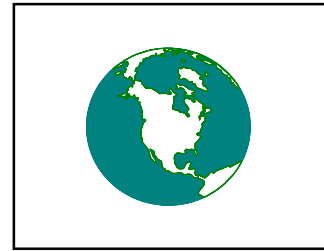


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CAR LINES

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EUROPE

1. Netherlands Introduces Incentives For Clean Fuels, Diesels

The Dutch environment ministry has announced that diesel fuel with lower than 10 ppm sulfur will receive a tax incentive of 1 € cent per liter, which lowers the gap of € cent 5 to € cent 4 between normal diesel fuel (50 ppm) and clean diesel fuel (10 ppm). Moreover from the 1st of July an incentive of € 600 will be introduced for new diesel passenger cars with a trap. Finally there is an incentive for clean heavy duty and marine diesel engines and for fuel efficient passenger cars from 1st of January under discussion.

In a related development, tax incentives were introduced in Denmark from January 1, 2005 - Petrol 0.04 Dkr/l (0.53c/l); Diesel 0.02 Dkr/l (0.27 c/l). The result: 100% shift to 10 ppm sulphur fuels.

2. German Upper House Rejects Bill on Diesel Filters

Germany's upper house of parliament has rejected a government plan to promote particle filters to trap soot from diesel engines, arguing that a proposed tax break should only apply to old vehicles. The opposition-controlled upper house, or Bundesrat, voted in favor of a resolution that would limit the tax breaks.

On May 11th, the German Cabinet had introduced draft legislation into Parliament that would offer tax breaks for diesel cars with emissions filters. A day earlier, a state government controlled by the leading bloc of opposition parties introduced into Parliament a competing bill that would offer similar but less comprehensive incentives. Because the ruling coalition parties control the lower house, or Bundestag, and the opposition parties control the upper house, or Bundesrat, it seems likely that a compromise will have to be reached in a conciliation committee before a final bill can be passed.

The Cabinet proposal is based on a draft released by the Finance Ministry on April 25 for comment. The government's proposal would offer tax breaks for owners of new cars with the built-in filters and for owners who install filters in diesel cars that lack them. In contrast, the proposal from the state government of Rhineland-Palatinate would only offer tax breaks to owners who install filters on cars that lack them. Both bills would institute the tax break starting Jan. 1, 2006. The competing bills are intended to provide incentives for the use of filters until 2008, when the German auto industry has agreed to make filters standard on all new diesel cars.

The Finance Ministry said its bill would cost state governments, which collect the car tax, € 1.2 billion (US\$ 1.54 billion) in revenue, while Rhineland-Palatinate said its version would only cost € 30 million. German Environment Minister Jürgen Trittin said state governments could afford the break, since they are already getting € 11.5 billion annually from the car tax.

A German car owner pays the vehicle tax annually. The tax is roughly € 5-€ 15 per cubic centimeter of engine capacity, with the per-cubic-centimeter price dependent upon the type of fuel a car uses. In 2004, the tax for an Audi A2 TDI 3L was € 185 per year, for a

Volkswagen Golf 1.9 TDI it was € 293, and for a Mercedes 220 CDI it was € 340, according to figures provided by the Organization for Transportation Issues in Germany.

The Cabinet draft would offer a one-time deduction of € 350 from the annual automobile tax for cars that enter the market between Jan. 1, 2005, and Dec. 31, 2007, and meet the particulate matter emissions standard of five milligrams per kilometer. It would also impose a 20 percent surcharge on the automobile tax for cars that enter the market after Jan. 1, 2008, that exceed the standard.

Also, the government draft would allow a one-time deduction of € 250 from the automobile tax for cars already in use that install an effective particle-emission reduction device between Jan. 1, 2005, and Dec. 31, 2007.

The state proposal would reward owners who install retrofit filters between 2006 and 2009 with a deduction of € 6 per 100 cubic centimeters of engine capacity. It would also impose penalties on diesel cars not meeting the Euro 5 auto emissions standard by 2007, starting at € 1.50 per 100 cubic centimeters of engine capacity and rising to € 3 in 2008. This would give the owner of a filter-equipped car with an engine capacity of two hundred cubic centimeters an annual tax savings of € 120, and would penalize the owner of a filterless diesel car with an additional tax of € 30 in 2007, and twice that amount in 2008.

In an earlier research note, Commerzbank analysts assessed the government's plan and said carmakers without strong offerings of filters such as Volkswagen could lose sales and suffer higher costs of some 300-350 euros per car.

Diesel-powered cars are popular in Germany and many other European countries due to their efficiency, durability and relatively lower fuel prices, but their share of new car sales has slipped in Germany this year. The KBA motor vehicles agency reported that diesels accounted for 41.7 percent of new car registrations in Germany last month, down from a high of around 50 percent.

3. German State Ordered To Cut Particle Pollution

A environmentalist campaign to ensure Germany complies with EU fine particle (PM10) pollution standards has been reinvigorated after a court ruled that the state of Baden-Württemberg must do more to combat PM10 pollution. This should keep public pressure on manufacturers to provide PM filters.

The campaign, led by Deutsche Umwelthilfe (DUH), has involved taking German cities to court to compel them to meet the standards. It suffered a setback in April when courts in Munich and Berlin threw out injunctions that would have forced new measures to cut pollution. But then an administrative court in Stuttgart agreed with two plaintiffs that Baden-Württemberg had not done enough to meet the EU limits. Backed by DUH, the plaintiffs presented evidence showing that Stuttgart and three other cities in the state were already in breach of a 1999 EU air quality directive.

The ruling, which the Baden-Württemberg government will appeal, orders the state to draw up an action-plan on PM10. DUH said the ruling had implications for other states and cities in breach of the new EU limits. It urged them to impose restrictions on diesel cars and trucks without particle filters.

In the European Union, a maximum average threshold of 50 micrograms of coarse particulate matter (PM-10) per cubic meter of air over a 24-hour period can not be exceeded more than 35 days per year, as prescribed by EU Directive 99/30 Relating to Limit Values for Sulfur Dioxide, Nitrogen Dioxide and Oxides of Nitrogen, Particulate Matter, and Lead in Ambient Air.

4. Germany to Issue Auto Stickers to Aid Traffic Bans

On April 25th, Germany's Environment Ministry issued a proposed plan to put stickers on vehicles based on their level of particulate matter emissions. The stickers would identify vehicles that are banned from areas restricted to low-emission vehicles, including certain German cities with PM levels exceeding the threshold under EU law. Diesel-powered cars, trucks, and buses would be divided into three groups: no sticker would be issued for the highest PM-emitters, a yellow sticker for PM-emitters meeting the present legal maximum, and a green sticker for low PM-emitters already meeting the coming EU exhaust threshold. The ministry said it was acting at the request of state governments, which have jurisdiction over rules on restricting traffic. After adoption by the Cabinet, the draft ordinance would have to pass the upper house of Parliament and the council of state governments, or Bundesrat, in order to become law.

5. French Think Tank Launches Research With DHL To Reduce Diesel PM

On May 10th, the French government's leading environmental think tank launched a new joint research venture with international freight giant DHL that aims to reduce emissions of fine particles by diesel-fueled delivery vehicles. The French Agency for the Environment and Energy Management (ADEME)--a government-run think tank under the joint authority of the environment and industry ministries--will work with DHL to test the effectiveness of experimental particle filters, considered the cheapest and most efficient means of curbing particle emissions. ADEME will partially fund DHL's acquisition of new filters, and then it will study their effectiveness in curbing particle emissions in several urban environments over a 14-month period. ADEME has suggested that the experimental filters can reduce particle emissions from diesel-powered delivery vehicles by 90 percent.

6. Italy Offers Incentives for Low-Pollution Scooters

On April 26th, Italy's Ministry of Environment and the country's Scooter and Accessory Association announced a € 25 million (US\$ 32.5 million) initiative aimed at encouraging the use of environmentally friendly scooters. Italy has around 12.4 million scooters in circulation, but only one in 10 meets the Euro II vehicle emissions standards that went into effect for scooters in 2004. Under the plan, buyers of new scooters that meet Euro II standards will receive incentive payments of € 250, starting May 1. Scooter owners who bought Euro II scooters in the 12-month period ending May 1 can also retroactively apply for a rebate up to that amount. "Scooters are a valid alternative to cars in many urban centers, so it is right to favor less polluting scooters," Minister of Environment Altero Matteoli said in a statement released by the ministry. The Scooter and Accessory Association said it would help to publicize the incentives and to certify that vehicles that claim to meet the environmental standards do so.

7. EU Ministers Agree on Legislation To Hike Road Tolls

On April 21st, European Union member states reached agreement on legislation that expands a framework for imposing tolls on commercial trucks in a bid to reduce air pollution, protect sensitive ecological areas such as the Alps, and reduce road congestion. The pending rules, which still must be approved by the European Parliament, allow for surcharges on existing tolls of up to 25 percent in some areas and apply the road-pricing framework to a larger number of vehicles.

After two years of negotiations, transport ministers approved the revised version of the proposal put forward by the European Commission in July 2003 on a 19-4 vote, with Greece and Finland abstaining. Debate over the eurovignette rules pitted EU states on the bloc's geographical periphery against central transit states that bear most of the burden of goods traffic across Europe. Portugal, Belgium, Malta, and Estonia voted against the plan because they believe it would increase the costs of goods that have to be transported long distances to reach their borders.

The measures would widen the scope of so-called "eurovignette" charges to cover heavy goods vehicles weighing 3.5 tons or more. They had previously applied to trucks weighing 12 tons or more. Member states would also be able to levy tolls on roads other than motorways and could vary charges based on the size, weight and environmental performance of the vehicle and on the time of day or the day of the week.

The proposal would revise EU legislation (1999/62/EC) that establishes rules for road charges applied to heavy vehicles.

The legislation allows for a 15 percent surcharge to be levied in mountainous areas, as well as a 25 percent surcharge on cross-border traffic in the Alps, with discounts for frequent users. One of the most important reasons the Commission proposed the legislation in 2003 was the controversy over heavy truck traffic crossing the Alps. Surcharges in all other areas would be capped at 13 percent.

Transport ministers made two key changes to the Commission proposal.

1. First, based on objections from some ministers to proposed language directing that additional revenue from the special tolls be plowed back into road infrastructure, Luxembourg, which holds the rotating EU presidency, offered a compromise that "recommends" the money be spent in the transport sector, but allows member states some leeway, by allowing states to spend the money on alternative transport projects, such as rail links.
2. Second, the revised version allows the tolls to be imposed on secondary roads as well as on motorways. The commission proposal would have restricted tolls to motorways only.

The EU Parliament is due to take the legislation up for its second reading by December. In the first reading, Parliament allowed for higher surcharges than those contained in the proposal approved by the transport ministers. Any differences between the ministers' version and Parliament's must be resolved in a Conciliation Committee, which must conclude by April 2006. Britain, which takes over the EU presidency from July, will try to

reach an agreement between parliamentarians and ministers before the end of 2005, a British official said.

Responding to the ministers' agreement, the International Road Transport Union (IRU), which represents the trucking industry, criticized the deal because it does not require member states to invest the toll revenue entirely in road networks.

Environmental groups were also critical of the legislation because they said it did not allow EU member states enough leeway to raise the tolls high enough to recoup all environmental and public health costs from truck traffic.

8. Transboundary Air Pollution Protocol Took Effect On 17 May

The Protocol to Abate Acidification, Eutrophication and Ground-level Ozone to the Convention on Long-range Transboundary Air Pollution of the United Nations Economic Commission for Europe (UNECE) entered into force on Tuesday, 17 May 2005. It has so far been ratified by: the Czech Republic, Denmark, Finland, Germany, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, the United States and the European Community.

The Protocol aims to cut emissions of sulphur, nitrogen oxides, volatile organic compounds (VOCs) and ammonia from energy generation, industrial sources, motor vehicles, agriculture and products. By 2010, Europe's sulphur emissions should be cut by 63%, its NO_x emissions by 41%, its VOC emissions by 40% and its ammonia emissions by 17% compared to their 1990 levels. Each country's individual ceilings depend (a) on the impact that its emissions have on public health and (b) on the vulnerability of the environment that they pollute. Countries whose emissions have the most severe health or environmental impact and whose emissions are the cheapest to reduce will have to make the biggest cuts.

The Protocol also sets limit values for specific emission sources (e.g. combustion plant, electricity production, dry cleaning, cars and trucks) and requires best available techniques to be used to keep emissions down. VOC emissions from such products as paints or aerosols will also have to be cut. Finally, farmers will have to control ammonia emissions (manure, artificial fertilizer).

Calculations made during the Protocol's negotiations showed that, once all the targets are met, the area in Europe with excessive levels of acidification will shrink from 93 million hectares in 1990 to 15 million hectares in 2010. That with excessive levels of eutrophication will fall from 165 million hectares in 1990 to 108 million hectares in 2010. The number of days with excessive ozone levels will be halved. Consequently, it is estimated that life-years lost as a result of the chronic effects of ozone exposure will be about 2,300,000 lower in 2010 than in 1990, and there will be approximately 47,500 fewer premature deaths resulting from ozone and particulate matter in the air. The exposure of vegetation to excessive ozone levels will be 44% down on 1990.

Furthermore, an analysis carried out during the Protocol's negotiations showed that its expected benefits (healthier population, higher agricultural productivity, less damage to buildings, etc.) far outweigh its estimated costs (e.g. end-of-pipe control or energy-efficiency measures) – probably by a factor of 3 or more.

The first meeting of the Parties to the Protocol will take place in December 2005. The Parties will include Slovakia which recently ratified the Protocol, which will enter into force for it in July.

9. Cafe Program Under Intense Debate, Air Proposal Delayed

Plans to revise and consolidate the EU's air quality framework law and its first three daughter directives were to be the immediate legislative proposals to emerge from a major new EU air pollution strategy. The strategy has been undergoing a final round of internal consultation within the European Commission. However, in the face of strong industry opposition, there are reports that Commission president Jose Manuel Barroso has ordered a delay.

The seven thematic strategies form the centerpiece of the EU's sixth environmental action program (6EAP) agreed in 2002. They have already been subjected to repeated delays; three had been due to be published before 2005.

At least one strategy, on air quality, and probably a second, on the marine environment, were to be published in July. Head of the Commission's environment department, Catherine Day, went on the record with this timetable in a recent presentation to MEPs. However, the delays were reportedly decided at a meeting soon after Ms Day's presentation.

The delay looks like a major lobbying success for EU business association Unice, which has recently delivered a damning assessment of the strategy, warning that it would cost too much for too little and too uncertain gains. The arguments evidently swayed Mr. Barroso. Environment Commissioner Dimas reportedly now fears that what he sees as the first big policy finalized under his watch could be watered down.

Commission official Matti Vainio had told a conference at the Green Week event in Brussels that the Clean air for Europe (Cafe) program's first legal proposal would add to the European Commission's "better regulation" drive. Merging the four existing laws would cut down on bureaucracy and paperwork, Mr. Vainio said. The package would likely introduce controls on fine particulate matter (PM2.5), however. Cafe would probably advocate a two-phase strategy - first by requiring better monitoring of PM2.5 and then by setting air quality limits.

But the most controversial part of the Cafe package was to be the ambition level that the Commission chooses to propose for reducing levels of five key air pollutants - sulphur dioxide, nitrogen oxides, volatile organic compounds, ammonia and PM2.5 - by 2020. The reduction objectives will not be formulated as binding targets, but the degree of ambition will be important since it will determine the range of targets set in future binding legislation - such as a revision of the national emission ceilings (NEC) directive which is due to culminate in draft proposals next year.

In the Cafe paper the Commission was to set out three scenarios - A, B and C - which the EU might aim to achieve. Scenario A is the least ambitious, but would still yield substantial cuts in the five pollutants. The annual cost to the EU of meeting this scenario would amount to €5.9 billion. The health benefits are put at a minimum of €37 billion. Meanwhile

the most ambitious scenario - C - would generate €14.9 billion costs and at least €49 billion in health benefits.

	EU emission reductions to 2020, ktons				
	Emissions in 2000	Baseline in 2020	'Low' ambition	'Medium' ambition	'High' ambition
SO2	8,735	2,805	1,704	1,567	1,462
NOx	11,581	5,500	4,678	4,297	4,107
VOC	10,661	5,916	5,230	4,937	4,771
NH3	3,824	3,686	2,860	2,598	2,477
PM2.5	1,749	964	746	709	683

For all scenarios there would be additional, unquantified improvements in the health of ecosystems. The Commission has calculated that implementing any of the scenarios the costs would cause changes in economic and employment indices of only fractions of percentage points. Mr. Vainio suggested there might be a "sweet spot" between the B and C scenarios which would be acceptable to EU legislators. The environment directorate is known to be arguing internally to for an ambition level close to the C scenario.

Panelists at the Green Week conference gave a foretaste of the political lines that will be drawn once the Cafe proposals emerge. Kirsten Meyer of the environmental coalition, the EEB, said the Commission's cost-benefit analysis gave a clear justification for aiming well beyond the C scenario. But Peter Tjan of the oil industry trade body EUROPIA said substantial benefits could be garnered at much lower cost by aiming below the A scenario. Some assumptions and models used to calculate the scenarios could be wrong, he said.

In a follow up letter to the Commission, business group Unice warned of spiraling costs. Unice said existing EU air quality legislation would already cost €66 billion per year and that new pollution curbs could add another €16 billion. The national emission ceilings directive had already introduced unnecessarily costly targets, it said. And the Commission had not been open enough about input assumptions to the "complex and sensitive" computer model used in the Cafe program. The Commission's environment directorate had not explained clearly how some sectors would be able to take measures to comply with its ambition levels, Unice went on. Analysis showed that some member states might end up bearing disproportionate costs, it added.

In response, EEB accused Unice of failing to take into account financial benefits of reducing air pollution. The Cafe analysis, it said, puts the net financial gain of further reduction measures at between € 31 billion and €140 billion per year. Far from being too stringent, the Commission's ambition levels were "too low compared with the environmental objectives they were set out to achieve", EEB went on. It blamed "systematic biases in the analysis", for instance setting assumed future reductions in carbon dioxide emissions at a level lower than that agreed by heads of governments at the latest spring council meeting.

The strategy will be accompanied by proposals to revise EU air quality directives by introducing legally binding air quality limit for PM2.5. The EEB expressed fears that this would be too weak whereas Unice asked the Commission to refrain for the moment from proposing "new binding air quality limits... especially if their attainability is doubtful".

10. Particles Norway's "Most Costly" Air Pollutants

Calculations of the "socio-economic costs" of 11 atmospheric pollutants in Norway show particulates (PM10) to be the most harmful, the pollution control authority (SFT) reports. Cost estimates of Nkr 1600-5500 (€198-680) per kilo mean that if Oslo alone were to cut traffic particle emissions 10%, "society would save Nkr 50-120 million every year in reduced damage to health", it said. Marginal costs associated with long-range pollutants (NOx and SO2) were also highest in the largest cities, while economic damage caused by the six greenhouse gases was "completely unrelated to where the emissions take place".

11. Urban Car Use "Is Being Unfairly Subsidized" Say NGOs

Hidden subsidies from local governments are promoting unsustainable private use of cars, according to a European Commission-funded study from NGO Local governments for sustainability (Iclei). Based on an analysis of local authority budgets from Germany, Austria, Switzerland and Italy, it claims that spending on, for example, road maintenance, lighting and policing, is the equivalent of subsidizing private car use by between € 80 and € 250 per citizen per year. The report calls for expenditure to be switched to greener transport projects such as bicycle lanes.

12. UK Firm Claims Breakthrough in Fuel Cell Technology

A small British technology company claimed to be on the verge of unlocking the vast potential of fuel cells as a commercially viable source of green energy. Cambridge-based CMR Fuel Cells said it had made a breakthrough with a new design of fuel cell which is a tenth of the size of existing models and small enough to replace conventional batteries in laptop computers.

Fuel cells have for years been touted as the next big green power source. But high costs and doubts about widespread availability of fuel -- usually hydrogen -- have held back the technology's transition to the mainstream despite years of research by energy firms and the automotive industry.

CMR said the new design would run for four times longer than conventional batteries in a laptop or other devices like power tools. The design, which would run initially on methanol, was based on new type of fuel stack which mixed air and fuel. Up to now fuel stacks have relied on complete separation of the two.

CMR is backed by venture capitalists including Conduit Ventures, a specialist fund backed by Shell Hydrogen, Johnson Matthey, Mitsubishi, Danfoss and Solvay.

13. Plans for Including Airline Emissions In EU Trading Scheme Expected Soon

Plans for including airline emissions in the EU carbon trading scheme will likely be drafted by the end of the summer. Initially, only emissions from flights that take place entirely within the European Union are likely to be covered under the trading scheme.

Airline emissions would add about 100 million metric tons of carbon to the 2.2 billion tons of emissions currently covered by the EU emissions trade scheme.

Airline emissions accounted for 2.0 percent of all greenhouse gas emissions in Europe in 2001 but are considered to have an impact equal to 3.5 percent of emissions because they are released higher in the atmosphere, according to the UN Framework Convention on Climate Change (UNFCCC) and the International Civil Air Organization (ICAO).

One difficulty in accounting for the emissions has to do with how to count emissions released in international air space, and how to allocate emissions from international flights.

Airline emissions are the largest component in the so-far unregulated category of "international bunker fuels" in the Kyoto Protocol (as described in Article 2, paragraph 2). International bunker fuels are the second-fastest-growing pollution category monitored by the UNFCCC, having increased 22 percent between 1990 and 2003. Only pollution from ground transport, which increased 24 percent over the same period, rose faster.

The category also includes shipping emissions, which remained roughly constant during the 13-year sample period. When the subcategory of aviation bunker fuels is treated separately, it is by far the fastest-growing sector that the UNFCCC monitors, rising 41 percent between 1990 and 2003.

EU emissions trading was officially launched in January, though forward trading has been going on for some time. The system sets limits on the amount of carbon dioxide (CO₂) energy-intensive installations like power plants can emit and allows them to buy or sell allowances that give them the right to release the main gas blamed for global warming.

The scheme is the linchpin of the 25-nation union's strategy to meet its environmental commitments under the Kyoto Protocol. And though it is still young, the exploding market for carbon trade has prompted officials to consider adding other greenhouse gases and other polluting sectors down the road.

The EU executive itself is currently reviewing how best to reduce emissions from aircraft.

Aviation could be well-integrated into European carbon dioxide trade by following a system based on the amount of fuel and type of engines used by planes. Its addition to the scheme would not disrupt the scheme as much as the addition of other parts of the transport sector would.

