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EUROPE

1. London Bus Retrofit Considered A Success

London Central Bus Company has been implementing a retrofit program for many years. In general they have had great success and will have all buses retrofitted with diesel particulate filters (DPFs) by mid year. Initially the systems were heavily subsidized but the subsidies have now run out. The Energy Savings Trust initially paid 75% of the cost; in 2004 this was reduced to 50% and as the Trust has now gone broke the subsidy is completely eliminated. Fortunately, the price of DPFs has been coming down fairly quickly. Originally the systems cost about £3000 to £3500, gradually came down to about £2800 to £2900 and are now down to about £2000 to £2300.

Initially London Bus worked with 2 systems, one from Eminox and another from a second company. Both systems seemed to work well but there were significant problems with the canisters for the second system. The local partner made an inferior product with frequent fractures in the brackets and eventually all of these systems were removed from the buses.

Ash accumulation was a concern with some of the systems. They introduced a maintenance procedure that resulted in removing the filter about every six months, blowing out the collected ash, reversing the filter and putting it back on. The maintenance team for the buses was uncomfortable with the maintenance and had some concerns with exposure to the materials. Subsequently they discussed the possibility of using ovens to burn off the collected materials and ended up making arrangements with Eminox for Eminox to purchase the ovens and to provide the service. At a cost of about £100 per year per system, Eminox will swap out the filters when the bus is brought in for routine maintenance. The bus mechanics will remove the filter, give it to Eminox and receive another filter which has already been cleaned to install.

They have not noticed any impact on fuel consumption.

They have now started retrofitting some Euro 3 buses. About 25 buses with Cummins engines have been fitted and the systems appear to be working well. There are some concerns with a few buses equipped with Volvo engines and these are being investigated.

There has been a noticeable impact on the work environment in the bus depot. In the past the depot was routinely full of fumes in the morning. Now that the buses are fitted with filters the air is noticeably much cleaner. It is now extremely rare to see smoke coming from a bus.

Currently the fuel has a maximum of 50 ppm sulfur and by 2007 it is expected to drop to 10 ppm maximum. Mercedes has indicated some concerns to London Bus regarding the lubricity of fuels with such low sulfur levels but it is expected that additive packages will resolve these concerns.

The bottom line is that London Bus is very happy with the program. There are no issues with regard to retrofitting Euro 2 buses. Euro 3 buses look to be equally successful.
2. Europe Car Registrations Fall in February

New car registrations in Europe dropped 4.1 percent to 1.05 million units in February, extending the year's weak start according to carmakers' group ACEA. The figures include the European Union -- excluding Malta and Cyprus -- plus European Free Trade Association members Norway, Switzerland and Iceland. Including just the 15 legacy EU members plus EFTA states, registrations fell 3.1 percent to 1 million.

"This result points out a slow start to the year in an economic context that remains sluggish," the ACEA said.

Registrations in the broader group of countries slipped 2.3 percent in the first two months of the year. The group noted February had the same number of working days in both years in almost every country.

Weak sales are making life hard for carmakers already battling a strong euro, high raw materials prices and excess capacity that is driving prices lower in a buyers' market. Carmakers are hoping that a raft of new models will boost sales as the year goes on.

German premium carmaker BMW had another fine month, boosting European registrations 23.9 percent year on year in February, while registrations for archrival DaimlerChrysler dropped 9.6 percent. BMW is milking the biggest new product offensive in its history, including its well-received 1-Series compact. It is counting on another boost from the launch of its new 3-Series model, which hit dealer showrooms this month.

DaimlerChrysler has blamed weak sales of its flagship Mercedes-Benz cars on problems with faulty diesel pumps and impending model changeovers, which encourages customers to postpone buying.

Group registrations for struggling Italian carmaker Fiat decreased 16.7 percent, led lower by its Fiat brand cars. Renault's sales retreated 12.8 percent compared to a robust February last year.

South Korea's Kia Motors again led Asian manufacturers, with registrations up 69.1 percent last month. Its share of the European market rose to 1.4 percent from 0.8 percent a year earlier. Other Asian carmakers turned in mixed showings. Toyota's registrations, including its luxury brand Lexus, fell 9.6 percent and blunted its steady advance in Europe, reducing the world's number two carmaker's market share to 5.4 percent. Nissan and Mazda sales also fell, but Mitsubishi, Honda and Suzuki grabbed more market share.

General Motors, the world's biggest carmaker, boosted its European market share to 10.5 percent from 9.8 percent thanks to gains by its Opel/Vauxhall brand.

3. EU Member States Override Commission Regarding Post-Kyoto Targets

Most EU member states apparently want to open international negotiations on the future of the Kyoto protocol by suggesting in advance quantitative targets for future greenhouse gas emission targets after 2012. Only eight EU countries are backing the European Commission's strategy to define targets later. The Luxembourg presidency
promoted a strategy in which the EU would from the outset promote "clear and unequivocal" future global climate gas reduction targets.

The Commission said that the EU must hold back to avoid scaring off essential partners such as the USA from serious negotiations. Environment commissioner Stavros Dimas appears to have hurt himself politically by taking this as his first high profile position.

European Union leaders backed a goal for ambitious cuts in greenhouse gases by 2020; the 25 ministers agreed that developed nations should pursue cuts of heat-trapping gases of 15-30 percent by 2020 and 60-80 percent by 2050 compared with levels set in the Kyoto Protocol, which uses 1990 as a base in most cases. But EU heads of state and government omitted the 2050 goal from an agreed statement after a two-day summit in Brussels while keeping the 2020 target. They said longer-term targets should be considered "in the spirit" of the ministers' decision. "These reduction ranges will have to be viewed in the light of future work on how the objective can be achieved, including the cost-benefit aspect."

