phlegm and mild COPD was estimated at 21.4% and 39.5%, respectively, if no air pollution reduction was assumed, and at 13.3% and 17.5%, respectively, if air pollution reduction was assumed.

Conclusion: We concluded that parallel to the decline of ambient air pollution over the last 20 years in the Ruhr area the age-related increase in chronic respiratory diseases and symptoms appears to attenuate in the population of elderly women.