14. Ireland Clears Way for Controversial Motorway

Ireland's environment minister has cleared the way for a controversial motorway that archaeologists say threatens one of the country's most important historical sites. Minister Dick Roche issued directions on how excavations should be carried out along the proposed M3 route, effectively giving the green light to a stretch of motorway skirting the Hill Of Tara, a Stone Age archaeological complex.

Described by some campaigners as Ireland's national monument, 6,000-year-old Tara -- a windswept hill-top some 30 km (19 miles) northwest of Dublin, was once the seat of

ancient Irish royalty. Ireland's patron saint Patrick is reputed to have faced down his druid foes on its slopes.

Plans for the motorway have sparked fierce opposition from archaeologists, historians and environmental groups. The Green Party called Roche's decision a bad day for Ireland.

The drive to preserve Ireland's past is under intense pressure from the needs of its present and a rapidly growing and increasingly wealthy population.

M3 advocates say a motorway beside Tara's slopes, connecting Dublin to the town of Navan and the northwest of Ireland is vital. They argue that unless developers can change some of its landscape, Ireland will struggle to spread Dublin's wealth, attract investors out of the congested capital and maintain the growth that earned the "Celtic Tiger" tag.

15. Porsche to Detail Hybrid SUV Plans in September

In mid-September, German luxury carmaker Porsche will provide the first details of plans to eventually build a hybrid version of its Cayenne sports utility vehicle, the company has announced. The Stuttgart-based carmaker is holding talks with potential partners in the industry to develop a more fuel-efficient derivative of its best-selling model amid rising pump prices and sinking sales of the Cayenne in the United States.

North American sales of the Cayenne dropped 27 percent to 4,424 units in the first four months of the year, a decline that Porsche has blamed on a strong base comparison and production bottlenecks.

The spokesman would not name companies with which Porsche is discussing the joint development of a hybrid powertrain, but the Handelsblatt newspaper reported that it was talking to Volkswagen, DaimlerChrysler and Toyota, citing company sources. Porsche aims to introduce a hybrid Cayenne at the latest when the next generation of its SUV is launched in 2008/2009, the German business daily added. Since the Cayenne is partly assembled in VW's Bratislava plant together with the VW Touareg SUV, Porsche is leaning more towards choosing VW for technological and economic reasons, Handelsblatt reported.

16. Royal Society Says Economic Instruments Needed to Meet U.K. Target

The United Kingdom should use "well-designed economic instruments, such as a carbon tax or auctioned permits" to meet its target for reducing greenhouse gas emissions, the Royal Society said in a policy statement May 16. The government will need to take tougher measures if it is to tackle the rising volume of emissions of carbon dioxide and other greenhouse gases, according to the Society. Most important, it recommends imposing financial penalties on emitters of carbon dioxide, "irrespective of the nature of the source." The penalties should apply across all industry sectors, "industrial, domestic and transport, including aviation," the Society said.

The statement was issued in response to a review of the U.K.'s climate change program published in December 2004 by the Department of Environment Food and Rural Affairs (DEFRA). It also came as DEFRA announced a five-year funding package for Oxford

University's Environmental Change Institute to study the impact of climate change. DEFRA said it will provide £3.5 million (US\$ 6.5 million) for the institute's U.K. Climate Impacts Program to "develop strategic research on the impacts of climate change across the UK" and assist the program in helping "local authorities, businesses, services and utilities, and regional governments, to prepare themselves for climate change."

Under the Kyoto Protocol, the United Kingdom is obligated to reduce emissions 12.5 percent below 1990 levels during 2008-2012. However, the government has set a more ambitious target of a 20 percent cut. The Royal Society said the United Kingdom already has admitted it will not meet that target. DEFRA's review showed that current policies will reduce CO2 emissions 14 percent by 2010. Emissions fell 7 percent between 1990 and 2003. The Society said the projection for an additional 7 percent cut under current policies is "very ambitious," given that emissions actually rose 1.5 percent from 2002 to 2003.

The Royal Society argued that the introduction of "well-designed economic instruments, such as a carbon tax or auctioned permits" would be the most cost-effective way to reduce emissions, and that placing an increased price on carbon would also "encourage the production of cleaner technologies and the substitution away from carbon-based fuels in the overall energy supply." Such a tax, it said, "would make coal less attractive than gas and both fuels less attractive than renewables and nuclear energy."

The report criticized both the climate change levy and the EU emissions trading scheme--two of the existing measures introduced to help reduce emissions. It described the effectiveness of the levy as limited because it targets energy use and not emissions. Thus, nuclear power, and "other non-emitting sources," are penalized, though effectively carbon free, according to the Royal Society.

The impact of the emissions trading scheme, it said, is weakened because 95 per cent of allocations are distributed free of charge.

The Royal Society acknowledged that the measures it believes need to be taken will require "political courage" on the government's behalf; such measures, it points out, will require a stepping-up of research into renewable energy in proportion to the gradual phasing out of nuclear power. It does, however, note that there are difficulties attached to some forms of renewable energy, pointing out that the science behind the creation of "carbon sinks" through afforestation is unproven. Afforestation projects, it said, "must not be allowed to divert financial and political resources away from the restructuring of energy generation and use."

The U.K. government has described climate change as a main priority for its presidency of the Group of Eight industrialized countries, which it holds until January 2006, and its forthcoming term as EU president from July 1 to Dec. 31.

17. Spanish Labor Union Decries Increase in Emissions

On May 4th, Spain's largest labor union released an annual report on greenhouse gas emissions stating that CO2 emissions in 2004 had increased 45.6 percent since 1990 levels, well above the 15 percent increase the country is allowed under the EU plan for implementing the Kyoto Protocol. The Workers Commissions' report repeated the union's warning that Spain is seeing the steepest increase in greenhouse gas emissions of any

industrialized country. The report, which was based on figures from 2004, offered one mitigating factor. It said the sharp rise in emissions that year was due partly to low rainfall and the resulting "bad hydroelectric year," which led to more reliance on power plants burning fossil fuels.

18. Swiss Carbon Emissions Return to 1990 Levels

Swiss greenhouse gas emissions increased to 52.3 million tons of carbon dioxide equivalent in 2003, bringing the country's carbon emissions back to the level reported in 1990, the Federal Office for Environment, Forests, and Landscape reported April 15. The agency attributed the increase to colder winter temperatures in 2003 resulting in greater use of heating fuel. Around 80 percent of Swiss emissions come from burning fossil fuels, it said. Under Switzerland's Law on CO₂, carbon emissions must be cut 10 percent from 1990 levels by 2010. In March, Switzerland announced it would impose a "carbon tax" on fuel starting in 2006.

19. Italy Seeks to Shift Commercial Transport From Roads to Sea Routes

On April 25th, Italy's Environment Ministry unveiled a plan to use € 252 million (US\$ 328 million) over three years to promote the use of sea routes for commercial transportation to reduce air pollution from road transport. Most of the money will come from the European Commission, with the Italian government itself contributing only € 12 million of the total.

According to government documents, around 80 percent of commercial goods are transported via roads. Another 12 percent is transported by rail and 3 percent by air. Sea transport is used for less than 5 percent of the goods transported domestically within Italy.

Road transportation pollutes more than both rail or water transport, the ministry said, and the transport sector is Italy's single largest producer of greenhouse gas emissions.

"Italian roads are the most congested in Europe, even though the country's long natural coastline makes water transport an ideal alternative," Italo Bolgheri, the ministry's vice-director for transportation issues, said at a briefing unveiling the plan. "Stressing water transport now will help us reduce road congestion as well as atmospheric pollution levels."

Most of the money will be used as subsidies for trucking companies to defray the cost of switching to maritime routes.

The money from the European Commission comes from the budget set out after the publication of the 2001 White Paper on European Transport Policy, which called for the development of alternatives to road transport to help countries meet emissions reductions targets.

20. Fiat Announces New Focus on Cleaner Cars

On April 26th, the Italian carmaker Fiat said its restructuring plans will include a new emphasis on environmentally friendly cars, including an additional budget of € 125 million (US\$ 163 million) on related research and development. "As environmental awareness in Europe grows, the market for these cars will also grow," a Fiat spokesman said. "Fiat

wants to be one of the leaders in this trend." Fiat said it would focus on cars that use nontraditional fuel sources, hybrid vehicles that combine traditional and nontraditional motors, and traditional cars that are more fuel efficient. Several vehicles prototypes in each category are already being developed and will be ready for use sooner as a result of the increased budget, it said, though it did not say when they would appear on the market.

21. Swedes To Test Road-Pricing In Capital

Sweden is to introduce road pricing for a seven-month trial in Stockholm from the new year, the first such scheme in a European city since the launch of the London congestion charge in 2003. Under the new regime motorists liable to the charge will pay SKr 10 (€1.09), rising to SKr 15-20 during busier periods, when entering or leaving the centre of the capital between 0630 and 1830 on weekdays.

The trial will cost SKr 3.3 billion to implement and is expected to generate SKr 75 million per month. Stockholm residents will vote whether to make the system permanent in a referendum to be held alongside parliamentary elections in September 2006.

The road-pricing announcement coincides with the introduction of a three-year experiment in free parking for biogas, ethanol and electric hybrid and other "green" vehicles. The vehicles will also be exempt from the new road charges.

22. EU Carmakers Make Progress in Cutting CO2 Pollution

CO2 emissions from new passenger cars sold in the EU-15 decreased by 11.8% between 1995 and 2003, an additional 1.2% reduction compared to 2002. The annual report on CO2 emissions from new cars, adopted by the European Commission, shows that the car industry has made progress in fulfilling its obligations under the voluntary agreements to market cars that emit less CO2. However, the report also underlines that major additional efforts will be required in the coming years in order to deliver the target to which the industry has committed itself.

Commission Vice-President and Commissioner for Enterprise and Industry Günter Verheugen said: "I am encouraged by the good results achieved particularly by the European and Japanese Associations since 1995. Industry is pointing out that the targets remain ambitious but the results so far show that they are taking the commitments very seriously. On the Korean side, we have received assurances that they will increase their efforts and catch up soon with the other two associations."

Commenting on the reduction, Environment Commissioner Stavros Dimas said: "I appreciate the efforts of car manufacturers to deliver cars that emit less CO2. I hope that the car industry will continue its efforts to meet the 140 g of CO2//km target under the voluntary agreement. This will be crucial to achieve the ultimate EU goal of 120 g of CO2/km. To respect the Kyoto commitments and reduce our oil dependence, we must reduce CO2 emissions from transport, the sector whose emissions keep growing."

	CO2 emissions in 2003 - -	Interim targets
ACEA	163 g/km -	165-170g CO2/km in 2003

JAMA	172 g/km -	165-175g CO2/km in 2003
KAMA	179 g/km -	165-170g CO2/km in 2004

Since the beginning of the Commitments, ACEA and JAMA show good progress in reducing CO2 emissions, although there has been less progress in 2003 than in the initial years of the commitments. KAMA's progress remains limited, although it has been catching up in the last three years, and substantial efforts are required to close the gap of 9 g/km to meet the 2004 intermediate range.

All three associations need to make major additional efforts to increase the average annual reduction rate and reach the 140g CO2/km target by 2008/9. In the remaining years, annual reduction rates must be on average 2.8% for ACEA, 3.1% for JAMA and 3.6% for KAMA.

Road transport generates more than one fifth of all CO2 emissions in the EU, with passenger cars being responsible for more than half of these emissions. CO2 emissions from road transport have risen by 22% since 1990, notably due to an increase in road transport, including private driving.

The commitments of the European, Japanese and Korean car manufacturers' associations to reduce CO2 emissions to 140 g/km by 2008/2009 are the first pillar of the EU's Strategy to reduce CO2 Emissions from New Passenger Cars. The other two pillars are consumer information (fuel efficiency labeling), and fiscal incentives.

The report attributes the total improvement since 1995 levels "overwhelmingly" to technological, rather than market changes such as tax cuts for less polluting cars which were "relatively small" in the period 1995-2003. The Commission is due to table a partially CO2-based car tax in the coming weeks. The effect of fuel efficiency car labeling schemes is also said to have been "negligible". A proposal to review the directive is expected later this year. Negotiations are also due to start later this year on moving beyond the 140 g/km target to the EU's political goal of 120 g/km.

As carmakers have gradually backed away from the 120 g/km target, so pressure has built for the EU to abandon the voluntary route and impose restrictions. Several EU governments emerged as supporters of legislation last year. One option that has been proposed is a system of tradable emission permits similar to the EU's industrial CO2 emission trading scheme.

23. Scania Introduces Bus Engines With EGR Instead of SCR

Scania has decided to introduce Euro 4 and Euro 5 systems which will enable public transport operators to comply with the emission regulations without using SCR aftertreatment with additives. Scania's Euro 4 and Euro 5 bus engines use EGR, exhaust gas recirculation, which they claim is effective in all conditions and guarantees consistent environmental performance.

"Scania recognizes the advantage of simply operating on diesel and the need for city buses to live up to expected emission standards in all conditions," said Group Vice President Hasse Johansson, head of research and development at Scania. "Scania has

therefore decided on a long-term strategy that involves using cooled EGR on buses to reduce emissions for Euro 4 as well as Euro 5.”

A maintenance-free particulate filter will also be available for operators seeking to reduce particulate emissions beyond legal limits.

“Scania strives to make things simple and efficient for operators. No extra substances need to be handled and no extra installations are required on a Scania bus,” concludes Mr. Johansson.

Part of the exhaust flow – up to 18% for Euro 4 and 25% for Euro 5 – is taken out before the turbocharger and is cooled by the engine coolant before blending with the intake air. The challenge consists in feeding exhaust gases into the intake air, which has a higher pressure. Scania has solved this with the Scania venturi system, a constriction in the intake manifold that makes the compressed intake air travel faster. This creates a low-pressure area downstream of the constriction, which is used to “suck” the exhaust gases into the intake air. A simple valve system is used to regulate the flow in relation to engine load.

High-pressure fuel injection in combination with a maintenance-free oxidizing catalyst reduces particulates and eliminates the diesel smell. Operators that wish to reduce particulate emissions beyond legal limits will be able to specify Scania’s maintenance-free particulate filter that is integrated in the normal silencer. Being a part-flow design, the filter effectively halves particulate emissions, while simultaneously eliminating the risk of clogging. The filter is standard on Euro 5 engines.

Scania’s city bus engines for Euro 4 and Euro 5 are all based on a 9-liter 5-cylinder unit derived from Scania’s modular engine platform. Power ratings are 230, 270 and 310 hp. Torque is particularly generous for this engine size (1,050, 1,250 and 1,550 Nm respectively), giving a relaxed drive with a minimum of gear changes. Initially, the Euro 5 engine will be rated at 270 hp.

Scania’s bus engines for Euro 4 are available from November 2005. Euro 5 engines and particulate filters are scheduled to become available during 2006.

24. MEPs Approve Deal To Limit Toxics In Tires

The European parliament at a plenary session adopted a compromise proposal to curb the content of polyaromatic hydrocarbons (PAHs) in car tires. The deal has already been agreed with national ministers and so should now come into force.

A ten parts per million (ppm) EU limit on extender oils in tires will now apply to all tires produced from January 2010, rather than 2009 as originally proposed by the European Commission. The only major change from a vote in the environment committee earlier this year was the removal of a two-year exemption for racing cars, aircraft and vintage cars.

25. EU Parliament Approves Mandatory Energy Savings Targets

On June 7th, the European Parliament overwhelmingly approved on a vote of 458-148 a plan to introduce mandatory energy-savings targets for the 25 EU member states to help meet its obligations to cut emissions of greenhouse gases and to offset Europe's growing dependence on imported fossil fuels. As approved by EU lawmakers, the legislation would require states collectively to achieve a 1 percent annual saving in energy "end-use" -- power distributed or sold to consumers -- over the period 2006-2009 while they develop national energy efficiency strategies. For the period 2009-2012, the target would be raised to 4 percent (an average of 1.3 percent per annum) and for the period 2012-2015 to 4.5 percent (an average of 1.5 percent per year).

The original Commission proposal would have required average annual savings of 1 percent for six years, beginning in 2006. The tougher Parliament version was accepted by EU Energy Commissioner Andrews Piebalgs, although the legislation still must be approved by the Council of Ministers.

In the event of a disagreement between Parliament and the Council, the two bodies will settle their differences through negotiation.

Under a separate amendment adopted by lawmakers, the Commission could set "differentiated" targets for individual states, provided that the overall annual goal is met. The amendment was adopted after lawmakers from energy-efficient states claimed their countries would find it much harder to achieve savings easily attainable by eastern European states that joined the European Union in 2004.

26. UK State of Environment Report Warns Of Hotter, Wetter Future

The United Kingdom now has less biodiversity and worse air pollution and faces a higher risk of flooding than five years ago, according to a government report titled *A Better Place?* published June 9.

According to the report, farmland bird populations are down to 57 percent of 1970 levels, and, in part due to the impact of climate change on sea temperatures, 70 per cent of U.K. marine fish stocks are at unsustainable levels. In addition, acid rain affects 75 percent of all wildlife habitats, "despite substantial cuts in industrial emissions of [sulfur] and nitrogen," the report noted.

The report forecasts a number of climate change effects in the United Kingdom: increased frequency of heat waves, drought, increased summer rainfall, less snow and frost, and more likelihood of severe wet winters. It also notes that "greater windiness in summer could add to the desiccation of the landscape," and it suggests that increased water stress, loss of key wildlife habitats, and changes in the migratory routes of birds are all possible.

The report also warns that agriculture could suffer as farmers may be "troubled by pests that survive the warmer winters" and could face increased soil erosion and, in coastal areas, the invasion of groundwater and soil with salt water.

27. UK Unveils £40 Million Strategy To Develop Technology

On June 14th, the United Kingdom outlined plans to invest £40 million (US\$ 72 million) over the next four years to develop carbon abatement technology and hydrogen and fuel cell technology as part of the country's campaign to cut greenhouse gas emissions.

Energy Minister Malcolm Wicks was quoted as saying, "Reaching our ambitious target of cutting carbon emissions by 60 percent by 2050 means action now to support emerging technologies that will enable us to burn coal and gas more cleanly. At the same time, with major expansion of coal fired power generation expected in China and India, we want to put the United Kingdom at the forefront of what could be a valuable new export opportunity," he continued. "We've consulted the industry closely and it's clear that the long term benefits of capture and storage, which could reduce emissions from power plant by up to 85 percent, merit significant investment now."

28. Particulate Pollution "A Tough Challenge" For UK

A new report on particulate matter was published by the Air Quality Expert Group, the body that advises government on matters of air quality. The report, 'Particulate Matter in the United Kingdom' concludes that although particulate matter levels have been decreasing over the past few decades background levels are still very high and more work needs to be done to ensure that national targets for reducing particulate matter are met.

The report was presented on 16th June by Professor Roy Harrison, Vice-Chairman of the Air Quality Expert Group. According to Prof Harrison, 'The report is based on a substantial amount of data analysis and modeling work, conducted by members of the Air Quality Expert Group. It represents our best view of current and future ambient concentrations of particulate matter and their relationship to air quality objectives and limit values.'

The main conclusions of the report are:

- The 2005 annual average limit value of 40 $\mu\text{g m}^{-3}$ for particulate matter should be met nearly everywhere but that there will be some exceedences of the limit of 35 days with 24-hour averages over 50 $\mu\text{g m}^{-3}$, especially in London.
- Substantial exceedences of the 2010 provisional annual average objectives and indicative limit values for particulate matter are likely. Given the substantial background levels of particulate matter and the extent of the exceedences, the additional reductions required by 2010 to meet the indicative limit values cannot be met by the control of primary emissions alone.
- Action plans are being developed for areas in which the 2005 limit values have been exceeded to ensure they are driven down. However, these measures will probably only make a marginal contribution to the wider reductions in particulate matter because of substantial background levels of particulate matter.
- The modeling of particulate matter concentrations is complex because of the need to combine the contributions made by the different sources that make up particulate matter. Improvements in the monitoring network, including enhanced monitoring of the chemical components, would improve the accuracy of these models.
- While road traffic is a major source of particulate matter near to roads, the regional background contributions, both rural and urban, is dominant. Reducing background levels of particulate matter must form a central component of mitigation strategies.

In conclusion, the Group recommends that both primary emissions of particulate matter and emissions of precursors to secondary particulate matter should be addressed. AQEG are concerned that much of local air quality management of particulate matter is currently driven by exceedences of one air quality objective, which tend to focus on "hotspots". Consideration should be given to additional forms of regulation to reduce average population exposure, complementing the existing concentration-based limit values. The Group notes the links between different pollutants and feels that a more flexible and holistic approach to air quality management might deliver more effective control strategies.

29. Scottish Experts Concerned About Diesel Car Pollution

Medical experts have called on car manufacturers to control the level of pollutants produced by diesel engines. The Chartered Society of Physiotherapy (CSP) said levels of PM10 particles were still rising in many places. These areas included Glasgow, which recorded the third highest figures in the UK. The two top areas were Marylebone Road and Camden in London.

The World Health Organization has said there is no safe limit for exposure to PM10, which can affect breathing, according to the group.

The CSP raised concerns about levels earlier this year, and said its latest monitoring had shown no significant reduction.

The highest reading in Scotland was at a curbside in Glasgow, where the figure had increased to 34 micrograms per cubic meter of air - an increase of seven micrograms since last year. Other Scottish black spots included parts of Edinburgh and Aberdeen.

The society called for all vehicle manufacturers to fit special filters as standard, arguing that the technology was proven and was already being used by Mercedes-Benz.

The CSP's Grahame Pope said: "Poor air quality can cause wheezing and shortness of breath. The health consequences for people with lung diseases like asthma and emphysema can lead ultimately to a premature death."

He said the government should consider legislation to tighten the standards for diesel cars.

30. Long Term French Study Finds Serious Health Effects From Air Pollution

Long term effects of air pollution on mortality were studied in 14,284 adults who resided in 24 areas from seven French cities when enrolled in the PAARC survey (air pollution and chronic respiratory diseases) in 1974.¹ Daily measurements of sulphur dioxide, total

¹ Twenty Five Year Mortality And Air Pollution: Results From The French PAARC Survey, L Filleul¹, V Rondeau², S Vandentorren¹, N Le Moual³, A Cantagrel¹, I Annesi-Maesano³, D Charpin⁴, C Declercq⁵, F Neukirch⁶, C Paris⁷, D Vervloet⁴, P Brochard¹, J-F Tessier¹, F Kauffmann³ and I Baldi¹. ¹ Laboratoire Santé Travail Environnement, Bordeaux, France, ² INSERM E0338, Biostatistique, Bordeaux, France, ³ Unité INSERM U472, Villejuif, France, ⁴ UPRES 3287, Marseille, France, ⁵ Observatoire Régional de la Santé Nord-Pas-de-Calais, Lille, France, ⁶ Unité INSERM U408, Paris, France, ⁷ Centre Hospitalier Universitaire de Rouen, France, Correspondence to: Dr L Filleul Laboratoire Santé Travail Environnement, Université Victor Ségalen Bordeaux 2, 146 rue Léo Saignat, 33076 Bordeaux cedex, France; laurent.filleul@sante.gouv.fr

suspended particles, black smoke, nitrogen dioxide, and nitric oxide were made in the 24 areas for three years (1974–76). Cox proportional hazards models controlling for individual confounders (smoking, educational level, body mass index, occupational exposure) were applied, and frailty models used to take into account spatial correlation. Indicators of air pollution were the mean concentration.

Models were run before and after exclusion of six area monitors influenced by local traffic ($\text{NO}/\text{NO}_2 >3$ in ppb). After exclusion of these areas, analyses showed that adjusted risk ratios (95% CI) for TSP, BS, NO_2 , and NO for non-accidental mortality were 1.05 (1.02 to 1.08), 1.07 (1.03 to 1.10), 1.14 (1.03 to 1.25), and 1.11 (1.05 to 1.17) for $10 \mu\text{g}/\text{m}^3$ respectively. Consistent patterns for lung cancer and cardiopulmonary causes were observed.

The authors concluded that urban air pollution assessed in the 1970s was associated with increased mortality over 25 years in France.

31. Swedes Assess Children's Environmental Health

Swedish children are healthy, but some environmental factors still pose risks, according to the latest annual report from Sweden's Environmental objectives council. The council was set up to monitor implementation of 15 national environmental quality objectives, adopted in 1999. This is the first time it has focused on children's health. The report identifies air and noise pollution as key threats. It recommends Sweden should focus on greening transport, chemicals, forestry and agriculture, and push for the EU chemicals legislation Reach to be "rigorous and effective".

32. EU Greenhouse Gas Emissions Rise In 2003

Emissions of greenhouse gases from the European Union have increased in 2003, after having fallen in 2002. Emissions in the 15 "old" member states (EU-15) increased by 53 million tons (1.3%) between 2002 and 2003. Total EU-25 emissions increased by 1.5%, says the latest annual report on greenhouse gas emissions from the European Environment Agency.

Between 2002 and 2003 EU-15 emissions of carbon dioxide (CO_2), which makes up over 80% of all EU-15 greenhouse gas emissions, increased by 59 million tons (1.8%). Since 1990 CO_2 emissions in the EU-15 have increased by 3.4%.

The emission increase in 2003 was mainly caused by an increase in power production using coal. The colder weather in the first quarter in several EU countries, also contributed to an increased use of fossil fuels to heat homes and offices.

Still, since 1990, the base year of the Kyoto Protocol, greenhouse gas emissions in the EU-15 have decreased by 1.7%. Five-year average emissions between 1999 and 2003 are currently 2.9% below the base year emissions.

Since 2003 a number of EU and national policies and measures have been implemented, which should help progress towards the Kyoto target. For example, the EU emissions trading scheme launched on 1. January 2005 is expected to result in further cuts in emissions of carbon dioxide (CO_2) in the coming years. In addition, some member states

are starting to take advantage of other options for reducing emissions that are available under the Kyoto Protocol. These options allow countries to achieve part of their targets by investing in emissions-saving projects in other countries that have ratified the Kyoto Protocol, or by undertaking projects that sequester CO₂ in forests or agricultural land.

The overall 53 million tons increase in EU-15 emissions between 2002 and 2003 reflected higher greenhouse gas emissions from energy industries (+24 million tons or 2.1%), mainly due to a 5% growth of thermal power production and a 5% increase of coal consumption in thermal power stations. The increase in thermal power production was driven by higher electricity consumption (+3%). The largest emission increases from electricity and heat production were in the UK (+10 million tons), Finland (+7 million tons), and Germany (almost +6 million tons). Substantial increases of coal consumption were the main reason.

Greenhouse gas emissions from households and the services sector increased considerably (+18 million tons or +2.8%), partly due to colder weather in first quarter of 2003.

Emissions from industry increased by 17 million tons (+2.1%) which was mainly due to higher emissions from iron and steel production as well as refrigeration and air conditioning.

Transport emissions increased by 6 million tons (0.7%) between 2002 and 2003. Germany reduced emissions from road transport for the fourth consecutive year which partly offset emission increases from that sector in other EU-15 Member States.

Emissions in the agriculture sector decreased mainly due to declining number of cattle and lower emissions from agricultural soils.

Other reductions were achieved for fugitive emissions from coal mining and from natural gas. Emission from the waste sector has decreased due to increased methane recovery and less waste land filled.

Liberal MEP Chris Davies said the 2003 increase "put in doubt the EU's commitment to fighting climate change". He called on the Commission, as a first step, to set legally binding targets on car manufacturers to reduce carbon dioxide emissions.

33. Ozone Pollution Declines in the EU In 2004

After reaching record highs in the hot summer of 2003, ozone pollution declined again in the summer of 2004, new figures from the European environment agency reveal. The EU air quality "alert" threshold of 240 micrograms per cubic meter (ug/m³) was exceeded on 99 occasions in eight member states, mainly around the Mediterranean rim. The 180 ug/m³ "information" threshold was exceeded 2,527 times in 12 states. However, a non-binding long-term concentration objective of 120 ug/m³ was exceeded "in almost every country, almost every month and at most [monitoring] stations."

34. France to Expand Biofuels Production Fivefold by 2010

On May 19th, France announced an extension of ongoing plans to increase the use of biofuels, seen as a key element in the government's national climate change plan. Then Prime Minister Jean-Pierre Raffarin said France will launch by the end of the year a new public tender for construction of facilities capable of producing 950,000 tons of biofuels annually as part of an effort to increase biofuel production fivefold within the next five years. The planned facilities, slated to go on-line over the 2008-2010 period, will produce 700,000 tons of bio-diesel and 250,000 tons of ethanol to be used as tax-advantaged additives in diesel fuel and gasoline sold here.

Last September, France invited bids to build 800,000 tons of biofuel production capacity.

This first phase of the biofuel initiative will see France license construction of three new biodiesel facilities, which produce fuel from rapeseed and sunflower plants, and three new ethanol facilities, with fuel derived from beetroot, corn, and wheat, for operations slated to begin by 2007, the government said. The two-phased biofuel initiative will increase production from today's 450,000 tons to 2.2 million tons by 2010.

The initiative should enable France to comply with a self-imposed objective of ensuring that cleaner fuels sourced from vegetable oils and agricultural ethyl alcohol account for 5.75 percent of all fuel consumption by 2010, the government said.

35. Renewables Seen as "A Win-Win Solution For The EU"

The EU should aim to source 25% of its energy from renewables by 2020, the European parliament's industry and energy committee said in a new report. New studies show Europe can aim even higher than the 20% by 2020 target recommended by the full parliament last year, it said. The report calls renewables "exceptionally important", saying they can address simultaneously health, environmental, economic and geopolitical (energy security) challenges. It calls for "more systematic" policies, including "higher incentives" to encourage more renewables, alongside greater energy efficiency.

Incentives for renewables should be harmonized across the EU "in the longer term", it says. The committee's preferred option would be "a single European legislation" on feed-in (fixed tariff) systems, though the report also suggests that quotas or tendering could be alternatives, if "current weaknesses" can be addressed.

If adopted by the full parliament - a vote is expected in September - the report's conclusions will not be binding on the EU. However, the committee's demands do reflect a rising political tide for renewables. Last year the European Commission warned that the EU was not on track to meet its existing target of a 12% share for renewable energy by 2010 and proposed putting off until 2007 any decision on 2020 targets.

NORTH AMERICA

36. California Judge Rejects Diesel Challenge

Truck drivers face tougher pollution regulations after diesel engine manufacturers lost a court battle to postpone the deadline. Judge Loren McMaster refused to issue a

preliminary injunction, saying he sympathizes with the manufacturers' complaint but has no power to intervene because the stricter regulations appear to be constitutionally valid.

The new regulations apply to an estimated 300,000 to 400,000 out-of-state vehicles driving through California, and 58,000 California trucks.

The California Air Resources Board adopted new pollution standards in December because a 1998 agreement and a voluntary program promoted by manufacturers didn't remove so-called smog defeat devices fast enough from diesel trucks. The devices allow the engines to meet pollution requirements when trucks are inspected — but exceed the limits when trucks travel at highway speeds.

Removing the devices from California trucks alone would trim pollution equivalent to that created by 1 million cars, the air board said. Clean air advocates want the regulations, if they stand, to spread nationwide.

Caterpillar, Cummins Inc., Mack Trucks Inc. and Volvo Powertrain Corp. said they've already paid the state \$37 million in civil penalties and other costs. Recalling trucks simply to replace the devices would cost truck owners millions of dollars in downtime for the replacement and new inspections, the companies argued.

The 1998 settlement required manufacturers to replace the defeat devices only when the heavy-duty engines were overhauled, which happened far less frequently than regulators expected. A year ago, the air resources board agreed to a plan for the industry to voluntarily reach 35 percent compliance by last November and 100 percent compliance by 2008. The board adopted the mandatory regulations when it found only about 18 percent of California-licensed vehicles had upgraded.

37. California Air Board Adopts New Ambient Ozone Standard

On April 28th, citing a need to better protect children from the effects of air pollution, the California Air Resources Board adopted the nation's most stringent standard for ground-level ozone. The unanimous decision established a new eight-hour-average standard of 0.070 parts per million for ozone. CARB also opted to retain the state's existing 0.09 ppm one-hour-average to help protect the public from ozone spikes.

US EPA last updated the federal ambient air quality for ozone in 1997, adding an eight-hour-average standard of 0.08 ppm, to protect the public from breathing lower levels of ozone over a day-long period. In implementing that standard last year, the Bush administration decided to revoke the nation's long-standing one-hour-average standard of 0.12 ppm, effective June 15, 2005.

The state's ambient air quality standards have been historically stricter than federal standards. But unlike the national standards, the state standards are not enforced. They are goals, used to guide development of state and local air quality regulations. Regional regulators are required only to demonstrate "reasonable progress" toward attaining the standards.

Ozone levels in metropolitan areas of the state frequently exceed the state's one-hour standard. Areas in the Los Angeles region, San Joaquin Valley, and Sacramento also often violate the less strict federal ozone standards.

State legislation passed in 1999, Senate Bill 25, required an extensive review of the state's air quality standards to ensure they were adequately protective, especially for children and other highly susceptible populations. CARB and the California Office of Environmental Health Hazard Assessment released the results of their review of the standards in June 2004, proposing the new standards based on evidence showing a correlation between ozone levels and several health effects. Studies cited in the 1,000-page report, which underwent peer review, found exposure of one hour to an ozone concentration of 0.12 ppm or for 6.6 hours to 0.08 ppm resulted in decreased lung function, such as coughs, wheezing, or pain upon deep breathing.

Ozone, also known as urban smog, can affect human health in many ways including: itchy, watery eyes, scratchy throat, difficulty breathing, and shortness of breath, coughs, heightened asthma rates, cardiopulmonary cases and premature deaths. CARB and OEHHA estimated the new eight-hour standard would prevent annually 580 premature deaths, 3,800 hospitalizations due to respiratory diseases, 600 emergency room visits for asthma for children younger than 18, and 3.3 million school absences for children ages 5 to 17.

Children are a particularly vulnerable population because their increased exposure to ozone can affect lung function. ARB research has also shown that children spend more time outside, are more active and breathe at a higher rate relative to their size than do adults.

38. Scientists Urge EPA to Strengthen PM Standards

A coalition of 100 doctors, scientists, professors, and researchers are urging the Environmental Protection Agency (EPA) to strengthen its fine particulate matter standard (PM 2.5). In a letter sent to EPA's Scientific Advisory Board in April, they contend that recent studies indicate that current particulate PM 2.5 standards do not adequately protect public health, especially of vulnerable populations like children and older people. They recommend strengthening the 24-hour fine particle standard between 25-35 $\mu\text{g}/\text{m}^3$ from the current 65 $\mu\text{g}/\text{m}^3$ and the annual fine particle standard between 12-14 $\mu\text{g}/\text{m}^3$ from the existing 15 $\mu\text{g}/\text{m}^3$. Under the Clean Air Act, EPA is required to review and revise standards for criteria pollutants every five years. The current fine PM standards were set in 1997. Under a consent decree with environmental groups, the EPA has until December 2005 to determine if these standards need revision with a final decision due on September 27, 2006. In December 2004 EPA designated 225 counties (partially or entirely) in 20 states to be in non-attainment of the PM 2.5 standard.

In related news, EPA removed 21 counties from its list of areas in non-attainment of the PM 2.5 standard. Counties in Alabama, California, Georgia, Indiana, Kentucky, Ohio, Pennsylvania and West Virginia were removed from the list based on 2004 monitoring data.

39. NESCAUM Paper Highlights Importance of PM NAAQS on Northeast

This paper identified the magnitude of general and susceptible populations within the northeastern United States that would benefit from compliance with alternative U.S. EPA 24-hour and annual mass-based PM_{2.5} standards. Within the New England, New Jersey, and New York study area, 38% of the total population are aged <18 or >5 yrs, 4-18% of adults have cardiopulmonary or diabetes health conditions, 12-15% of children have respiratory allergies or lifetime asthma, and 72% of all persons (across child, adult, and elderly age groups) live in densely populated urban areas with elevated PM_{2.5} concentrations likely creating heightened exposure scenarios. The analysis combined a number of datasets to show that compliance with a range of alternative annual and 24-hour PM_{2.5} standard groupings would impact a large fraction of the total population in the Northeast. This work finds that current PM_{2.5} standards in the 8-state study area affect only 16% of the general population, which live in counties that do not meet the existing annual/24-hour standard of 15/65 µg/m³. More protective PM_{2.5} standards recommended or enacted by California and Canada would protect 84-100% of the Northeast population. Standards falling within current ranges recommended by U.S. EPA would protect 29-100% of the Northeast population. These considerations suggest the size of general and susceptible populations affected by the stringency of alternative PM standards has broad implications for risk management and direct bearing on EPA's current NAAQS review and implementation.

40. Canada Sees 5,900 Deaths Yearly From Air Pollution

On April 29th, Health Canada said it believes the deaths of 5,900 Canadians per year can be directly linked to air pollution. That is slightly higher than the previous estimate of 5,000, which was discredited in 2002 after scientists at Health Canada and Johns Hopkins University discovered a statistical glitch in the model used to calculate the figure, the department said in a statement. The latest estimate was generated using complex statistical models and data from air pollution and mortality studies in the Canadian cities of Quebec City, Montreal, Ottawa, Toronto, Hamilton, Ontario, Windsor, Ontario, Calgary, Alberta, and Vancouver, it said. "The new estimate considers short- and long-term health effects of air pollution, and assumes a background level of air pollution," it said. The department urged Canadians to reduce the potential impact of air pollution on their health by driving automobiles less often, heeding air pollution advisories, and avoiding or reducing strenuous outdoor activities when smog levels are high.

41. DC to Purchase Diesel Hybrid Buses Instead of CNG

The Washington Metropolitan Area Transit Authority (WMATA) moved one step closer to adding hybrid buses to its fleet with members of the Board voting to purchase 100 new diesel hybrid buses. The Board declined to pursue the purchase of compressed natural gas (CNG) buses in favor of 117 regular diesel buses. Officials cited prohibitive additional cost of upgrading the fueling facilities for the CNG buses as the reason for the shift to hybrids. WMATA operates 1,450 buses including 164 CNG buses. The buses will be purchased at a cost of \$116 million over the next three years. Funding for the buses will come from WMATA's Infrastructure Replacement Program. However, the decision was contentious, with some board members voting against the decision to abandon the purchase of additional CNG buses in favor of the diesel buses. Those members contended that DC's serious air pollution problems warrant implementation of the cleanest available option which is CNG.

42. California County Purchases Gasoline Hybrid Buses

Montebello, CA recently joined the hybrid bus club with the purchase of five gasoline hybrid buses, adding to its existing fleet of 68 diesel buses. The buses, funded through \$2.55 million in state and federal transportation grants, will be supplied by New Flyer Industries. The 40-foot buses will be fitted with ISE Corp's Thundervolt gasoline-electric series hybrid system. The bus order is part of a 76-bus purchase by six counties in California, including Long Beach, Orange, Norwalk, Gardena, Montebello and Fresno. Delivery of the gasoline hybrid buses is expected in June 2005, and they are likely to be pressed into service in July. The city eventually plans to replace 40 diesel buses with hybrids starting in 2006.

43. Bush Defends Environmental Policies on Earth Day

President George W. Bush defended his environmental policies on Earth Day, although nature conspired to prevent him from delivering his message in the Great Smoky Mountains. "We didn't create this earth, but we have an obligation to protect it," Bush said in an airport hangar at nearby Knoxville's McGhee Tyson Airport.

Bush had planned to go to the Cades Cove wildlife area in the Great Smoky Mountains National Park to help out on a trail restoration project, but heavy rains forced him to scrap a plan to become the first president since Franklin Roosevelt to stop in the country's most visited park.

Many environmentalists consider the Bush administration to be the most anti-environmental in the modern era, dismantling the framework of environmental laws, standards, and enforcement that underpins environmental protection in the United States. But Bush said his administration had moved to protect the environment while encouraging economic growth.

He cited a rule aimed at cutting pollution from diesel engines by 90 percent, and said 90 percent of Americans have water that meets stringent health standards. He also cited moves he has taken to expand wetlands and guard against forest fires by removing downed trees.

The Great Smoky Mountains National Park is visited by 9 million people a year but its spectacular vistas are impaired by a polluted haze. The National Parks Conservation Association says 30 plant species in the Smokies are showing signs of damage from ozone pollution. Bush said ozone levels have dropped since 2000, "but there's more to be done to make sure the Smoky Mountains and the Smoky Mountain National Park's as beautiful as possible."

44. US Rejects Airline Climate Taxes That EU Is Considering

The United States said it would be too harsh on airlines to tax emissions greenhouse gas emissions from their planes, even though the European Union reaffirmed it was considering such measures. It would be "pretty difficult" to impose extra costs for airlines, said Harlan Watson, the senior US climate negotiator, at a UN meeting of government experts to discuss ways to rein in global warming.

"We are still recovering from September 11," he said in response to a question, referring to the impact on the airline industry of the 2001 attacks in the United States. "Aviation is growing in some sectors of the world. It's not particularly growing in the United States," he said, adding that many airlines in the United States had been "teetering on the edge of bankruptcy".

The UN's Intergovernmental Panel on Climate Change estimates that aviation causes 3.5 percent of global warming, widely blamed on human activities, and that the figure could rise to 15 percent by 2050. Growth in airline traffic is more than offsetting fuel efficiency improvements in airline engines.

45. President Bush Says US Should Help China Improve Energy Efficiency

The United States must help fast-growing China and India become more energy efficient, and reduce its own dependence on foreign oil by finding alternative energy sources, President Bush has announced. "It's in our economic interest and our national interest to help countries like India and China become more efficient users of oil," Bush said at a Virginia processing plant that makes "biodiesel" fuel out of soybeans. "That would help take the pressure off global oil supply, take the pressure off prices here at home," he said.

Oil prices reached record highs in April, but have since slipped off the peaks. Surging demand for fuel in China and India, where economies are rapidly expanding, contributed to the price increase. High oil prices have hurt Bush's poll ratings, and he has been calling for more production to help push prices down.

The United States is the world's largest energy consumer, far outstripping China and India. US demand for oil is about 21 million barrels per day, compared with 7.4 million barrels per day projected this year for China, according to the US Energy Department. India's oil consumption was 2.2 million barrels per day in 2003 and is projected to grow to 2.8 million by 2010, according to the department.

Bush said he would ask leaders of the world's richest nations at a Group of Eight summit in July to help developing countries find "practical ways to use clean energy technologies" and be more efficient in energy use.

In his speech, Bush also repeated his call for the construction of new US oil refineries and nuclear power plants to supply more energy to the American economy. "Our dependence on foreign oil is like a foreign tax on the American dream, and that tax is growing every year," he added.

46. President Bush Proposes Building Oil Refineries at Ex-Military Bases

President George W. Bush proposed allowing oil companies to build new refineries at abandoned military bases and encouraging new nuclear power plants. "The problem is clear. This problem did not develop overnight, and it's not going to be fixed overnight," Bush said in lowering expectations for immediate relief from higher gas prices.

Bush, in his second energy speech in a week, warned that the United States must wean itself from foreign oil and described it as a national security problem, two days after he

met Saudi Crown Prince Abdullah and reached no agreement that would lower gasoline prices in the near term.

A Washington Post-ABC News poll showed on Tuesday that less than half of Americans support the way President Bush he is handling energy policy.

Bush proposed pursuing technological advances to make hydrogen-powered fuel cells a source of energy for everything from cell phones to cars. "Our dependence on foreign energy is like a foreign tax on the American people. It's a tax our citizens pay every day in higher gasoline prices and higher costs to heat and cool their homes. It's a tax on jobs, and it's a tax that's increasing every year," he said.

Bush, speaking to a friendly crowd of small business leaders, urged Congress to include in energy legislation now moving on Capitol Hill a plan to let oil companies use former military bases to build new refineries. No new US oil refineries have been built since the 1970s, mostly because of the lengthy process to obtain environmental permits from state regulators and opposition from local communities.

Bush also proposed offering federally backed risk insurance for companies wanting to build new nuclear plants, to mitigate the cost of delays due to any potential failures in the licensing process. The last generation of nuclear power plants was built in the 1970s and 1980s.

In addition, Bush proposed allowing the Federal Regulatory Commission to become the lead authority over states in granting licenses for the construction of liquefied natural gas terminals. At the four operating terminals in the United States, imported supercold, liquefied natural gas is processed for use in the United States. Bush's support for federal regulators to override local opposition to new terminals came on the same day that some of the world's biggest producers of liquefied natural gas, meeting in Trinidad, agreed to work together to seek what they called a "fair price" for their shipments, a move similar to the early days of the OPEC oil cartel.

47. Senate Panel Rejects Better Mileage for Gas Guzzlers

The Senate Energy Committee has rejected a Democratic plan to require sport utility vehicles and minivans to become more fuel efficient and achieve the same gasoline mileage as passenger cars in six years. Under the failed proposal, SUVs and other light trucks would have to meet the same 27.5 mile-per-gallon rule for passenger cars by 2011, up from a current 21 mpg for light trucks.

Democrat Dianne Feinstein of California tried to add the plan to a broad energy bill being debated by the committee. The panel voted against it, 15 to 7.

Supporters said closing the so-called "SUV loophole" would reduce US crude oil imports, cut down on polluting emissions spewed by vehicles and save consumers money at the pump. Opponents said imposing a higher fuel standard would place further burdens on US automakers that are already suffering financially, endangering thousands of high-paying jobs. They also said the government should not dictate what vehicles consumers buy. However, Feinstein pointed out that consumers are on waiting lists to buy more fuel-

efficient hybrid vehicles made by Japanese automakers, while US companies are stuck with growing inventories of gas-guzzling SUVs.

Chairman Pete Domenici of New Mexico said another provision in the bill would require the president to find ways to cut US oil demand by 1 million barrels per day by 2015. US oil demand averages about 21 million barrels per day, with imports accounting for 3 out of every 5 barrels consumed. Gasoline use makes up 40 percent of total oil demand.

Separately, Domenici said he expects lawmakers to offer an amendment to the energy bill to boost annual ethanol production possibly to 8 billion gallons. The corn-based additive, which has broad support among lawmakers from farm states, helps stretch US gasoline supplies and makes fuel burn cleaner. Energy legislation passed by the US House recently would set an annual ethanol mandate of 5 billion gallons by 2012.

48. Federal Court Orders EPA to Act on DC Smog Plan

The US Environmental Protection Agency (EPA) was ordered by a federal judge to expedite action on a smog reduction plan for the Washington DC area. A US District Judge ruled that EPA repeatedly missed deadlines to approve the DC metropolitan area pollution reduction plan and ordered the agency to act on the plan by May 3, 2005. The judge also sharply rebuked the EPA for an “unblemished record of nonperformance” in complying with sections of the Clean Air Act.

The Washington DC area suffers from serious air pollution problems and was designated as a non-attainment area for ozone and particulate matter federal air quality standards. As a result, it was required to submit plans to the EPA outlining measures to improve the region’s air quality. Old diesel buses contribute significantly to the ozone problem in the region, emitting nitrogen oxides and volatile organic compounds which are ozone-forming precursors. Asthma and Allergy Foundation of America recently ranked Washington DC as the fifth most challenging place in America for people living with asthma.

49. Ontario Exempts Hybrids From Emissions Testing

On April 22nd, Ontario Environment Minister Leona Dombrowsky confirmed that the provincial government will exempt hybrid vehicles from the province's Drive Clean emissions testing program. Hybrid vehicles are assured of having very low emissions, and the province's current emissions testing equipment requires vehicles to idle, which gas-electric hybrids are not designed to do, Dombrowsky said in a statement. The exemption will be in the form of an amendment to the Highway Traffic Act that will take effect May 1, she said. The provincial government will refund Drive Clean testing fees to owners of hybrid vehicles that have already been tested, she said.

50. Transport Canada Outlines Projects To Reduce Emissions From Freight Sector

On April 18th, Transport Canada unveiled a series of pilot projects to test ways of reducing emissions of greenhouse gases from Canada's transportation sector. The department said it would provide a total of about C\$1 million (US\$ 806,000) in funding for seven new demonstration projects--two in Alberta, two in Ontario, one in Saskatchewan, one in Quebec, and one at a location to be determined--to cut emissions during freight transport.

"The funding not only helps the transportation sector develop more energy-efficient operating practices and technologies in today's competitive environment, but is also an important investment in our future," Transport Minister Jean Lapierre said in a statement.

The projects are under the Freight Sustainability Demonstration Program, part of the C\$11 million Freight Efficiency Program announced in April 2004. The projects are:

- C\$250,000 for Canadian Pacific Railway, in Calgary, Alberta, to demonstrate and measure the impact of innovative feedback mechanisms and training for train operators on achieving greater fuel efficiency;
- C\$250,000 for FedEx to offset the cost of purchasing and operating a number of hybrid delivery trucks in Canada for a two-year period to determine whether the first available hybrid electric-diesel trucks meet operational and reliability requirements in day-to-day operations;
- C\$200,000 for Quebec-based Innovation Maritime to evaluate the use of a blend of biodiesel and regular diesel fuel on a ship's auxiliary power units while in the Port of Montreal;
- C\$106,925 for Air Canada to convert to using liquid propane gas for 58 gasoline-powered ground vehicles at the Calgary, Alberta, airport;
- C\$105,944 for Saskatoon, Saskatchewan-based Saskatoon Diesel Services to demonstrate a more efficient auxiliary power unit that uses exhaust gas heat recovery to further reduce greenhouse gases emissions;
- C\$68,500 for Toronto-based FIBA Canning to compare the efficiency of tanker trucks retrofitted with wide-base tires with tanker trucks using regular tires by measuring tailpipe emissions on four trucks as they travel between Mississauga, Ontario, and Montreal; and
- C\$28,486 for retailer Hudson's Bay Co. to start using a biodiesel and regular diesel fuel blend in 12 dedicated transport trucks based in London, Ontario.

The Freight Sustainability Demonstration Program contributes up to 50 percent of eligible project expenses, to a maximum of C\$250,000, for demonstration and evaluation of innovative tools, technologies, and practices with potential to reduce growth of greenhouse gases emissions from the transport sector. Transport Canada is to allocate C\$4.5 million under the program through 2007.

51. Ontario Report Supports Shutting Coal-Fired Plants

On April 27th, Ontario Energy Minister Dwight Duncan released an independent study that he said supports the provincial government's decision to eliminate the use of coal-fired electricity generating plants. The study found a direct relationship between the increased air pollution from coal-fired generation and premature deaths, hospital admissions, emergency room visits, and minor illnesses, Duncan said in a statement. "The true cost of coal is in air pollution-related illness," he said. "That's why we're committed to replacing

coal-fired generation with cleaner sources." The study also found that the environmental, health, and financial costs of coal-fired generation were higher than for other options, Duncan said. It identified the lowest-cost option to replace coal-fired plants as a combination of refurbished nuclear plants and new natural gas-fired generation, he said.

52. Ontario Seeks Projects for Clean Power Generation

On April 20th, the Ontario government said it will issue a second request for proposals for renewable electricity generation projects. The request, to be issued April 22, will call for wind, water, solar, biomass, and landfill gas projects producing up to a total of 1,000 megawatts of "green" power, enough to supply 200,000 homes, Energy Minister Dwight Duncan said in a statement. "This is another major step forward to increase Ontario's supply of renewable energy and replace coal-fired generation," he said. The government will issue in June a further request for up to 200 megawatts of renewable generating capacity, he said. The first request, issued in June 2004, led to approval of 10 projects producing 395 megawatts of renewable electricity. The government has also approved four major renewable electricity projects involving both generation and demand programs. The province has set a target of supplying at least 5 percent of total capacity from renewable sources by 2007.

53. US Court Dismisses Cheney Energy Task Force Case

A US appeals court threw out a lawsuit that sought details about Vice President Dick Cheney's 2001 energy policy task force that critics say secretly formed policy favorable to the industry. The unanimous ruling ordered a federal judge to dismiss the lawsuit by the Sierra Club environmental group and the watchdog group Judicial Watch that sought to learn about contacts between task force members and industry executives.

"We hold that plaintiffs have failed to establish any duty, let alone a clear and indisputable duty, owed to them by the federal government" under the law in question, the Federal Advisory Committee Act, Judge A. Raymond Randolph wrote in the 13-page ruling. All eight judges on the appeals court sided with the Bush administration and agreed the lawsuit must be dismissed. "In making decisions on personnel and policy, the president must be free to seek confidential information from many sources, both inside the government and outside," Randolph said.

He said the president may form a committee composed of only federal employees. The internal communications of such a group will remain confidential so long as the right to vote or a veto is not later given to nongovernmental employees, he said. Randolph said the energy task force met that requirement. He said a government official emphasized that no outsiders took part in any of the meetings and there was no evidence any outside individuals had a vote or a veto over the group's decisions.

The dismissal of the case had been expected after a US Supreme Court ruling in June last year that refused to require that task force records be disclosed. It sent the case back to the appeals court. The justices set aside an earlier ruling by the appeals court that Cheney, a former energy industry executive, must comply with a federal judge's order to produce the internal White House documents or give a detailed explanation of what was withheld and why.

The plaintiffs had argued that Cheney, the former chief executive of energy and construction company Halliburton Co., drafted a policy that favored the industry by consulting energy industry executives.

54. US States Sue EPA over Mercury Trading Rules

Eleven states have sued the Bush administration to block new rules allowing coal-burning utilities to trade rights to emit toxic mercury, adding to a flurry of lawsuits challenging the regulations. The core issue in all the lawsuits is whether the Environmental Protection Agency went far enough with its March regulations to protect public health. Mercury contaminates fish and water and has been linked to neurological disorders in young children.

The EPA regulations rolled out in March ordered US utilities to cut their emissions of mercury by 70 percent by 2018 through a cap-and-trade system. New Jersey and 10 other states filed a federal lawsuit in Washington, D.C., saying the cap-and-trade rules will lead to "hot spots" with concentrated mercury levels near power plants. That's because polluting utilities will be able to buy rights to emit the toxin rather than reduce levels outright.

EPA officials have downplayed the possibility of hot spots and the agency said it will "vigorously defend" the rules against court challenges from states and environmental groups.

The other states in the lawsuit are California, Connecticut, Maine, Massachusetts, New Hampshire, New Mexico, New York, Pennsylvania, Vermont, and Wisconsin.

The nation's 1,100 coal-burning power plants emit about 48 tons of mercury each year, the largest unregulated US source.

At least 13 states and 12 environmental groups have already sued the Bush administration over a related rule that dropped Clean Air Act requirements for US utilities to use "maximum achievable control technology" to cut mercury emissions. That change set the stage for EPA to allow utilities to start trading emissions rights.

US utilities say their emissions account for only a small portion of the mercury in US waters, and that pollution from municipal and medical waste incinerators will keep levels high even when the rule is fully implemented.

55. Washington State Adopts California Emission Standards

On May 6th, Washington Gov. Christine Gregoire (D) signed into law legislation that will apply most of California's vehicle emission requirements to Washington vehicles, but not until Oregon also adopts the standards. In signing the Washington bill, Gregoire said the legislation--the Clean Car Act--is the state's "most important environmental legislation so far this decade."

The law would reduce nitrogen oxides and hydrocarbons emitted by new vehicles, as provided in the California standards, according to a statement from Gregoire's office.

Washington is also adopting under the new statute California's pending rules that would limit emissions of carbon dioxide and other greenhouse gases from motor vehicles.

Washington's new emission standards will not take effect until the 2009 model year at the earliest, according to the statement. The statement said Oregon "is in the process of adopting the standards." However, an Oregon bill to adopt the California standards appears to be stalled, and in any case may face stiff opposition from Republican lawmakers, who control the Oregon House. Oregon Gov. Ted Kulongoski (D) soon will reportedly appoint a task force to study the matter.

The California low-emission vehicle standards (LEV II) require reductions in emissions of nitrogen oxides and hydrocarbons in 90 percent of new cars and light trucks, and require the remaining 10 percent of vehicles to produce zero emissions, though manufacturers may receive credits toward the zero-emission requirement by producing partial zero-emission vehicles.

The House voted to accept amendments adopted last week by the state's Senate. The Senate dropped some of California's provisions, including a quota for zero-emission vehicles.

In addition to California, other states that have adopted tougher auto emissions standards include New York, New Jersey, Massachusetts, Maine, Rhode Island, Vermont and Connecticut.

56. ARB Releases Final Proposals Covering Large Spark-Ignited Off-Road Engines

On May 6th, ARB staff issued a staff report detailing regulatory proposals covering emission standards for large spark-ignited (LSI) off-road engines. These proposals contain two major components: a fleet average emission requirement and lower emission standards for new large spark-ignited engines used in off-road applications. Off-road spark-ignited engines covered by this regulatory action include engines 25 hp and greater with engine displacements of one liter or larger. Propane-fueled forklifts represent the single largest application group within this off-road spark-ignited engine category in California (approximately 40,000 forklifts operating in California).

The fleet average emission component of this proposed regulation would begin in 2009 and require progressively more stringent HC+NOx fleet emission standards in 2011 and 2013. The fleet average component of the proposed regulation would only apply to forklifts, sweepers/scrubbers, tow tractors, and airport ground support equipment (for small fleets, only forklifts need comply with the proposed fleet average). Compliance with the proposed fleet average provisions would require equipment owners to consider the purchase of electric or fuel cell equipment options, new equipment certified at low emission levels, and/or the retrofit of existing uncontrolled equipment with verified retrofit technology. The proposed ARB fleet average HC+NOx emission standards are summarized in the Table below.

ARB Proposed Fleet Average for Off-Road Large Spark-Ignited Engines (25 hp or larger with engine displacement of one liter or larger)

LSI Fleet Type	Number of	HC+NOx	HC+NOx (g/bhp-	HC+NOx (g/bhp-
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	Units in CA	(g/bhp-hr) by 2009	hr) by 2011	hr) by 2013
Large fleet – forklift component	26+	2.4	1.7	1.1
Mid-size fleet – forklift component	4-25	2.6	2.0	1.4
Mid-size or Large non-forklift fleet	4+	3.0	2.3	1.7
Small fleet	1-3	N/A	No uncontrolled equipment after 12/31/2010	No uncontrolled equipment after 12/31/2010

An alternative compliance option has been proposed for forklifts used in agricultural activities. Under this proposed option, 10% of the uncontrolled forklifts used in agricultural activities would be required to be controlled to a 3.0 g/bhp-hr or lower HC+NOx emission level each year for 10 years starting in 2007.

With respect to new spark-ignited engines, the ARB proposal would harmonize with EPA's 2007 large spark-ignited, off-road engine requirements (i.e., 2.0 g/bhp-hr HC+NOx certification with steady-state and transient testing) and require manufacturers to certify to a 0.6 g/bhp-hr HC+NOx level starting in 2010. This 0.6 g/bhp-hr HC+NOx certification level would be consistent with EPA's optional "Blue Sky" certification level for this category of spark-ignited engines.

To comply with the proposed fleet average requirements, the proposed program would also provide flexibility with optional tiered certification standards for new engines that would be lower than the EPA 2007 certification limits (e.g., six optional certification levels: 0.1, 0.2, 0.4, 0.6, 1.0, 1.5 g/bhp-hr HC+NOx) that could be used by manufacturers instead of proposed mandatory certification limits, and a retrofit technology verification process.

Board consideration of the proposed LSI off-road engine program is scheduled for the June 23-24, 2005 Board hearing in Fresno, CA.

57. New Research Indicates Diesel Vehicle Sales, Fuel Availability on the Rise

There is growing evidence that American drivers are turning to diesel-powered vehicles as a high-performance and fuel-efficient alternative to gasoline according to the Diesel Technology Forum. A new analysis of data from R.L. Polk & Company shows that annual registrations of new diesel passenger vehicles in the U.S. - including cars, trucks and SUVs - has grown nearly 56 percent during the past five years, from 301,000 diesel vehicles in 2000 to nearly 470,000 diesel registrations in 2004.

Concurrent with rising sales of diesel vehicles has been a greater availability of diesel fuel at local filling stations. According to another new report commissioned by the Diesel Technology Forum (DTF), diesel is now available at nearly half (42 percent) of fueling service stations across the country. This level represents a 12 percent increase from the U.S. Environmental Protection Agency's last report in 2000 that diesel was available at only 30 percent of U.S. service stations.

American consumers now have more diesel choices than ever before. Four new light-duty diesel models were introduced in the U.S. in 2004 (the Jeep Liberty CRD, Mercedes E-320 CDI and the Volkswagen Passat and Touareg), making modern diesel technology now available in four key market segments - from economy cars and family station wagons to luxury sedans and SUVs. This is in addition to the continuing popularity of diesel engine options in medium-duty pickup trucks such as the Chevrolet Silverado, Dodge Ram, Ford F-Series and GMC Sierra trucks.

58. EPA Reportedly Rejects Certification For VW Diesel Using Fuel Additive

The refusal of EPA to approve a metal fuel additive and catalyst replacement system has forced Volkswagen to pull its 2005 10-cylinder Toureg sport utility vehicle from the U.S. market, according to press reports. The EPA decision apparently closes the door on the automaker's prime strategy for controlling soot buildup on particulate matter (PM) traps that is widely employed in Europe.

As automakers struggle to change the negative perception of diesel-fueled vehicles, VW introduced a 310-horsepower, direct-injection diesel with 553 foot-pounds of torque that got the attention of consumers looking for a performance SUV. The 2004 model was certified for emissions by EPA under Tier I standards. The 2005 model, needing to meet the stricter Tier II standards, was rejected by EPA because the V-10 diesel engine relies on a metal additive, the iron compound ferrocene, to aid in burning off particulate matter removed from the exhaust stream in a PM trap.

The primary reason reportedly given by VW for EPA's rejection of the ferrocene diesel additive strategy was their apprehension about approving a metal additive to a fuel after bad experiences with lead and questions about a manganese-based additive, MMT (methylcyclopentadienyl manganese tricarbonyl). "There are too many issues surrounding this additive," and they "don't want to open the door to metal additives," is how a VW official reportedly characterized EPA's position.

The VW officials defended the use of the iron additive, saying it is not toxic and noting there are already iron particles present in engine emissions from normal, everyday engine wear. There are also metals additives present in engine lubricating oil which also find their way into the emission stream, the officials added. The use of the additive would only have been needed for two model years, 2005 and 2006. Diesel vehicles after model year 2006 have to meet an even stricter emissions standard, basically the same emissions standard that gasoline vehicles have to meet, which will require a different technology, the VW officials reportedly said. Also starting in September of 2006, most on-road diesel fuel sold in the U.S. will have a substantially lower sulfur content, having to meet a 15 parts per million standard. This will reduce the buildup of soot on PM traps that has to be burned off.

Another reason VW reportedly gave for EPA's refusing the 2005 model year emissions certification was that it relied on motorists bringing in their vehicle after 60,000 miles to not only refill the ferrocene reservoir but replace the particulate matter trap as well. EPA's position is a vehicle's ability to meet emissions standards over the 120,000 estimated life of the vehicle should not be contingent on components of the after-treatment system having to be replaced before the end of the estimated life.

The VW officials said the company would have covered the cost of refilling the ferrocene reservoir and the replacement of the PM trap. Motorists would be warned by a check-engine light that the trap needs to be changed. At some point the buildup on the trap would render the vehicle inoperable, which was offered as an assurance the vehicle would not drive along spewing impermissible levels of particulate matter for long.

The automaker is reportedly "bullish" that the V-10 Toureg can be reintroduced in model year 2006 after receiving EPA emissions certification. Instead of relying on a fuel additive, the company will use another technology to burn off soot from the PM trap. Diesel fuel is sprayed into the exhaust stream after the combustion cycle, which allows for the soot to be burned off the trap. The technique has been employed by other automakers in Europe on their diesel vehicles for at least two years.

VW has looked to the Toureg to still critics of diesels who see them as using a noisy, smoke spewing, rough driving technology best left to large trucks and buses. The Toureg delivers tremendous acceleration, and does so smoothly and without the rough idling and smoke associated with truck diesels. VW dealers sorely miss the V-10 version and long for its return. They say it attracted customers who sought it for its performance, not its fuel efficiency. Diesels can be 20 to 30 percent more efficient than gasoline vehicles.

59. Toyota To Make a Hybrid Camry in Kentucky

Toyota Motor Corp., Japan's top automaker, said it would produce a gasoline-electric hybrid version of its popular Camry sedan at its assembly plant in Georgetown, Kentucky, starting late next year. It will be the first North American production of a hybrid vehicle for Toyota. Toyota currently imports its hybrid vehicles, such as the Prius car and the Lexus RX 400h luxury sport utility vehicle, from Japan.

Company officials provided no pricing or technical details for the new Camry, the fifth hybrid for Toyota and Lexus, its more expensive line of vehicles.

The Kentucky plant is the company's largest in North America with the capacity to build 500,000 vehicles annually. Toyota already builds the gasoline-powered Camry, Avalon and Solara vehicles there. Officials said the plant has the capacity to build about 48,000 of the hybrid Camrys a year.

The regular Camry was the top-selling car in the United States in 2004, with sales of 426,990 vehicles.

Interest in hybrid vehicles has increased with higher gasoline prices, although they are still produced in relatively small volumes. Toyota's fuel-sipping Prius saw its US sales in April increase 196 percent over the same month last year. Toyota's Lexus RX 400h reached dealerships in April. Its Highlander SUV hybrid is due to go on sale in June and the 2007 model year Lexus GS 450h hybrid sedan is due to go on sale in spring of 2006.

60. Toyota Chairman Says Open to Hybrid Tie-Up With GM

Toyota Motor Corp. is open to supplying its hybrid technology to General Motors Corp. to help its ailing US rival regain competitiveness, according to the Japanese auto maker's chairman. Hiroshi Okuda made the comments two weeks after expressing concern about

the health of the US industry, saying voluntary price hikes and technical tie-ups could be ways to help peers like GM and Ford Motor Co. catch their breath as they lose market share to foreign brands.

GM currently has an agreement with DaimlerChrysler AG to jointly develop a "two-mode" hybrid system by 2007 for use in bigger vehicles like pickup trucks.

"I don't know how well (GM and DaimlerChrysler's hybrid alliance) is working out, but if there's a chance for Toyota to supply technology to GM it's something we'd be interested in," Okuda told a news conference in his capacity as chairman of Japan's biggest business lobby, the Japan Business Federation.

It is not clear whether selling hybrid cars would help GM's bottom line since the system, which twins an electric motor and a gasoline engine to increase fuel efficiency, is expensive to develop and produce. But supplying the technology to more auto makers would definitely benefit Toyota by raising output volumes and thus reducing per-unit production costs.

Toyota has so far signed up Nissan Motor Co. to buy its hybrid system and has an agreement to license part of the technology to Ford.

Okuda's comments also follow a report in the Asian Wall Street Journal that GM Chief Executive Rick Wagoner would meet top Toyota officials in mid-May to discuss a possible technology-sharing deal on hybrid vehicles when he visits Japan. Okuda confirmed the meeting would take place but stressed it had been planned since last year to coincide with Wagoner's visit to the World Expo site near Toyota's headquarters in Aichi prefecture.

GM and Toyota, the world's two biggest auto makers, have long been cooperating in various fields and had renewed a pact to collaborate on research and development of alternative-fuel vehicles until 2006 after a five-year deal expired last year. Toyota said the renewed agreement centered on zero-emission hydrogen fuel-cell vehicles, and that there were no new agreements beyond that, such as those referred to in the Journal.

61. Japan Gives \$3.5 Million for Air Monitoring in Mexico

Japan will give US\$ 3.5 million worth of air-quality monitoring equipment to Mexico, Mexico's environment ministry (SEMARNAT) announced on April 28 on the occasion of the 10th anniversary of Mexico's National Center for Environmental Research and Training (CENICA). Japan's International Cooperation Agency has been working with the center since its inception. Japan will donate the equipment this year, allowing the center to start a new project to improve atmospheric monitoring in Mexico. The project aims to reinforce Mexico's Information System for Air Quality.

62. Mexican Agency Threatens To Close Poorly Maintained Pipelines

On May 12th, Mexico's Federal Bureau for Environmental Inspection (PROFEPA) threatened to close some of the country's major oil pipelines if state-owned oil company Petroleos Mexicanos (PEMEX) does not begin "urgent maintenance" on 35 "high risk" pipelines. Federal Environmental Prosecutor Jose Luis Luege told a press conference

PEMEX needed to immediately begin maintenance operations or face the continued risk of major oil spills.

Luege said the 35 pipelines had outstanding maintenance requirements dating from 1998 or 1999. Mechanical failures due to improper maintenance caused a string of 15 "serious" accidents since October 2004, he said.

Luege said that the Finance Ministry, which controls the disbursement of Pemex's congressionally approved budget, had only authorized 2.4 billion pesos (US\$ 216 million) for maintenance of the critical pipelines. This amount will only allow PEMEX to upgrade seven of the 35 pipelines, Luege said. PEMEX Chief Executive Luis Ramirez Corzo said on Jan. 31 that 100 billion pesos will be needed from 2006 to 2008 for maintenance on the more than half of the company's pipelines that have outlived their 30-year projected life span and therefore present failure risks. He said PEMEX needed an additional 8.4 billion pesos in the 2005 maintenance budget of 26.1 billion pesos.

He said closing one of the at-risk pipelines, the Nuevo Teapa-Poza Rica duct, would effectively shut three of the nation's most important refineries. He added, however, that the economic impact of such measures would make such a move unlikely.

Jose Ramon Ardavin, deputy prosecutor for industrial inspection, said PROFEPA and PEMEX were working on a "follow-up" system that would catalog the nation's pipelines by degree of risk.

Luege said that PROFEPA had filed criminal charges in all of the 15 "serious" cases since October. He said authorities at the Federal Attorney General's Office were continuing investigations but that none of the charges had yet been presented before a criminal court. Luege named only one recent case--in 2002 when a refinery superintendent was forced to step down--where PROFEPA criminal complaints had resulted in sanctions against officials.

PROFEPA also released the results of Pemex's environmental impact study related to the Dec. 22 spill of 5,000 barrels of crude in Nanchital, Veracruz. Gerardo Alverado, director of contaminated site inspections, said 76 of 869 soil samples taken in the area surrounding the site of the spill on the Coatzacoalcos River had exceeded newly established limits.

Alverado said PROFEPA had ordered PEMEX to begin remediation work immediately after the spill, which had prevented more widespread contamination. Luege said PROFEPA was breaking new ground in ordering the thorough remediation of spill sites. Luege said the remediation efforts would require dredging the banks of the Coatzacoalcos River and removing "a very large amount of earth, sand, and sediment, around 10,000 cubic meters." He said the collected waste would be burnt at cement factories.

63. Mexico's Oil Company Announces US\$ 542 Million Investment

Following a string of accidents over the last year, Mexico's state-owned oil company Petroleos Mexicanos (PEMEX) on May 24 said it was investing 6 billion pesos (US\$ 548 million) for environmental protection in 2005, the largest sum ever for a single year.

PEMEX Chief Executive Luis Ramírez Corzo told a press conference that PEMEX was directing the investment toward different environmental projects, mostly in the remediation of sites that have been contaminated for decades.

In 2004 and 2005, PEMEX will have invested 11 billion pesos (US\$ 1 billion) in such projects, Ramírez said. PEMEX's total budget for 2005 is approximately \$12 billion, he said.

Ramírez said the environment was a "No. 1 priority" for the company alongside the production of oil.

PEMEX officials said the company had remediated 198 hectares of contaminated sites and was working to clean up an additional 691 hectares as well as 421 dams.

Ramírez said the company had previously invested around 500 million pesos per year in the cleanup of contaminated sites, what Ramírez referred to as "environmental debt" that has accrued since PEMEX was created in 1938.

In addition to environmental protection efforts, Ramírez said PEMEX was investing US\$ 3 billion in 2005 in the maintenance of installations, including US\$ 1 billion in pipeline maintenance and US\$ 316 million for seven high-risk pipelines. Maintenance investments for 2005 are almost double the average of US\$ 1.5 billion in past years, Ramírez said.

Ramírez said that PEMEX "was not operating any at-risk pipelines." He said all pipelines that were at-risk due to age were operating at lower capacity and pressures and that the operation of all pipelines requiring major repairs had been suspended. Ramírez said the poor maintenance of PEMEX pipelines dates back to a 15 year "lag" since problems in aging pipelines were identified. He said further investments of US\$ 3 billion per year through 2008 would "close the breach" created by the lack of investments in proper maintenance.

PEMEX operates under a heavy tax burden, handing over around 60 percent of its revenue to the federal government, which depends on oil income for a third of its budget. PEMEX says the high level of taxation prevents it from making the needed investments in maintenance as well as in exploration and production.

PEMEX officials said the company was implementing international best practices throughout its four subsidiary operations: exploration and production, refining, gas, and petrochemicals.

PROFEPA's Luege commended the company for its efforts but said he still wanted to see quicker cleanup efforts following accidents and certification of all of PEMEX's installations as "clean industries" under PROFEPA's voluntary audit program. Currently 376 of 562 PEMEX installations have received such certification, the company said.

Luege said PROFEPA had fined PEMEX 120 times in 2003 for a total of 207 million pesos and 106 times in 2004 for a total of 225 million pesos. He noted that many of the fines had yet to be collected due to legal proceedings by PEMEX that have tied up the resolution of the fines in court.

64. PEMEX Pledges US\$ 3 Million for Restoration At Gas-Field Sites

On May 11th, Mexico's state-owned oil company Petroleos Mexicanos (PEMEX) said it was committed to the sustainable development of gas drilling in the Burgos Basin, where it is channeling 34.1 million pesos (\$3.089 million) for environmental restoration projects between 2004 and 2006. In a press statement, Carlos Morales, Pemex's director of exploration and production, said the company recognized it was lagging behind "in the area of sustainable development" but that the company had identified where it needed to improve. The statement followed testimony Morales gave before a special congressional commission investigating gas production in the region.

The Burgos Basin, which stretches through the states of Nuevo Leon, Tamaulipas, and Coahuila, currently provides around one-quarter of the country's national gas production and existing plans would further expand production.

Alfonso Martínez, the top official of the Environment Ministry (SEMARNAT) in Nuevo Leon, said the funds for restoration in the region were welcome but were insufficient to restore the lands already damaged by gas drilling dating from the 1940s. He said roughly 60 percent of the Northeast region required restoration work.

Martinez said the funds from PEMEX were actually set aside in October 2004 and were being disbursed by the National Commission for the Knowledge and Use of Biodiversity (Conabio) to 20 restoration projects proposed by universities and nongovernmental organizations.

Martínez said it was clear that PEMEX was making an effort to improve operations in the region. He said the number of fines imposed on PEMEX for failing to meet a list of 60 environmental requirements for gas projects had been falling in recent years.

Martínez said local, state, and federal authorities along with local universities were working together to ensure that PEMEX and private companies working in the region are meeting requirements. Local universities and governments are providing the companies with properly trained personnel to minimize the impact of drilling operations on local vegetation, wildlife, and watersheds, he said.

65. Canada Considers C\$900 Million for Environment

On May 6th, Canadian Finance Minister Ralph Goodale introduced legislation that would authorize an additional C\$900 million (US\$ 667 million) in spending on environmental initiatives. The funding would contribute to support for public transportation programs and an energy retrofit program for low-income housing, Goodale said in a statement. "These new investments build on our government's efforts to increase federal financial support for the priorities of Canadians in key areas," he said. The new spending is part of an agreement reached by Prime Minister Paul Martin's minority government in the House of Commons with the opposition New Democratic Party. In exchange for the New Democrats' support for legislation to implement the government's 2005-2006 budget, the prime minister agreed to replace C\$4.6 billion in corporate taxation cuts with an equivalent amount of social spending, including on environmental initiatives.

66. US Delays Date to Begin Selling Low-Sulfur Diesel

The US Environmental Protection Agency pushed back by six weeks the planned date in 2006 for introducing low-sulfur diesel, saying the delay will help ease the transition to the new cleaner fuel. The agency said it will issue a rule later this year to move the date that retail outlets must begin selling the low-sulfur diesel fuel (15 parts per million) from Sept. 1 to Oct. 15, 2006. The EPA said the later date will allow more time for terminals and service stations to comply with the federal standard.

"This action will help ensure nationwide transition to 15 ppm (of low sulfur diesel) prior to the introduction of new clean diesel trucks and buses," the agency said in a statement. During the extended transition period, diesel with a sulfur content of 22 ppm can be marketed as ultra-low sulfur diesel fuel, the agency said.

The change will not interfere with the planned introduction of clean diesel vehicles and engines in the autumn of 2006 or reduce the environmental benefits that will be achieved, the EPA said.

The EPA said last year that refiners were "on target" to meet the new federal standard, with the agency expecting 95 percent of the nearly 3 million barrels of highway diesel produced each day will have the new low-sulfur content by the 2006 implementation date.

67. Bush Aide Softened Greenhouse Gas Links to Global Warming

A White House official who once led the oil industry's fight against limits on greenhouse gases has repeatedly edited government climate reports in ways that play down links between such emissions and global warming, according to internal documents. In handwritten notes on drafts of several reports issued in 2002 and 2003, the official, Philip A. Cooney, removed or adjusted descriptions of climate research that government scientists and their supervisors, including some senior Bush administration officials, had already approved. In many cases, the changes appeared in the final reports.

The dozens of changes, while sometimes as subtle as the insertion of the phrase "significant and fundamental" before the word "uncertainties," tend to produce an air of doubt about findings that most climate experts say are robust.

Mr. Cooney was chief of staff for the White House Council on Environmental Quality, the office that helps devise and promote administration policies on environmental issues. (Shortly after this story broke in the New York Times, he resigned his position and took a new job with ExxonMobil.)

Before going to the White House in 2001, he was the "climate team leader" and a lobbyist at the American Petroleum Institute, the largest trade group representing the interests of the oil industry. A lawyer with a bachelor's degree in economics, he has no scientific training.

The documents were obtained by The New York Times from the Government Accountability Project, a nonprofit legal-assistance group for government whistle-blowers.

In one instance in an October 2002 draft of a regularly published summary of government climate research, "Our Changing Planet," Mr. Cooney amplified the sense of uncertainty by adding the word "extremely" to this sentence: "The attribution of the causes of biological and ecological changes to climate change or variability is extremely difficult." In a section on the need for research into how warming might change water availability and flooding, he crossed out a paragraph describing the projected reduction of mountain glaciers and snow pack. His note in the margins explained that this was "straying from research strategy into speculative findings/musings."

Mr. Cooney's alterations can cause clear shifts in meaning. For example, a sentence in the October 2002 draft of "Our Changing Planet" originally read, "Many scientific observations indicate that the Earth is undergoing a period of relatively rapid change." In a neat, compact hand, Mr. Cooney modified the sentence to read, "Many scientific observations point to the conclusion that the Earth may be undergoing a period of relatively rapid change."

68. Mexico To Tighten Heavy Truck Emissions Rules

Mexico has made a preliminary decision to require all new heavy diesel truck and bus motors to comply with current U.S. Environmental Protection Agency emission standards and testing methods. The new standard, still under revision, would replace a current rule that allows for both European and U.S. emission standards. U.S. and European manufacturers have been disputing the final version of the rule for years and the preliminary decision could affect future investments by companies.

Luis Barojas Weber, director of industry regulations at the Environment Ministry (SEMARNAT), said that the government had decided to go with the EPA standards after reviewing economic and environmental factors. The preliminary decision had been made at highest levels of the government, according to Barojas, but SEMARNAT still will go ahead with further consultations with stakeholders and a public consultation process that could run until late 2005 before the final version is published.

The lack of a final rule over the past few years has caused uncertainty for U.S. and European manufactures considering investments in Mexico. Some have threatened to move investments elsewhere, Barojas said.

The fight between two groups of companies began at the end of 2000. On the side supporting the EPA rules are DaimlerChrysler, including DaimlerChrysler-owned Detroit Diesel, and the International Truck and Engine Corporation. The group supporting the continuation of Mexico's current policy of allowing both EPA and European standards includes European truck and bus manufacturers Volvo Truck, Volvo Bus, Scania, MAN Ferrostaal, Volkswagen, and the U.S. companies Kenworth, Cummins, and Caterpillar, all of which manufacture motors meeting "Euro" standards.

Cummins, Mercedes Benz, and International Truck and Engine Corporation are currently the top sellers in Mexico, according to the Mexican truck manufacturers association.

After the start of the Mexican-European Union free trade deal in 2001, manufacturers asked for the acceptance of European emission standards as well, claiming the acceptance of only EPA rules constituted a non-tariff barrier, Barojas said. In a Feb. 10,

2003, resolution, SEMARNAT decreed both EPA and EU emission standards were acceptable for new heavy diesel motors and trucks.

In late 2003, the government launched a financing program to help truckers renew their fleets, and "allowing European models gave the market more options," said Raul Hernandez, Scania's commercial director in Mexico.

However, International Truck and Engine and DaimlerChrysler filed a number of lawsuits throughout 2003 and 2004 in an attempt to overturn the dual-standard agreement, Barojas said.

Joaquin Iñiguez, International Truck and Engine's marketing and government relations director, said manufacturers importing Euro-standard motors from Brazil, such as Cummins, had a significant cost advantage over his company. Further complicating matters, the state-owned oil company Petroleos Mexicanos (PEMEX) will not have the grade of low-sulfur fuel required by Euro IV motors until around 2008, Iñiguez said, adding there is concern that PEMEX may not even be able to meet that target date. Iñiguez said this interim period would give companies providing Euro-compliant motors from Brazil a double cost advantage, since they would be able to comply with the less-costly Euro III standard through at least 2008, while his company was meeting more-costly EPA 2004 standards.

69. US EPA Signs Final Rule On In-Use Diesel Engine Testing

The US Environmental Protection Agency (EPA) has signed a final rule implementing in-use testing requirements for heavy-duty diesel engines. Under the program, manufacturers will measure gaseous and particulate exhaust emissions from diesel engines using portable emission measurement systems (PEMS) installed onboard of the vehicle. The regulation will help to ensure that diesel emission standards are met under real-world driving conditions.

Following a pilot highway truck program starting this year, the in-use testing will become mandatory in 2007 for highway engines. Compliance will be monitored by testing in-use diesel engines to determine emissions during normal vehicle operation. If noncomplying engines are identified, the EPA will use the data to make evaluations about the possible need to pursue further actions. The data will also be available to the public.

US diesel emission regulations include not-to-exceed (NTE) standards (which in most cases are set at 1.25-1.5 times the respective emission limit over the FTP/SET test cycles). The NTE limits must be met under any engine operating conditions--steady-state or transient--within a predefined area on the engine map, without reference to any particular test cycle.

The following are key elements of the program:

- Pilot program for gaseous emissions for 2005 and 2006 model years.
- Enforceable program beginning in the 2007 model year for gaseous emissions, when new NTE and tailpipe emission standards for NOx and (PM) take effect.
- Enforceable and pilot programs for PM begin one year after the gaseous programs begin.

- Monitors in-use emissions of diesel vehicles -- CO, HC, NOx, and PM -- with portable emission measurement systems.
- Testing will be conducted on in-use vehicles, under real-world driving conditions, within the engine's useful life to monitor for NTE compliance.
- Measurement accuracy margins will be established for PEMS field measurements:
- Testing conducted and paid for by manufacturers with EPA oversight.

It is expected that NTE testing requirements will be also adopted in future emission standards in Europe. The US EPA has been sharing their NTE testing experience with EU authorities within the United Nations' ECE GRPE group.

70. US Senate Proposes Funding For Diesel Emissions Reduction

US Senator George Voinovich (R-Ohio) and a bipartisan group of co-sponsors has introduced legislation to reduce emissions from existing diesel engines. The proposed Diesel Emissions Reduction Act of 2005 (DERA) would provide up to \$200 million per year to state and local governments and nonprofit organizations across the country to reduce emissions from older diesel trucks, buses, and off-road equipment currently in use.

The DERA bill establishes national and state-level grant and loan programs to promote the reduction of diesel emissions. The legislation:

- Authorizes \$1 billion over 5 years (\$200 million annually)
- Provides that 70% of the funds are distributed by EPA
- Allocates 20% of funds to states to develop retrofit programs with an additional 10% available as an incentive for state's to match the federal dollars being provided
- Establishes priority areas for projects—such as those that are more cost-effective and affect the most amount of people—and focuses the federal program on public fleets
- Includes provisions to help develop new technologies, encourage more action through non-financial incentives, and require EPA to outreach to stakeholders and report on the success of the program.

71. New York to Adopt California Greenhouse Gas Standards

Gov. George E. Pataki (R) proposed regulations May 18 that would adopt California's auto emission standards for greenhouse gases. The legislation would require reductions in greenhouse gas emissions starting in model year 2009, with a progressively tougher fleet average standard through model year 2016. The regulations also would adopt California's credit and debit trading provisions.

The New York State Department of Environmental Conservation (DEC) estimates that the regulations would reduce automobile emissions in New York by 14.8 million tons of carbon dioxide equivalent per year in 2020 and by 26.2 million tons of CO₂-equivalent per year in 2030. The regulations cover emissions of CO₂, methane, nitrous oxide, and hydrofluorocarbons. The reductions are established in CO₂ equivalents, based on a formula using the gases' global warming potential.

Pataki's announcement comes at a time when New York and several other northeastern states are working to finalize plans for a cap-and-trade program to reduce CO2 emissions from power plants. The plan was due by the end of April, but Pataki said the states are still working on the details of a model rule for the program.

72. UK Pleas For Action On Climate Unsuccessful in US

UK prime minister Tony Blair failed to secure a shift in America's position on climate change policy following a meeting in Washington with US president George Bush. Just before the meeting, science academies from 11 countries attempted to put further pressure on Mr. Bush by issuing a joint statement (see story below) demanding "prompt action" on climate change.

Mr. Blair's traveled to Washington in preparation for the summit of G8 leaders he will host in Scotland in July. Along with African development, Britain has made climate change a priority for its G8 presidency, hoping to heal the divisions caused by America's 2001 decision to reject the Kyoto protocol and its underlying basis of greenhouse gas limits for rich countries and none for poor.

At a joint press conference between the two men, Mr. Bush stuck to a general commitment to developing "clean and efficient technologies" to "address global change". In direct contrast to the case being made by the UK and the G8 science academies he again insisted on the need to know more about global warming. He also said that nuclear power would be essential to any movement away from hydrocarbon energy.

73. GM To Create New Diesel Unit As It Untangles Its Fiat Joint Operations

General Motors has walked away from its five years as Fiat Auto's powertrain partner with something it badly needed: a 1.3-liter common-rail diesel engine. In 2000, only 10 percent of GM sales in Europe were diesel-powered vehicles. By 2004, that figure had increased to 46 percent. About 60 percent of the 740,000 diesels GM expects to sell in Europe this year came from the powertrain joint venture with Fiat.

GM says that one-third of the 1.55 billion euros, or \$1.91 billion at current rates, it paid Fiat to end their alliance covers:

- Shared intellectual property rights to the 1.3- and 1.9-liter diesels developed by the former partners.
- Joint ownership of the Bielsko-Biala, Poland, engine plant, where 550,000 1.3-liter diesels are built annually.

GM also will supply Fiat with four-cylinder gasoline engines.

GM is turning its former Fiat-GM Powertrain assets into a new company called GM Powertrain Europe, based in Turin, Italy, home of Fiat's headquarters. It will be the company's diesel technology specialist. GM also plans to open a global diesel development center in Turin this month.

74. General Motors Executive Urges Consistency In U.S., Canadian Standards

On May 26th, General Motors of Canada Ltd. President Michael Grimaldi urged governments in the United States and Canada to provide automobile manufacturers with consistency in environmental standards. Consistency in regulation among jurisdictions has been identified as one of the key stumbling blocks preventing the auto industry from achieving better environmental performance, Grimaldi said in a keynote address at the EECO 2005 Environment and Energy Conference.

In Canada, for example, there is unnecessary overlap in facility emissions reporting requirements between Ontario regulations and the federal government's National Pollutant Release Inventory, according to Grimaldi.

There is also a need for greater cooperation between industry and government to improve environmental performance, both of vehicles and the plants that produce them, Grimaldi said. He said General Motors has used consistent, focused efforts to improve its performance, but further change will be more difficult and will require a move away from adversarial regulatory approaches and toward partnerships.

With the assistance of the federal and provincial governments, Grimaldi said, General Motors's C\$2.5 billion (US\$ 2.1 billion) Beacon Project will refurbish the company's manufacturing plants and provide needed investment in industry-leading environmental technologies. He said the updated plants will meet Ontario emissions standards and will set new benchmarks for assembly and paint operations that will serve as a model for other manufacturers.

Since 1990, General Motors has reduced by 40 percent the carbon dioxide emissions from its Canadian operations, despite continuing increases in production levels, Grimaldi said. That is approximately seven times the improvement required to meet the company's share of Canada's overall Kyoto Protocol commitment to reduce greenhouses by 6 percent from 1990 levels by 2008-2012, he said.

Grimaldi stressed the auto industry's strong environmental performance to date, noting that since the 1970s, General Motors and the other automakers have reduced smog-related emissions from their vehicles by more than 99 percent. And despite growing numbers of vehicles and longer driving distances, overall levels of volatile organic compounds and nitrogen oxides in Canadian air sheds are continuing to decline, according to Grimaldi.

Grimaldi said General Motors was the first company to join the U.S. Environmental Protection Agency's Climate Leaders program and was the first to cooperate with the Ontario Ministry of Environment. The latter project required a certificate of approval for its Oshawa plant that carries enhanced requirements for tracking and reporting environmental performance based on stringent criteria.

General Motor's latest Canadian initiative is a "Car Heaven" program, launched May 26, that provides an incentive for Canadians to get older vehicles with less stringent pollution controls off the road. Grimaldi said the program offers consumers a C\$1,000 credit toward the cost of a new vehicle for turning over an older vehicle for recycling. There are currently more than 7 million 10-year-old and older vehicles on Canadian roads, Grimaldi said.

Grimaldi stressed that General Motors is taking a different approach to adding hybrid vehicles to its product line compared to other automakers. Rather than starting with the most fuel-efficient vehicles, the company is starting with larger vehicles, such as sport utility vehicles, he said. The company is planning 12 different hybrid models based on its top-selling models, with three different hybrid propulsion systems that provide varying trade-offs between fuel efficiency and cost, he said. General Motors also has introduced a hybrid mass transit bus for use in municipal transportation systems.

A key to making hybrid vehicles more effective in reducing emissions levels is the broad availability of ethanol-blended gasoline, he said. Grimaldi said General Motors is the only Canadian auto manufacturer to ensure that all of its vehicles can operate efficiently on 10 percent ethanol blends. He said the availability of even more ethanol-intensive fuels, such as E-85, would permit manufacturers to produce full-size sport utility vehicles with greenhouse gas emissions performance comparable to the smallest, most fuel-efficient hybrid vehicles available.

75. Daimler, EPA In Discussions Over SCR

DaimlerChrysler and EPA are in negotiations on the terms by which the automaker will be allowed to bring in diesel vehicles using selective catalytic reduction (SCR) emissions control technology according to published reports. EPA's position has consistently been that whatever emissions reduction technology a vehicles uses must continue to meet federal emissions standards for its 120,000-mile lifetime. SCR technology requires motorists to fill a tank with a urea solution; to gain EPA approval of the diesel-fueled vehicles using SCR, Daimler has agreed to incorporate protocols that disable the vehicle if the customer has not filled an empty urea reservoir after a certain period of time.

What is under discussion is the number of miles the motorist will be allowed to drive on an empty, or near empty, urea tank. Also being discussed is whether the motorist will be given a number of opportunities to restart the vehicle after the first punitive warning.

Another aspect of the discussions revolve around establishing a distribution infrastructure for the urea solution. Chrysler and Mercedes dealerships throughout the U.S. will definitely carry the solution, but the dealerships are not open 24-hours a day. The automaker is also exploring having a company such as Jiffy Lube stock the product in its oil change centers. This still would not solve the problem of needing round-the-clock availability.

DaimlerChrysler officials have reportedly been heartened by sales of its diesel Jeep Liberty sport utility vehicle, which have exceeded company predictions.

76. Volkswagen Agrees to Pay More Than \$1 Million for Clean Air Act Violation

Volkswagen will pay \$1.1 million to resolve its failure to promptly notify EPA and to correct a defective oxygen sensor affecting at least 329,000 of their 1999, 2000 and 2001 Golfs, Jettas, and New Beetles, federal officials announced today. This is the largest civil penalty to date for this type of violation.

As part of this settlement, Volkswagen completed a voluntary recall of the affected vehicles at a cost of over \$26 million. Vehicles with the defect may release thousands of tons of harmful pollutants including nonmethane hydrocarbons (NMHC) and carbon monoxide (CO).

The defect occurs gradually on engine start-up in cool and damp environments when the oxygen sensor cracks from "thermal shock." The dashboard indicator light illuminates, telling the owner to "Check Engine." Volkswagen received numerous warranty claims associated with cracked oxygen sensors during the winter of 1999-2000, but did not report the defect to the EPA until June 2001. EPA had already discovered excess emissions from a randomly selected vehicle during a routine test.

In addition to paying the civil penalty, pursuant to the consent decree, Volkswagen will also improve its emissions defect investigation and reporting system to ensure future compliance.

77. U.S. Makes Clean Diesel Technology Development A Priority With EU.

The Bush administration has made the development of clean-diesel vehicle technologies a priority in a new cooperative energy policy stance with Europe, where diesel vehicles have gained substantial market share because of emissions improvements and fuel saving benefits, according to a new policy paper released by the White House during the recent E.U.-U.S. Summit in Washington, D.C.

The decision to move ahead with the EU. on clean diesel was announced June 20 in a paper released during the summit's first day of meetings. The title of the document, "Energy Security, Energy Efficiency, Renewables and Economic Development," reveals the gist of White House thinking behind U.S. interest and collaboration with Europe on clean diesel.

"By working together, the European Union and the United States intend to cooperate [and] promote sound energy policies, improve energy security and foster economic growth and development," the paper states. "We recognize the need for stronger actions to increase energy security and reduce the economic impact of high and volatile energy prices."

Furthering cooperation on clean diesel is placed in a list of objectives that the U.S. and EU. "will focus their activities ... [as] areas of common action." The diesel objective reads: "Working together to promote the development, deployment and adoption of cleaner, more efficient diesel vehicle technologies, including by seeking to better align our regulatory standards for diesel engines and fuels."

The diesel industry sees the policy announcement as expected and in step with the administration's renewed diesel fervor, highlighted last month by a presidential visit to a biodiesel facility in West Point, Virginia, say industry sources.

The European Union and the United States recognize the important potential that can result from further efforts. We will continue to address energy efficiency through effective policy measures and technology, and focus our efforts on achieving security of supply and helping the developing world to address energy challenges.

To further these objectives, the United States and the European Union will focus their activities in the following areas of common action:

- Working in partnership with developing countries to help them reduce poverty by promoting energy efficient policies and the use of renewable energy sources, as well as deploying advanced, efficient, affordable energy technologies to help meet their energy needs.
- Working together through the Carbon Sequestration Leadership Forum to foster the development and deployment of clean, efficient technologies, especially in key developing economies, as global reliance on fossil fuels, particularly coal, continues.
- Promoting our work on hydrogen technologies and the International Partnership for the Hydrogen Economy.
- Working together to ensure the continued safe operation of existing nuclear generation and to exchange experience on nuclear safety measures and control. We take note of the efforts of those states who will continue to use nuclear energy to develop more advanced technologies that would be safer, more reliable, and more resistant to diversion and proliferation.
- Continuing work to advance all forms of renewable energy, and to promote the use of renewable and energy efficiency technology and policy measures, including promotion of energy conservation. As members of the Renewable Energy and Energy Efficiency Partnership (REEEP), we will place a greater emphasis on cost-effective energy efficiency opportunities.
- Working together to promote the development, deployment and adoption of cleaner, more efficient diesel vehicle technologies, including by seeking to better align our regulatory standards for diesel engines and fuels.
- Working through the international Methane to Markets Partnership to capture and use methane as a clean-burning energy source from coal mines, landfills and oil and gas systems.

78. Three Studies Link Daily Ozone Levels to Mortality Rates

Three independent research reviews commissioned by the U.S. Environmental Protection Agency and published in the July issue of *Epidemiology* draw "remarkably consistent" conclusions linking daily levels of ozone pollution to an increased risk of death. Accompanying editorial commentaries point out that, although the studies are limited by the nature of the data and the statistical methods used, the results provide the strongest evidence to date relating ambient ozone levels to daily mortality.

All three papers were meta-analyses, or statistical reviews of previous research data. By combining results from many studies, important patterns can emerge that are not apparent in the individual studies. Although the researchers worked independently, using a broad range of studies and applying varying statistical methods, all studies had the same goal: to assess whether death rates increase on days with high levels of ozone pollution -- and if so, how much.

Dr. Michelle L. Bell of Yale University and colleagues found a significant relationship between ozone and short-term mortality rates using two different datasets. The effect was particularly strong for cardiovascular and respiratory causes of death, in elderly people, and for same-day ozone levels. For each 10 parts per billion (ppb) increase in daily ozone

level, the total death rate for that day and the two following days increased by 0.87%. This relationship remained consistent after adjustment for other factors, including levels of particulate pollutants.

The analysis by Dr. Jonathan I. Levy and colleagues of Harvard School of Public Health found a very similar increase of 0.86% per 10 ppb. Most of the ozone-related increase occurred during the summer months. In this study, the relationship between ozone and mortality appeared significantly weaker in areas with high rates of home central air conditioning.

The analytic approach taken by Dr. Kazuhiko Ito and colleagues of New York University suggested a smaller overall effect of ozone on death rates, but confirmed that the main effect occurred during the warm months. Analysis of data from 23 geographic locations around the world confirmed a significant relation between ozone and mortality in all but 5 regions. The relationship was strongest in Brisbane, Australia, and Mexico City, cities where ozone levels remain fairly constant year-round.

Previous studies have found increased rates of health problems on days with high levels of ozone pollution, especially in children and older adults with asthma and other respiratory diseases.

In an editorial commentary, Dr. Steven N. Goodman of Johns Hopkins School of Medicine highlighted the fact that three independent research groups reached such consistent conclusions, despite using different methods and operating under differing assumptions. Dr. Goodman also points out some weaknesses of the statistical methods used, especially the use of pooled data from many single-site studies. A 14-year follow-up study of air quality from 95 U.S. cities suggests that ozone's effect on death rates may be smaller, though still significant. Very large, multi-site studies would be needed to provide the data needed for more definitive conclusions on the health risks of ozone.

A commentary by Dr. David V. Bates of University of British Columbia points out that the new studies are timely, because the EPA is planning a review of federal ozone standards in 2005. Added to previous research showing harmful health effects of ozone pollution, the new studies "point to the urgent need to reduce public exposures to ambient ozone by all possible means," Dr. Bates concludes.

George Thurston, an associate professor of environmental medicine at the New York University School of Medicine, said there have been other studies that suggested this link, but that the size and scope of these studies is important. "This is more broad-based evidence that shows these associations more comprehensively," he said.

Also reported in the studies were that mortality rates were lower in cities where air conditioning was prevalent during hot weather. "Air conditioners are not just a comfort issue, but a health issue," Thurston said.

John Bachmann, the EPA's associate director of science/policy in the agency's air quality and standards division, said the consistent and significant findings in all three studies linking higher ozone levels with higher mortality rates suggests there is a strong relationship between the two. He said the findings should help the agency in its assessment of the cost/benefit ratio of air quality regulations concerning ozone. "We know that the benefits of lower ozone levels include decreased hospital admissions and fewer

illnesses, but we wanted to resolve the question of whether we should be counting mortality in assessing the benefits of reducing ozone levels," he said.

"Now, these studies will be included in the scientific review, and the results will play some role in the review of the standards for ozone levels," he said, adding that it was "way too premature" to say whether these studies will result in tougher ozone standards. The agency now recommends ground ozone levels not exceed 80 ppb.

ASIA PACIFIC REGION

79. Beijing Experienced Severe Particulate Pollution in April

The four worst Beijing air quality days so far this year all occurred in April as the result of high concentrations of particulate matter from construction, coal incineration and dust storms. This occurred after three months of relatively clean air in comparison to the same period last year. Beijing experienced a sharp uptick in the number of extreme pollution days in 2004 and in increase in average particulate pollution levels.

Despite efforts, such as moving heavy industry and electricity generation outside the city, to improve Beijing's air quality ahead of the 2008 Olympics, growing energy consumption, the rising numbers of personal automobiles and the city's omnipresent construction, present hurdles for continued improvements.

The Beijing Municipal Government has identified World Health Organization average Ambient Air Quality Standards as a target for 2008. With levels of pollutants such as particulate matter and nitrogen dioxide several times that of major cities in developed countries, a great deal of work remains for Beijing to meet its air quality goals.

80. Japan Approves Plan to Meet Kyoto Targets

On April 28th, Japan's Cabinet approved a new program for implementing the country's commitments under the Kyoto Protocol on climate change, making few changes since a preliminary plan was released for comment March 29. Under the Kyoto Protocol, Japan is required to reduce its greenhouse gas emissions by 6 percent from 1990 levels by the period 2008-2012.

The newly approved plan sets emissions-reduction targets for major industrial sources, and calls for an overall reduction in industrial emissions by 8.6 percent from 1990 levels by 2010. From the energy sector, however, it calls for a more severe cut of 16.1 percent.

At the same time, it allows for an increase in emissions from offices and households by 10.7 percent, and an increase from transportation of 15.1 percent. At the end of fiscal year 2002, which ended in March 2003, industrial carbon dioxide emissions were down 1.7 percent from 1990, but office and household emissions had risen 33 percent and transport emissions had risen 20.4 percent.

The plan also said Japan would use forestry "sinks" to absorb CO₂ equivalent to 3.9 percent of its 1990 greenhouse gas emissions by 2010. It also said Japan would purchase emission credits from other countries under the Kyoto Protocol's flexible mechanisms to help meet its target.

In a related effort, Japan's Environment Ministry April 28 launched a Web-based program called Team Minus-6 to solicit public contributions to emissions reductions. The program outlines actions that consumers can take such as reducing the use of air-conditioners and driving less.

81. Phasing Out Leaded Gasoline In Jakarta Improves Children's Health

A study held by a team of the University of Indonesia's (UI) Environmental Health Department from January to March this year shows that the lead content in blood samples of elementary school students has dropped to 4.2 microns per centiliter from 8.6 microns in 2001, when the leaded gasoline phase-out program began.

"The result of the study indicates that the leaded gasoline phase-out program has been fruitful in reducing lead content in human blood," said Budi Haryanto, the UI team coordinator.

A high level of lead, which usually enters the human body through air and food, can damage brain cells, marrow, kidneys and other vital organs.

Budi revealed that blood samples were taken from 200 third and fourth graders of 20 elementary schools in five municipalities. Each school was represented by 10 students -- five girls and five boys. Budi said the team chose elementary school students as the subjects in the study "because they are at the most susceptible age to the impact of lead on the human body".

According to Budi, some 80 percent of lead in the environment is contributed by vehicular emissions. Other resources are manufactured goods like paints, canned foods, batteries and electronic waste.

Responding to pressure by environmentalists, the central government has required state oil and gas company Pertamina to supply only unleaded gasoline to fuel stations in the capital. Unleaded gasoline is also sold in Bali, Batam and Cirebon.

According to ministerial decree No. 1585.K/32/MPE/1999 issued by the Minister of Energy and Mineral Resources on the requirements of gasoline and diesel sales, Pertamina was required to supply only unleaded gasoline to the domestic market, as per Jan. 1, 2003. The regulation has yet to be upheld by the government.

Responding to the government not upholding the law, the Committee for Leaded Fuel Phase-Out (KPBB) has lodged complaints against the ministry. KPBB chairman Ahmad Safrudin said his organization demanded that the ministry immediately phase out leaded gasoline.

82. New Zealand to Establish Tax on Greenhouse Gases

On May 4th, New Zealand announced it will introduce a tax on greenhouse gas emissions equal to NZ\$ 15 (US\$ 11) per metric ton of carbon-dioxide-equivalent emissions starting in April 2007. The move is part of a broader government climate change initiative begun in October 2002.

Pete Hodgson, the convener of the Ministerial Group on Climate Change said that "the carbon tax introduces a price differential between clean and polluting energy sources that reflects their environmental costs so individuals and businesses can make informed choices." The ministers' group is intended to help coordinate climate change policy.

The tax will apply to fossil fuels when they are imported or produced and to certain other emissions of greenhouse gases from large geothermal developments and manufacturing processes.

The tax will add about one New Zealand cent to the cost of a kilowatt-hour of electricity for households (roughly a 7 percent increase), NZ\$ 0.04 to a liter of gasoline, NZ\$ 0.46 to a 9 kilogram bottle of LPG, and NZ\$ 0.68 to a 20 kg bag of coal. The tax will raise energy costs an average of NZ\$ 4 per week for a typical household.

Estimates of the macroeconomic impact vary. Overall, a small negative impact on the order of 0.03 percent of gross domestic product is expected.

The tax will be administered jointly by the Inland Revenue Department and the Customs Service.

The IRD May 4 released a consultation paper seeking feedback on how the carbon tax will apply to specific industries. The closing date for submissions is July 8.

The tax has been designed to allow for a possible future transition to emissions trading. The government said it views the carbon tax as a "transitional path toward full or partial emissions trading, which may become a better option as world markets develop."

The tax is intended to be revenue neutral, and plans for redistributing the net additional proceeds from the carbon tax will be released May 19 as part of the business tax package in the 2005-06 budget, the government said.

Meanwhile, on April 20th the government announced it would streamline the process through which companies can gain exemptions from the carbon tax under New Zealand's Negotiated Greenhouse Agreement (NGA) program. An NGA is a binding agreement between a firm and the government that requires the firm to move toward "world's best practice" in managing greenhouse gas emissions. Only firms or industries whose international competitiveness would be at risk from an emissions charge are eligible. NGAs aim to prevent "carbon leakage," whereby firms or production could potentially migrate from New Zealand to take advantage of another country's less stringent climate change policies.

In the same announcement, the government said it had simplified NGAs to reduce compliance costs by adjusting the process for defining world's best practice in emissions management and for measuring progress toward that objective.

83. China Says It Is Not To Blame For Global Energy Crunch

China's fast-growing economy is largely self reliant in energy and is not to blame for a crunch in world energy supplies, the country's top state planner has said. Some have

pointed to rising demand from China as a contributor to high oil prices but Ma Kai said the country was 94 percent self-sufficient in energy last year, helped by its huge coal industry.

"China's economy is growing very fast but by no means does it have to lead to strained energy supplies around the world," Ma told an economic forum on the island of Hainan. China was looking for more energy supplies at home to meet its growth needs, and there were enough resources to support this, Ma said.

China is largely dependent on coal to drive its economy, the world's seventh largest, and Ma pointed to abundant recoverable coal reserves of more than 140 billion tons. Coal accounted for about 67 percent of China's energy consumption and 76 percent of energy production, he said.

China was trying to save energy and develop other sources, such as nuclear, wind and hydro power generation, to reduce its reliance on coal, Ma added.

The worst power crunch in two decades hit China last year. More than two-thirds of its provinces suffered electricity blackouts and coal ran short amid soaring demand for energy. Shortages continue in southern China this year, with projections for a national shortage of 23,000 megawatts this year, down from 40,000 megawatts last year.

84. China to Watch Others on Climate Change Action

China will watch how other countries meet their environmental commitments to cut greenhouse gas emissions in coming years before deciding whether to sign up to its own mandatory cuts, according to Xie Zhenhua, Chinese environment minister; he said China would take action to cut emissions blamed for global warming, but would wait before committing itself to targets after 2012, when the first phase of the Kyoto Protocol environmental treaty ends.

"I hope that some countries would, according to the obligations which are provided for in the Kyoto Protocol, implement in a substantive way their obligations and take up their commitments," Xie told reporters in Brussels after meeting European Union environment officials. "On the Chinese side, the Chinese government would make its own decision after making some assessments of the implementation by other countries."

The European Union, considered a leader in climate change and largely credited with securing Russia's crucial ratification of Kyoto after the United States pulled out, is pushing for other nations to join the fight against global warming. Global negotiations for the post-2012 period are to begin this year. The EU has said developed nations should pursue cuts of heat-trapping gases of 15-30 percent from 1990 levels by 2020. But Environment Commissioner Stavros Dimas has stressed that other nations -- especially the United States -- must be on board in order to make a dent in global warming.

China, like other developing nations that have signed up to the Kyoto Protocol, is not required to make emissions cuts in the treaty's first period from 2008-2012.

85. Asia Moving To Low Sulfur Fuels But Haphazardly

Asia's uneven sprint to match the West's stringent fuel standards has tightened supplies and forced older refiners to gear up or bow out. By the end of 2007, countries that consume more than half of Asia's 24 million barrels per day (bpd) of oil demand will move to lower sulphur emission standards, according to a survey conducted by Reuters. By 2010, nearly all of Asia will have tightened specifications.

Looming changes in Indonesia and Vietnam, Asia's leading importers of gasoline and diesel, threaten to strain clean fuel supplies after new specifications in India and the Philippines triggered a wave of imports. Further down the line, refiners in China -- the world's second biggest consumer -- face the challenge of satisfying more stringent rules in 2010 at the same time as rapidly rising demand and increasing high-sulphur crude imports.

Unlike the West, Asia has no harmonized standard on limits for sulphur. Nations are left to move forward at their own pace, causing sometimes sudden and irregular shifts in cleaner-fuel demand that can spike prices and re-route trading flows.

Multi-billion-dollar investments have also taxed budgets at a time when analysts say the world's refiners should be expanding capacity to meet soaring demand for transport fuels.

Still haunted by the anemic margins and costly overcapacity of the 1990s, refiners are understandably reluctant to plough in the up to \$30 billion analysts say is needed to meet higher environmental standards over the next decade. China alone reportedly needs at least \$3 billion worth of investment.

Asia -- which has the fastest rate of vehicle growth in the world -- has a proven track record in catching up with the West when it comes to consumer fuels. Europe and the United States took 20 years to remove lead from gasoline; most of Asia did it in four. Now, Asian governments are racing to institute European fuel quality standards at a breakneck pace.

In the next year alone, four Asian countries that consume 8.2 million bpd will reduce their sulphur limit to 500 parts per million (ppm) -- or 0.05 percent -- the so-called EURO-II standard that came into force in Europe in 1996. More than half of Asia is already at this standard. By 2010, nations with more than 8 million bpd of demand plan to cap sulphur at 50 ppm, a move Europe officially made this year.

Major oil product exporters such as Singapore, South Korea and Taiwan, whose refiners are set to leapfrog mid-tier European standards to meet a diesel sulphur limit of 50 ppm by 2007, will gain as the region's supply tightens, analysts say.

Japanese refiners produce the region's cleanest gasoline and have moved faster than government regulation.

But faced with high investment costs and a rapidly shifting landscape, some refiners have opted simply to shut older plants, exacerbating the current crunch in product supply. Exxon Mobil Corp. mothballed its Port Stanvac refinery in Australia due to poor profits, turning the country into a net importer of petrol. Analysts say new specifications from 2009 could keep the plant off the market for good.

The changes are taking a toll on some of Asia's developing nations, which for years have been a dumping ground for lower-quality oil products produced elsewhere. In the

Philippines and India, where new standards took hold this year, refiners have been forced to import low-sulphur fuel after hesitating to invest in costly upgrades.

Analysts say Royal Dutch/Shell's 10-year-old refinery in the Philippines may struggle if it does not upgrade soon. Caltex mothballed a 49-year-old refinery there in 2003.

India, normally a top exporter of diesel and gasoline, bought a massive 80,000 bpd of cleaner diesel in March to meet new clean fuel laws in its 11 largest cities and may not be able to provide high-quality fuel nationwide until the end of this year. Diesel imports could stay as high as 45,000 bpd through June due to refinery upgrade delays, an Indian refinery source reportedly said.

And in Thailand, Bangchak Petroleum PCL is raising funds for a \$220-million plant to make cleaner fuels and boost profits by 2007 amid worries it would be left behind as the government aims for 50-ppm fuels by 2010.

China has taken a measured approach, instituting a nationwide 500-ppm limit for both gasoline and diesel from July that refiners say they are able to meet. Beijing has committed to improving air quality ahead of the 2008 Olympic Games. The next push to make even cleaner fuel by 2010 may be more difficult, however, as Chinese refiners face the fastest demand growth of any major consumer.

86. South Korea Aims to Curb Pollution with Diesel Tax Hike in July

South Korea, the world's fourth-biggest crude oil buyer, has announced that it plans to raise a domestic transport tax on diesel by 14.4 percent in July as part of efforts to curb air pollution. The rise is in line with the government's medium-term plan to bring the domestic retail price of diesel to 85 percent to that of gasoline by July 2007, the finance ministry said in a statement.

According to the plans, which are subject to parliamentary approval in June, transport tax on diesel would rise by 46 won per liter to 365 won from July 1 this year, the ministry said. The tax hike would result in a 6.5 percent rise in retail price of the fuel to 1,025 won per liter, based upon an average price for the past six months, it said. The government would raise the transport tax by 39 won per liter in July 2006 and again by 50 won per liter in July 2007 to meet the medium-term goal, it said.

To help ease financial burden of truckers and bus operators, the government would fully cover the amount of diesel price increases through a subsidy for the next three years, it said.

Meanwhile, Seoul would cut a special consumption tax on liquefied petroleum gas (LPG) and Butane by 35 won to 210 won pre liter effective July 1, bringing the retail price of the fuels to just 50 percent of that of gasoline, the ministry said. The tax cut would see the retail price fall to 686 won per liter from 730 won now.

87. Hyundai Motor Eyes Hybrid Cars in 2006

South Korea's Hyundai Motor Co. said it may produce rear-wheel-drive luxury cars around 2007 to emulate the success of BMW's premium cars and Toyota's Lexus, and also churn

out hybrid cars later in 2006. The moves by the country's top automaker, which controls half the home market, is seen as a step towards its goal of being among the world's top five car makers by 2010.

Hyundai and its affiliate Kia Motors Corp. will also bring forward by a year, to end-2006, plans to sell small-size hybrid cars to the United States, the spokesman said. The first hybrid models will be subcompact cars of Hyundai's Accent and Kia's Rio, which share production platforms. Hyundai would not churn out large-size hybrid vehicles for a while because of their low profitability, the spokesman added.

Like many South Korean exporters, Hyundai has to cope with a stronger won currency and higher steel prices, as well as a sluggish local economy. Its first-quarter operating profits tumbled by almost one third.

88. MMT Use To Be Eliminated In India

In response to strong pressure from the Centre for Science and the Environment (CSE) and the Central Pollution Control Board, Mani Shankar Aiyer, Minister for Petroleum and Natural Gas, has written a letter to Ms. Anumita Roychowdry, lead campaigner and ICCT member, noting that "except for Numalighr Refinery Limited (NRL), which uses marginal quantities of MMT as a trimming agent for a marginal increase in the octane number of Motor Spirit, other Public Sector Oil refineries are not using MMT anymore. You will be glad to learn that NRL too will discontinue the use of MMT by March 2006."

89. Thai Energy Plan Calls For Cutting Demand, Boosting Renewables

On May 17th, Thailand's Cabinet approved a plan put forward by the Energy Ministry that will boost investment in renewable energy and energy conservation programs as part of a campaign to cut the country's dependence on fossil fuel imports. The plan aims to reduce energy consumption 20 percent by 2009, thereby saving the country 200 billion baht (US\$ 4.9 billion) per year, according to a ministry statement.

The plan calls for 800 billion baht in investment to improve Thailand's energy infrastructure and to promote alternative energy sources. Some 116 billion baht has already been earmarked for the cultivation of crops used in biofuels, such as palm, sugarcane, and tapioca.

To encourage motorists to switch from benzene and diesel to bio-fuel blends or gasohol, the government will ban the sale of additive methyl tertiary butyl ether (MTBE) and 95 octane gasoline from January 1, 2007. The number of gas stations offering gasohol will rise from 430 to over 7,000 by the end of 2005, with gasohol consumption reaching a projected 4 million liters annually over the next two years, the ministry said.

The plan will also promote the use of local natural gas, with the government pledging to have some 180,000 natural gas vehicles on the road and at least 180 natural gas stations in operation (up from 31 currently) by the end of 2008. The effort is supported by the Ministry of Finance, which has promised to reduce import duties on natural gas cars and parts, and the Ministry of Transport, which will cut the registration taxes applied to natural gas vehicles.

The Ministry of Energy hopes the shift to alternative fuels will reduce annual benzene consumption by 760 million liters and annual diesel consumption by 1.3 billion liters.

Speaking to reporters after the Cabinet endorsed the ministry's plan, Minister of Energy Viset Choopiban said it would be supplemented by a nationwide awareness campaign promoting energy-saving measures. In addition to calling on the public to drive below 90 kilometers per hour and turn off appliances at night, the Cabinet had instructed all government offices to immediately trim their energy consumption by 10 to 15 percent, which will be verified by a ministry committee, he said.

The Cabinet had also called for the establishment of a joint government-private sector panel to brainstorm ways to save energy in the industrial sector and push at least nine industrial estates around the country to use only natural gas by 2007, he added.

90. Analysts Say China's Auto Market Has Bottomed Out

China's automobile market has bottomed out and pricing is expected to stabilize this year after a loss of pricing power in 2004, analysts and companies said at a China investment conference. Car sales in China grew 15 percent in 2004 after almost doubling in 2003, as heavy investment led to oversupply and price cuts and a government-ordered credit tightening cooled the market.

But demand for cars is still robust as ownership remains very low in China.

Car sales in China, the world's third largest market, rose 22.4 percent in May from a year earlier, the country's official industry body said in monthly figures. That kind of growth outshines what is seen in mature markets such as North America and West Europe and has attracted a swarm of foreign car makers.

Ford Motor Co., for example, expects its car sales in China to jump at least 50 percent this year, as substantial price cuts become a thing of the past.

China's auto manufacturers sell the vast majority of their output domestically. But they are modeling themselves after their Japanese and Korean counterparts and have rapidly improved their technology by learning from western partners and rivals.

Low-priced Chinese car maker Geely Automobile Holdings Ltd. said last month it will soon assign a contractor to assemble its cars in Malaysia for sale in Southeast Asia and is in talks for similar deals in the Middle East and North Africa. Geely, which has learned its lesson the hard way, said it had no plans to enter the US or European market for now. The company started selling motorcycles in the United States a few years ago but sales failed to take off due to quality problems. That line of business is not profitable, Geely said.

91. Japan to Work With Automakers on Fuel Cells

Japan's Ministry of Economy, Trade, and Industry will cooperate with the automobile industry and academia to research and develop fuel cell technology starting this fall, ministry and industry officials said June 9. The initiative will involve about 30 researchers from Chiba and Hokkaido universities and from Toyota Motor Corp., and it will be based at the Polymer Electrolyte Fuel Cell Cutting-Edge Research Center in Tokyo. The goal will

be to develop cheaper fuel cells over the next five years, according to officials from METI's Agency for Natural Resources and Energy and from Toyota. The center will employ the "open architecture" concept so that each maker can develop its own proprietary technologies using the same raw materials and basic technologies, they said.

92. Vice Mayor Says Olympics Drives Beijing's Economic Growth

The 2008 Olympic Games in Beijing will promote economic growth of the capital city in the next several years, said Beijing Vice-Mayor Zhang Mao at the World Mayors Forum. Zhang said Beijing's gross regional product will grow with the annual rate of 10 percent in the next three years until 2008. The gross domestic product (GDP) per capita will exceed 5,000 US dollars and disposable income per capita for city residents will reach 22,000 Yuan (2,600 US dollars) in the year of 2008.

Beijing will also improve the traffic situation in the city, said Zhang, noting that the length of the city's rail track will be increased from current 114 kilometers to more than 200 kilometers in 2008, and the tramline will also be added.

According to Zhang, with the transformation of some water plants and the implementation of the project to divert water from the South to the North, the water supply for city residents and for the Olympic Games will be guaranteed.

Meanwhile, Beijing will increase the greenbelt area in the downtown district to 45 percent, with the green area per capita reaching 15 square meters. Also about 200 companies in the downtown area will be moved to other districts.

Beijing plans to build and renovate 36 stadiums for the 2008 Games. The construction for all of these stadiums will be completed before 2007, said Zhang.

93. Strengthening Supervision Necessary For China's Oil Industry

A leading industry expert has said that strengthening supervision over the oil and gas industry will help the Chinese government respond to the problems haunting the country's petroleum industry. With the sharp rise of its energy consumption, China's reliance on imported oil and gas resources has increased, creating a huge challenge to the country's petroleum industry, said Lu Sizhong, deputy director of the development and research department of China National Petroleum Corporation (CNPC), China's largest oil producer.

According to Lu, in the market economy, it is necessary for the central government to exert proper supervision over such a special and important industry as petroleum and natural gas. Lu suggests that while establishing a proper supervision system, China needs to reform its existing petroleum management system by separating the maker and executor of policies.

Although oil shortages lie at the core of China's current energy problems, the government should consider establishing management institutions for other energy resources such as coal, electricity, nuclear energy and new or recycling energy, said Lu. China should establish an integrated energy administrative department to treat the energy problems as a whole, he added.

According to Lu, the establishment of a supervision system for the petroleum industry should be based on China's national conditions. It should not be too ideal as China is a developing country still in the process of industrialization and its market economy has not been completely established. The oil and gas industry is not an ordinary competitive industry in sectors of exploitation, development, pipeline construction and management. As a mature market economy is forming in China, the industry's government monopoly must be taken into account, Lu said.

Therefore, Lu suggested that the petroleum and gas industry should be opened up to market forces in line with the efficiency of the supervision by the government.

After being established, the supervision institution should take the creation of a standard and efficient market environment as its emphasis. Its functions should be the supervision for resources, technologies, market and service, but not the management status of an enterprise, he said.

Since laws and regulations are the most effective supervision means, China should step up its legislation process for the oil and gas industry, suggested Lu. According to Lu, a market law, a special law for the petroleum and natural gas industry and a complete legal system are what China now lacks and really needs.

LATIN AMERICA

94. Brazil Lawmaker Introduces Legislation Setting Out Emission-Cutting Goals

A Brazilian lawmaker has proposed a climate change bill that sets out broad objectives for reducing or stabilizing greenhouse gas emissions in an effort to ensure that emissions-reduction projects qualify for credits under the Kyoto Protocol's Clean Development Mechanism. The bill (No. 5067/05), the second to be introduced in Brazil's Congress in less than a year, is intended to improve on the previous measure (No. 3902/04), which contained a number of mandatory steps aimed at cutting emissions, according to Antonio Carlos Mendes Thame, the bill's author and a member of the subcommittee on climate change in the Chamber of Deputies, Brazil's lower house.

Because measures in the earlier bill--such as reducing the Amazon deforestation rate, forcing automakers to undertake reforestation projects, and replacing fossil fuels with cleaner ones such as biodiesel--would all be required under law, they could not qualify for emission-reduction credits under the Clean Development Mechanism (CDM), which is based on voluntary initiatives. "This second bill has no such specific measures, just general objectives, and thus won't prevent specific Brazilian emission-reduction projects from getting CDM credits," he said.

The CDM is one of several so-called flexible mechanisms in the Kyoto Protocol, which came into force in February, and it is designed to allow governments or private firms in industrialized countries to obtain credits for emission-offset programs in developing countries.

The previous bill was introduced in July 2004, but Thame predicted the climate change subcommittee would submit his legislation to the Chamber floor for a vote. If the bill clears the lower house, it would then be submitted to the Senate for a final vote.

Thame's bill, introduced in mid-April, would create tax incentives and exemptions for activities that promote stabilization or reduction in emissions and would set up a climate change fund of government and private-sector contributions to finance projects that reduce emissions and use cleaner technologies. It also would establish low-interest, long-term government loans for such projects.

The legislation also would require a report assessing the success of climate change initiatives in Brazil and would support establishment of carbon trading credit markets. Finally, the bill would require environmental standards for emissions, although specific limits would be set in separate regulations.

Thame said his bill "represents the combined inputs" of state environmental agencies, state assemblies, business councils for sustainable development, and Brazil's carbon trading credit market, and "each of those entities [has] clout in Congress."

Brazil's Ministry of Development, Industry, and Foreign Trade and the Brazilian Mercantile and Futures Exchange (BM&F) last December announced they would jointly establish an exchange for carbon dioxide emissions credits. In August, the BM&F will set up a data base for CDM projects, and later this year it will open the carbon exchange for trading.

The idea behind a general climate change bill is to make it applicable even if Brazil becomes an Annex I country after 2012, a step that would carry an obligation to cut emissions.

95. Brazil Ethanol Industry Sees Japan Move in 2 Years

Brazil's ethanol industry expects to win the lion's share of Japan's opening ethanol market within two years and aims to move into China by 2008, the president of Brazil's leading sugarcane group said. Eduardo Pereira de Carvalho, president of the Sao Paulo Cane Agroindustry Union (Unica), is going to Japan shortly for talks about possible imports on a trip planned to coincide with a visit by President Luiz Inacio Lula da Silva.

Carvalho, whose organization represents most of Brazil's producers, told reporters he expected Brazil -- the world's leading producer and exporter of ethanol -- to gain the largest share of the Japanese market. Japan is expected to need 1.8 billion liters of fuel ethanol a year after it modified its energy policy last year to let gasoline to include up to 3 percent ethanol

"We will get (into the market) within 2 years time, I think we have to be patient ... But I'm optimistic in the medium and long term," Carvalho said on the sidelines of a biofuel conference in Spain.

After Japan, the next challenge was China, where an economic boom has boosted energy demand, and Carvalho said his goal was to be in that market by 2008.

96. Brazil Races to Keep Ahead of World Ethanol Demand

The cane-based ethanol industry in Brazil, the world's biggest, is scrambling to invest in port infrastructure to keep ahead of expected growth in world demand for the biofuel.

Medium- to long-term forecasts for Brazilian ethanol exports vary widely, depending on the expert, but most analysts agree Brazil will have to invest in infrastructure if it is to continue to expand ethanol exports beyond 2010.

The Sao Paulo Cane Agroindustry Union, trading house Coimex and Transpetro, the logistics arm of Brazil's national oil company, Petrobras, say exports will rise to somewhere between 8 billion and 10 billion liters in the next few years. Accurately projecting ethanol exports just a year out, however, has proven difficult. Brazil shipped a record 2.6 billion liters last year, surpassing all forecasts and topping the previous year's exports by more than 135 percent.

But market conditions have now changed drastically. The dollar is much weaker and domestic ethanol prices are higher, making shipments to the United States, the No. 1 importer of Brazilian ethanol in 2004, less likely. India, which suffered from drought last year, is likely to import less as well.

Industry analyst Datagro is more conservative than others in its forecast, which says exports are unlikely to surpass 6 billion liters by 2010 and exports will fall in 2005 to 2.3 billion liters from 2004's record 2.6 billion.

Outside of Brazil, countries have been slow to embrace ethanol as a fuel additive and many aggressive projections for Brazilian exports depend on countries such as Japan making a 2 percent to 5 percent blend in gasoline mandatory.

High petroleum prices and global warming are certainly forcing countries such as the United States, Japan, China, India and Europe to reconsider their energy matrices. But it is still unclear whether these countries will be able to successfully implement national ethanol programs -- or be willing to rely on imports from Brazil while it remains the only major world exporter, one that, in the end, may not be able to meet their needs.

Although Santos is likely to be Brazil's largest ethanol outlet for some time, it is unlikely to be the only port that will expand Brazil's export capacity. Paranagua port in the south is expanding its liquids terminal, which will have a capacity to house 35,000 cubic meters of ethanol.

A study by Transpetro, Petrobras' logistics arm, is also weighing an ethanol pipeline in northern Rio state with a floating terminal, which would revive a now declining cane industry in that part of the state, once the main sugar producing state.

Brazil's northeast ethanol producers are also studying expansion in Pernambuco, Maceo and Rio Grande do Norte states.

97. OECD Report Praises Chile; Urges Range of Action

On May 10th, the Organization for Cooperation and Economic Development (OECD) released a report on Chile's environmental management that praised some recent improvements but also offered 52 recommendations for strengthening policies and institutions. Chile had made a number of achievements in this area, particularly regarding air pollution from the mining sector and air quality in the Santiago metropolitan region, OECD Adjunct Secretary General Kiyotaka Akasaka told a press conference upon the

release of the report. However, the report highlights areas where Chile needs to strengthen environmental protection to keep pace with its rapid economic growth, Akasaka said.

Chile is not a member of the OECD but cooperates with the group of 30 industrialized countries in some areas. The report is part of the OECD's regular series of environmental performance reviews and was produced jointly with the U.N. Economic Commission for Latin America and the Caribbean (ECLAC).

Recommendations in the report urged Chile to:

- develop and strengthen environmental enforcement at both national and regional levels, and to create an environmental inspectorate;
- develop energy efficiency measures for all types of energy consumption and review the energy supply mix to take into account environmental concerns such as air pollution in Santiago;
- strengthen the environmental information system and develop environmental indicators to support government accountability and public information;
- implement and fully fund national and regional biodiversity strategies and pass laws to further the protection of nature;
- establish an effective land-use planning system that incorporates biodiversity concerns;
- reform the tax system with environmentally friendly incentives in line with OECD principles on taxation and the environment; and
- improve environmental integration in all business sectors, but especially Chile's primary sectors such as mining, tree planting, and aquaculture.

In a press conference May 13, Paulina Saball, the executive director of CONAMA, Chile's national environmental agency, welcomed the report. Chile's voluntary participation in the OECD evaluation would help spur "a conversation between the various actors about the planning and the environmental challenges of the country," she said, adding, "I believe this is an historic opportunity to examine the breadth, quality, and the rigorousness of CONAMA."

Caribbean

98. Trinidad and Tobago Doubles Enforcement Team

Trinidad and Tobago will more than double the size of its environmental police force from 20 to 43 in a move intended to boost enforcement, Environment Management Agency (EMA) Chairman John Agard has told the press. The unit, which was only created in 2000, is charged with enforcing environmental laws such as those on vehicle emissions and waste disposal. Officers carry arms and wear police uniforms but are paid by EMA. Agard said the unit has been issuing an average of 250 tickets per month to polluting vehicles, and has generated 1 million Trinidad and Tobago dollars (US\$ 166,000) in annual fines for violations, mostly targeting vehicle emissions and illegal dumping. Trinidad and Tobago, with a population of just over 1 million, is the Caribbean's biggest producer of oil and natural gas.

AFRICA

99. South Africa Seeks to Boost Efficiency To Cut Projected Demand by 12 Percent

South Africa has published an energy efficiency strategy that sets a target of reducing projected demand nationwide 12 percent by 2015 through the use of energy efficiency standards, appliance labeling, energy audits, and improved energy management practices.

The strategy sets targets for reducing demand in several sectors of the economy, including industry and mining, transport, power generation, residential, and commercial and public buildings. It focuses in particular on improving efficiency in heavy industries through the introduction of better energy management practices and the replacement of obsolete technologies.

The Energy Efficiency Strategy of the Republic of South Africa, issued by the Department of Minerals and Energy in mid-April, is intended to implement a White Paper on Energy Policy released by the department in 1998. The strategy calls for the phase-in of mandatory equipment efficiency standards, for the use of certain industry-specific technologies, and for audits to identify areas for potential improvement in energy-intensive industries.

The plan calls for the mining and industrial sectors, which together account for 47 percent of overall energy demand, to reduce their energy consumption by 15 percent by 2015. Commercial and public buildings also are expected to reduce consumption by 15 percent, while the transport and residential sectors are called on to reduce demand by 9 percent and 10 percent, respectively.

The overall goal is to reduce energy demand by 12 percent by 2015.

South Africa has so far adopted few energy efficiency measures and has relied too heavily on its abundant reserves of inexpensive but dirty coal, leading to inefficiencies, the document said. In 2001, the country ranked 26th in the world in gross domestic product, but was the 16th largest consumer of energy.

Within the industrial and mining sector, the paper said a savings potential of at least 11 percent is readily achievable using low- to medium-cost "technical interventions." Furthermore, the sector could achieve an additional 5 percent to 15 percent savings via "proven no-cost and low-cost techniques of energy management and good housekeeping," the document said.

Among the measures proposed for the transport sector are the introduction of a labeling system for vehicle efficiency and legislation to promote the uptake of more efficient technologies.

In terms of energy pricing, the government will shift from a current cross-subsidized approach to a pricing structure that reflects the real economic, social, and environmental costs, according to the paper.

Three phases of implementation are planned: immediate adoption of low-cost and no-cost interventions, as well as those higher-cost measures with short payback periods, to be followed by medium- and long-term investment in energy efficiency.

This approach, in line with government's broader objectives of job creation and poverty alleviation, is designed to avoid a heavy impact on the cost of doing business initially.

GENERAL

100. Antarctic Glaciers In Mass Retreat

Almost all the glaciers that flow into the sea off the Antarctic Peninsula are retreating. The discovery comes from an analysis spanning more than half a century of aerial photographs and satellite images.²

"Fifty years ago most glaciers were slowly growing in length, but the pattern is now reversed and they're shrinking," the British Antarctic Survey's Alison Cook told a press conference in London. Of 244 glaciers studied, 87% have shown a net retreat since photographic evidence was first collected in the 1940s, says Cook, who led the project.

The trend is probably linked to local climate changes on the peninsula, she explains, where temperatures have risen by around 2°C over the past 50 years. This is much more than the average temperature increase seen in the rest of Antarctica.

The researchers are unsure whether glaciers are likely to be shrinking to the same extent across the rest of the continent. And they are also uncertain about the effects of the coastal glacier retreat. The ice blocks are typically about 2 kilometers wide and several dozen kilometers long. This is small compared to the peninsula's huge, floating ice shelves, which have likewise been disintegrating in recent years. The glacier melt is unlikely to raise sea levels much, or alter local salinity.

But if the glaciers retreat much further they may uncover bare rock, which could attract invasive species, the team says. "That would open up a whole load of new ground for colonization," says Cook's colleague David Vaughan.

The survey, which is the most comprehensive of its kind thus far, was completed by researchers from the Cambridge-based British Antarctic Survey and the US Geological Survey, headquartered in Reston, Virginia. Together, they scrutinized some 2,000 images to chart the changing positions of the mouths of the 244 glaciers. The study included glaciers that flow directly into the sea on a westerly stretch of the Antarctic Peninsula, which points up towards South America.

101. Ice Core Sample To Yield Farthest-Reaching Climate Data Yet

On April 27th, a team of Italian scientists reported that an ice core sample they extracted from Antarctica will allow for a detailed study of climate patterns and air quality dating back almost 500,000 years earlier than previously possible, allowing for more detailed studies of historical climate trends. The focus of the study, which will be completed after November, will be to determine whether warming trends measured over the last hundred years are anthropomorphic.

² Cook A. J., Fox A. J., Vaughan D. G. & Ferrigno J. G. Science, 308. 541 - 544 (2005).

"There has been a lot of speculation in this area, and most scientists have concluded that warming since the industrial revolution comes as a result of human activity," Giacomo Eli, a spokesman for the team, said at a press briefing. "The results of this study will provide the most complete data yet from a historical perspective."

The core sample the scientists extracted was from a depth of 3 kilometers and will yield data going back 900,000 years, covering as many as 12 glacial and interglacial cycles.

The best data previously--from an ice core extracted from Russia's Ice Station Vostok five years ago--dates back only 420,000 years and includes only four glacial and interglacial cycles.

The scientists said that modern technology and the depth of the ice sheet near the Italian-French ice station at Concordia on Antarctica's Dome C will eventually allow samples going back as much as 1.5 million years.

102. OECD Publishes Broad Range of Data on Emissions, Taxes

On April 21, the Organization of for Economic Cooperation and Development (OECD) released a far-reaching compendium of environmental information on its 30 member countries, including data on topics ranging from greenhouse gas emissions to sewage sludge disposal. The publication aims to provide member countries with "objective, reliable, and comparable environmental statistics," according to a foreword.

According to the report, greenhouse gas emissions from South Korea have grown more than for any other OECD country, up 55 percent between 1990 and 2000.

Slovakia and the Czech Republic had the largest drops in greenhouse gas emissions, with Slovakia's dropping 29 percent and the Czech Republic's down 26 percent between 1990 and 2002.

The United States remains the largest greenhouse gas emitter, and in 2002 released more than 6.9 billion tons of greenhouse gases measured in carbon dioxide-equivalents.

The compendium describes trends in agriculture, transportation, energy use, and various industries that could affect environmental quality.

103. U.N. Climate Talks Start Hunt for Kyoto Successor

A U.N. meeting has taken a tiny first step towards finding a successor to the Kyoto protocol on global warming, with calls for the United States and developing nations to take part after 2012. But India, China and Brazil told rich nations to do more to keep promises of cuts in their own emissions of heat-trapping gases before trying to widen the accord. They also urged the rich to provide more aid and non-polluting energy technologies.

"We need common solutions for the most serious environmental challenge of our time. Climate change is already a harsh reality," German Environment Minister Jürgen Trittin said at the opening of the two-day seminar of experts from 190 nations. "Climate protection must not end in 2012. Companies and investors want to plan beyond 2012," he said.

Kyoto entered into force on Feb. 16 after years of delays and weakened by a pullout by the United States, the world's top polluter. The informal Bonn seminar was a first step to start considering what to do after it runs out in 2012. Under Kyoto, rich nations are meant to cut emissions of heat-trapping gases from power plants, cars and factories by 5.2 percent below 1990 levels by 2008-12 to try to slow what many scientists say could be catastrophic climatic changes.

"This is a global problem -- we can't let the United States stay out," Argentine Environment Minister Gines Gonzalez Garcia said. Australia, the other main outsider, must also join. He said developing nations also needed to consider how they could take part in future without stifling economic growth. Under Kyoto, rich nations are meant to take the lead as the main source of pollution since the Industrial Revolution.

"U.S. climate policy recognizes ... the need to take near-term actions, while maintaining economic growth that will improve the world's standard of living," U.S. climate negotiator Harlan Watson told the seminar. He did not outline any goals beyond 2012. Watson said Washington was spending \$5.2 billion in 2005 alone on climate and energy scientific research and on energy tax incentives.

Big developing nations, which have no targets to 2012, said rich states had to do more to set an example. "Emissions are still rising (in rich nations), transfers of finance and technology (to the poor) are minimal," Indian delegate Surya Sethi said. And he said India needed economic growth of eight percent a year to reduce poverty.

Spain, Portugal, Ireland, Greece, New Zealand and Canada are among Kyoto backers further above 1990 emissions levels than non-participant the United States. Emissions by Spain and Portugal, for instance, are 40.5 percent above 1990 levels.

"We hope that (developed nations) will honor their commitments," China's head of delegation Gao Feng said. "The extent to which they do will influence actions in the future."

He also urged more aid to promote energy efficiency and help a shift to use of renewable energies like solar or wind power.

"The best way to ensure post-2012 is to ensure now the success of the Kyoto protocol," Brazil's delegate Andrea Correa do Lago said.

104. International Air Pollution Rules For Shipping Take Effect

International regulations to control harmful emissions from ships' exhausts entered into force on 19 May 2005. Regulations for the Prevention of Air Pollution from Ships are contained in Annex VI of the MARPOL Convention³ 1 and were adopted in the 1997 Protocol to that Convention.

³ International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78).

The Annex VI regulations set limits on sulphur oxide (SO_x) and nitrogen oxide (NO_x) emissions from ship exhausts and prohibit deliberate emissions of ozone-depleting substances.

A. Sulphur content of fuel

The Annex includes a global cap of 4.5 percent by mass (% m/m) on the sulphur content of fuel oil and calls on IMO⁴ to monitor the worldwide average sulphur content of fuel once the Protocol comes into force.

Annex VI contains provisions allowing for special "SO_x Emission Control Areas" (SECAs) to be established with more stringent controls on sulphur emissions. In these areas, the sulphur content of fuel oil used onboard ships must not exceed 1.5% m/m.

Alternatively, ships must fit an exhaust gas cleaning system or use other methods to limit SO_x emissions. The regulation requires such alternative methods to be approved by the Administration (flag State). Draft Guidelines on on-board exhaust gas-SO_x cleaning systems have been developed and are expected to be approved by IMO's Marine Environment Protection Committee (MEPC) when it meets for its 53rd session in July 2005.

The Baltic Sea Area is designated as a SECA in the Protocol. However, the regulation allows for a 12-month period from the date of entry into force before the limits in a SECA can be enforced.

In March 2000, the MEPC approved a proposed amendment to Annex VI to also include the North Sea as a SECA. The aim is to adopt the amendment once MARPOL Annex VI enters into force. It is anticipated that the MEPC will adopt amendments to Annex VI, including the proposed North Sea SECA, at its 53rd session to be held from 18-22 July 2005. The entry into force date is anticipated to be November 2006, with a 12 month period after that date before full implementation of the North Sea SECA.

B. Monitoring of sulphur content

IMO has been monitoring the worldwide average sulphur content of residual fuel supplied for use on board ships since 1999 following the adoption of resolution MEPC.82(43) Guidelines for monitoring the world wide average sulphur content of residual fuel supplied for use on board ships . The monitoring is based on bunker reports around the world representing more than 60 per cent of all bunkers delivered to ships. The worldwide average for 2004 has been calculated to be 2.67% m/m sulphur content. This figure has been almost constant since 1999 (the variation is less than +/- 0.02 % m/m).

C. Ozone-depleting substances

Annex VI prohibits deliberate emissions of ozone-depleting substances, which include halons and chlorofluorocarbons (CFCs). New installations, such as refrigeration and fire-fighting systems, containing ozone-depleting substances, are prohibited on all ships, but

⁴ IMO - the International Maritime Organization - is the United Nations specialized agency with responsibility for the safety and security of shipping and the prevention of marine pollution by ships.

new installations containing hydro-chlorofluorocarbons (HCFCs) are permitted until 1 January 2020.

D. Emissions of nitrogen oxides

Annex VI also sets limits on emissions of nitrogen oxides from diesel engines. A mandatory NO_x Technical Code establishes procedures for the testing, survey and certification of marine diesel engines which will enable engine manufacturers, ship owners and Administrations to ensure that all applicable marine diesel engines comply with the relevant limiting emission values of NO_x as specified in regulation 13 of Annex VI.

E. Incineration

The Annex also prohibits the incineration aboard ship of certain products, such as contaminated packaging materials and polychlorinated biphenyls (PCBs), which have previously been used in a number of industrial materials.

F. Greenhouse gas policy

In November 2003, IMO adopted resolution A.963 (23) IMO Policies and practices related to the reduction of greenhouse gas emissions from ships. The MEPC is developing draft Guidelines on the CO₂ Indexing Scheme and has recognized that IMO guidelines on greenhouse gas emissions have to address all six greenhouse gases covered by the Kyoto Protocol: carbon dioxide (CO₂); methane (CH₄); nitrous oxide (N₂O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride (SF₆).

105. Nickel Producers Train Sights on Hybrid Car Market

Vigorous global demand for nickel and tight supply are not stopping Canada's Inco Ltd. and Falconbridge Ltd., respectively the world's No. 2 and 3 producers, from training their sights on the small but fast-growing market for hybrid electric/gasoline vehicles, which use nickel-containing rechargeable batteries.

Hybrids are still a drop in the ocean of world car sales, but purchases have soared as oil prices stay high and countries try to limit harmful emissions.

Two-thirds of nickel output goes into stainless steel. But small amounts in the form of foams and powders are made into nickel metal hydride batteries -- rechargeable cells that can be used in cell phones, electric toothbrushes and now hybrid cars. It's hard to pinpoint exactly how much nickel is making its way into hybrids, mostly via Japanese battery makers, but estimates range from 8 kilograms to about 13 kg per battery pack. A back-of-the-envelope calculation multiplying that by the 500,000 hybrid cars that some researchers say could be sold globally this year, gives an estimate of 6,500 tons of new nickel demand.

The nickel battery also contains cobalt, and the electric motor extra copper, both metals that nickel producers often mine in tandem with their primary product.

Overall, hybrid nickel demand is still small when compared with world demand of about 1.3 million tons this year, but the exponential growth of the market to date -- albeit from a

low base -- offers promise for producers. From a handful in 1997, global hybrid sales are forecast to reach between 1 million and 3 million cars by 2010, possibly creating new demand for 50,000 tons of nickel a year -- equal to a year's output from Inco's big new Voisey's Bay mine on Canada's Atlantic Coast.

But some analysts remain skeptical. Research firm J.D. Power and Associates argues that the \$3,000-\$4,000 mark-up on hybrids will keep the market small, and that it will plateau in the United States by 2010 at just 3 percent of car sales. There is also the possibility that nickel batteries, as has happened in cell phones, could be replaced by lithium-ion packs, which are more energy-dense and therefore smaller and lighter.

106. Energy Ministers Say Must Cut Oil Dependence

The world's richest energy consuming nations have called for measures to curb their dependence on unreliable and expensive imports as near-record oil prices show signs of stifling the global economy. The United States, Europe, China and Japan were among those represented at a meeting of the International Energy Agency, the energy arm of the Organization of Economic Co-operation and Development, to protect the interests of consuming nations.

Economists increasingly blame high energy costs for what seems to be an unexpected slowdown in the European economy. The US economy has also lost steam and grew at its slowest pace in two years in the first quarter.

Worldwide surveys of manufacturers showed factories in the United States and Europe shifted down another gear in April, indicating an oil-induced soft patch in economic activity persisted into the second quarter.

The United States, the world's largest consumer, indicated that high oil prices could be around for years.

Analysts say chronic underinvestment, together with rising demand and reduced spare oil capacity drove oil prices in April to a record high above \$58 a barrel. Prices have since fallen back to \$50, calmed by increased output from the Organization of the Petroleum Exporting Countries that has helped to increase stocks in the United States, the world's largest energy consumer. But oil is still around two thirds more expensive than when the IEA last held a ministerial meeting in Paris two years ago.

In a communiqué, the IEA said investment was key to calming oil prices. "Energy markets require both timely investment and sufficient stocks to absorb unpredicted yet inevitable surprises." The energy body has said \$16 trillion needs to be invested over the next quarter of a century to ensure supplies and that spending is not on track.

The IEA is also calling for ways to curb energy import dependence, raise fuel efficiency and reduce the environmental impact of the world's growing reliance on fossil fuels. It has published a report called "Saving Oil in a Hurry", which includes proposals, including car sharing and potentially unpopular driving restrictions, that could shave one million barrels per day from industrialized nations' oil demand.

107. 11 National Academies, 24 Multinationals Urge Action On Climate Change

On June 7th, the national science academies of the eight leading industrialized countries plus China, India, and Brazil issued a joint statement asserting that human activity is causing climate change and calling on the Group of Eight to take prompt action to reduce greenhouse gas emissions linked to global warming. The statement was timed to precede the G-8 summit scheduled to take place in Gleneagles, Scotland, July 6-8.

The statement urges G-8 leaders to "acknowledge that the threat of climate change is clear and increasing" and to consider setting "scientifically informed targets" for emissions and greenhouse gas concentrations.

In a response to the statement, U.K. Environment Minister Margaret Beckett said she was "delighted that all of the G-8's senior scientific academies are now saying the same thing to world leaders."

The statement asserts that while there will "always be uncertainty in understanding a system as complex as the world's climate," there is now strong evidence that "significant climate change is occurring" as a result of human activity. It adds that atmospheric carbon dioxide levels have increased from 280 parts per million in 1750 to over 375 ppm today, "higher than any previous levels that can be reliably measured," and that the Earth's surface has warmed by 0.6 degrees centigrade over the past 100 years.

The statement says it is "vital" for countries to identify cost-effective steps to cut greenhouse gas emissions and thereby "lessen the magnitude and rate of climate change."

It warns, however, that even if emissions are lowered, climate change will continue, and that therefore countries must now prepare for "unavoidable" changes. It suggests that by the year 2100, rising sea-levels could render 6 million people homeless in Bangladesh alone.

It also called on G-8 leaders to help build technological capacity in developing countries to help them adjust to the effects of climate change.

CO₂ on the increase

- 1958: A US scientist, Charles Keeling, begins measuring the atmospheric concentration of carbon dioxide (CO₂) on an extinct volcano in Hawaii. It stands at 315 parts per million (ppm).
- 1968: The US spacecraft 'Apollo 8' takes the first pictures of Earth from a distance, beautiful but fragile - which help start modern environmentalism. The CO₂ level has reached 323 ppm.
- 1972: The UN Conference on the Human Environment in Stockholm - the moment when the world first recognizes environmental threats to the Earth as a whole. CO₂ now at 327 ppm.
- 1988: The world wakes up to the danger of climate change, with an outspoken warning from scientists, and a speech by Margaret Thatcher. CO₂ level stands at 351 ppm.

- 1992: The Earth Summit at Rio de Janeiro sees more than 100 countries sign the UN Framework Convention on Climate Change, the first global warming treaty. CO₂ now at 356 ppm.
- 1995: The Kyoto protocol to the UN's climate treaty is signed in Japan, binding countries, including the US, to make cuts in their CO₂ emissions. The CO₂ level has now reached 360 ppm.
- 2000: Obvious that the 1990s were the hottest decade in the global temperature record, with 1998 the hottest year in the northern hemisphere for 1,000 years. CO₂ is 369 ppm.
- 2001: George Bush withdraws the US, the world's biggest CO₂ emitter, from Kyoto, alleging it will damage America's economy - jeopardizing the whole process. CO₂ level now at 371 ppm.
- 2003: First two weeks of August are the hottest period ever recorded in western Europe: 35,000 people die. New record high temperature for Britain. CO₂ now at 375 ppm.
- 2004: After much dithering, Russia ratifies Kyoto, enabling the protocol to enter into force despite the desertion of the United States. But that doesn't stop the CO₂ level rising to 377 ppm.

108. Leading Multinationals Urge G-8 To Coordinate Response to Global Warming

On June 10th, leaders of 24 multinational corporations including British Airways, Cisco, Ford, HSBC, Rio Tinto, Siemens, and Toyota presented a petition to British Prime Minister Tony Blair urging him to call for concrete steps on climate change at the G-8 meeting hosted by Great Britain in Scotland in July. In the petition, the companies give their support to the findings of the Intergovernmental Panel on Climate Change, which they describe as "the primary source of information on climate change science." But, they argue, the current "patchwork" of regulatory schemes is neither cost-effective nor efficient and has been "exacerbated" by the short-term nature of the Kyoto Protocol.

The statement calls for market-based mechanisms to reduce greenhouse gas emissions and urges world governments to produce "clear, transparent, and consistent price signals" under "a long-term policy framework that includes all major emitters of greenhouse gases." They recommend a global carbon trading market similar to the EU emissions trading scheme which was formally launched in January.

The statement's signatories asserted that they "recognize a responsibility to act on climate change." "Many of us are significant users of energy or produce products whose use results in substantial emissions of greenhouse gases; some of us have assets or investments that will be adversely affected by changes in climate; all of us face the prospect of increased regulation in one form or another," the statement said, adding, "small costs today can become material costs in the future, with significant impact on bottom-line performance, shareholder value, and brand reputation."

The statement says that while some businesses are already addressing climate change through participation in voluntary emissions reductions programs, purchasing power from renewable sources, or "active exploration of new investments," more needs to be done by governments, businesses, and consumers.

However, the statement criticizes the short timeframe of the Kyoto Protocol, which contains commitments only for 2008-2012, and argues that the risk factor will put investors off funding climate change projects since "for an investor seeking to gain a fair return on low carbon capital projects whose life cycle may often be in the 25-50 year range (e.g. power plants), the level of risk can become a significant disincentive." It adds, "The same kind of uncertainty clouds the future value of tradable emissions credits and the value of investment in low-carbon infrastructure in emerging markets."

To counter such uncertainty, the statement urges the Group of Eight nations to establish "a long-term, market-based policy framework extending to 2030 that will give investors in climate change mitigation confidence in the long term value of their investments."

It also urges that "Business and the G-8 governments should work together to establish a practical tool kit for integrating climate change into their global supply chain requirements;" that there should be common metrics used by the G-8 governments for measuring and reporting processes and systems; that there should be new partnerships with emerging nations "to streamline and encourage low carbon investment;" and that climate change should be addressed as part of an overall sustainable development agenda.

The statement was signed by executives of ABB, Alcan, BP, British Airways, BT, Cinergy, Cisco, Deloitte, Deutsche Bank, E.ON Ruhrgas, EADS, EdF, Eskom, Ford, HP, HSBC, Petrobras, RAO UESR, Rio Tinto, Siemens, Swiss Re, Toyota, Vattenfall, and Volkswagen.

109. U.N. Environmental Accords Signed By Mayors From 50 Cities Worldwide

On June 5th, Mayors of 50 cities from around the world signed the United Nations Urban Environmental Accords, a document outlining 21 actions designed to put cities on the path toward sustainability regarding energy use, waste reduction, transportation, and other areas. The signing came at a ceremony held at San Francisco City Hall that marked the end of the U.N. World Environment Day conference held in that city June 1-5.

By signing the document, the mayors pledged to implement some or all of the 21 actions during the next seven years. The measures address energy, waste reduction, urban design, urban nature, transportation, environmental health, and water.

Action items in the accords the cities can choose from include

- reducing citywide greenhouse gas emissions 25 percent by 2030;
- cutting peak energy loads by 10 percent within seven years;
- adopting policies to achieve zero waste to landfills by 2040;
- adopting green building rating systems;
- providing public parks and other open space;
- protecting critical habitats from development;
- expanding affordable public transportation;
- eliminating leaded gasoline;
- reducing the use of hazardous products or chemicals;
- establishing a system to measure air pollution and clean up the air;
- increasing access to safe drinking water; and

- reducing the volume of untreated wastewater discharges by 10 percent in seven years.

Under the accords, the cities are to work to implement as many of the 21 actions as possible between now and World Environment Day in 2012, according to U.N. documents.

Success will be recognized through a City Green Star Program. Cities adopting 19 to 21 of the actions will earn four stars and those achieving 15 to 18 will get three stars. Adopting 12 to 17 will get a two-star rating and the cities implementing between eight and 11 will be one-star cities.

Mayors of U.S. cities that joined San Francisco in signing were from Austin, Tex.; Berkeley, Calif.; Chicago; Denver, Colo.; Santa Monica, Calif.; Oakland; and Seattle, Wash. Other signers included the mayors of London; Istanbul; Copenhagen; Moscow; Delhi; Stockholm; Zurich; Taipei; Rio de Janeiro; Jakarta; Lyon, France; Nairobi; San Miguel de Allende, Mexico; Vitoria-Gasteriz, Spain; and Vancouver, British Columbia.

110. US MSHA Adopts Final Rule On DPM Exposure In Mines

The US Department of Labor's Mine Safety and Health Administration (MSHA) has issued a final rule limiting the exposure to diesel particulate matter (DPM) in underground metal and nonmetal (i.e., non- coal) mines. The rule revises the interim DPM concentration limit measured in total carbon (TC) to a comparable, permissible exposure limit measured in elemental carbon (EC). The EC metric has been considered more accurate than the TC measurement, which can also include carbon from non-diesel sources, for instance oil mist. The former interim level was 400 µg/m³ of TC. The new interim level is 308 µg/m³ as EC.

111. ExxonMobil Shareholders Vote 28% In Favor of Kyoto Compliance Plan

At ExxonMobil Corp.'s annual shareholders meeting in Dallas on May 25, 28.3 percent of shareholders voted in favor of a resolution calling on company directors to prepare a public "Kyoto Compliance Report" outlining how the company will meet greenhouse gas reduction requirements in countries that are implementing the Kyoto Protocol.

Although the show of support was insufficient for the measure to pass, it "exceeded by far what we anticipated," said Rev. Michael Crosby of the Province of St. Joseph of the Capuchin Order of Milwaukee, a Catholic group that was the lead proponent of the resolution. "We're more convinced than ever that a lot of other institutional entities are concerned about the company's economic policy and positions on this issue."

Crosby said the resolution was intended to push ExxonMobil to show its commitment to addressing climate change. The resolution needed only 3 percent of the vote to be eligible for resubmission next year.

The meeting also voted on a second climate-related resolution, this one backed by Christian Brothers Investment Services, another institutional investor with a religious affiliation. The second resolution called on the corporation to convene a "summit" of climate change scientists with a view to adjusting its position on the issue accordingly.

ExxonMobil maintains that "scientific evidence [on climate change] remains inconclusive," according to a board statement urging shareholders to vote against the resolution.

The second resolution received 10.3 percent of the vote, compared to 8.8 percent in 2004. To be eligible for a third submission it needed only 6 percent.

The board recommended shareholders vote against both resolutions.