The leaders' decisions set the stage for further international climate change talks within the Kyoto framework, slated to take place later this year. They also mean the EU itself will need to implement tough measures for post 2012, when the first stage of Kyoto ends.

The wording of the Council declaration, however, is fairly vague, calling only for "global joint efforts" in the coming decades. "Without prejudging new approaches for differentiation between parties in a future fair and flexible framework, the EU looks forward to exploring with other parties [to the U.N. Framework Convention for Climate Change] possible strategies for achieving necessary emission reductions and believes that, in this context, reduction pathways by the group of developed countries in the order of 15 to 30 percent by 2020 and 60 to 80 percent by 2050 compared to the levels envisaged in the Kyoto Protocol should be considered," the declaration said.

"The most important point is that we need to prevent the average world temperature from rising by more than 2 percent in the coming decades," said Environment Commissioner Stavros Dimas.

4. France Renews Call for Stronger 'U.N. Environment Organization'

On February 17th, France relaunched a diplomatic initiative aimed at convincing the international community to create a new global environment organization under the United Nations. The French initiative is based on a plan to transform the Nairobi, Kenya-based U.N. Environment Program into an autonomous U.N. agency with built-in financing and operational powers similar to U.N. agencies like the World Health Organization.

French President Jacques Chirac first floated the idea of creating a U.N. Environment Organization during the 2002 World Summit on Sustainable Development in Johannesburg, South Africa. He proposed that the UNEO could serve as a coordinating center for all existing multilateral environmental agreements, and could be given a higher profile for promoting the sustainable development agenda than UNEP, a voluntary U.N. agency with membership of just 58 countries. Chirac suggested that the new environment organization be equipped with an enforcement arm as well as a dispute
settlement process similar to that used by the Geneva-based World Trade Organization, and insisted on the need for obligatory funding for all member states.

France formed an intergovernmental working party of 26 countries to study the idea in mid-2004, and is now preparing to relaunch discussions during high-level UNEP meetings in Nairobi. French Minister of Ecology and Sustainable Development Serge Lepeltier will lead the French delegation to the annual meeting of UNEP's Governing Council, taking place this year parallel to a Global Ministerial Environment Forum slated to attract environment ministers and other government officials from more than 100 countries.

Lepeltier has announced plans to seek support for the French initiative during the UNEP meetings, aiming to see it included on the agenda of wider development discussions slated to take place during a September U.N. summit on the Millennium Development Goals.

The French initiative is reportedly supported by Canada, Germany, Italy, Senegal, South Africa, and Switzerland, while a number of other countries, including Belgium, Brazil, China, India, Indonesia, Japan, Kenya, Mexico, Norway, and the United Kingdom, are participating in the intergovernmental working party.

5. EU Says Won't Meet 2 Percent Biofuel Target This Year

Europe will not succeed in its goal of having two percent of all transport fuels derived from biofuels by the end of 2005 but is making great strides in that direction, an EU official has said. The 25-member bloc is trying to promote biofuel use, notably biodiesel derived from vegetable oils, and ethanol, which can be produced from grains, sugar or biomass, as a "green" alternative to petroleum-based products.

"The EU directive sets a two percent target for end-2005, but we're not going to reach that. It may well reach 1.4 or 1.5 percent," Paul Hodson, an official at the EU Commission's energy and transport unit, said. Speaking to delegates at Agra Europe's Outlook 2005 conference in London, Hodson said despite the projected shortfall, output of the greener fuel had risen sharply in recent years, largely because of tax breaks on fuel duties in top producing countries like Germany.

He said that in 2000, only 0.2 percent of all transport fuels sold were derived from biofuels, with around 0.6 percent registered in 2003.

Looking ahead, Hodson said the EU's ultimate goal to reach 5.75 percent by 2010 would have a profound impact on agriculture across the bloc. "If the 5.75 percent target is reached, biofuels could need nine percent of the EU agricultural area," he said.

The Commission said that assuming 14 billion liters of biodiesel and 13 billion liters of bioethanol were produced, some 9.7 million hectares of rapeseed, 5.1 million hectares of grain and 0.6 million hectares of sugar beet would be required.

"EU biofuel targets have big implications for agriculture, particularly rapeseed," Hodson said.
Although the usually conservative International Energy Agency (IEA) has said a 20 percent inclusion rate was possible globally by 2030, Hodson said the EU would probably find this a challenge because of land constraints and higher production costs. "To reach a big share, ethanol production from sugar cane in hot countries will be critical," he said.

Demand for rapeseed oil to make biodiesel grew sharply last year in Europe as production capacity rose sharply thanks to EU measures aimed at reducing the bloc's dependence on fossil fuel imports and cut greenhouse gas emissions.

However, progress in some countries like Britain has been slow, with many in the industry complaining that government support, in particular on tax breaks, were poor. UK government officials estimate that little more than 5,000 tons of biodiesel was produced last year, though this figure is set to rise this year as new capacity comes on stream. Transport generates a quarter of UK emissions and -- being almost entirely fuelled by fossil energy -- would need to play a crucial role in the quest to reduce carbon dioxide output, a British white paper said in 2003.

6. UK Biodiesel Maker, Retailer in Green Fuel Tie-Up

Green fuel maker Global Commodities UK has announced it plans to open a new facility to turn waste vegetable oil into biodiesel this year after agreeing a joint venture with distributor Rix Biodiesel. As part of the agreement, Rix Biodiesel Limited -- Britain's first company to make and market the renewable transport fuel three years ago -- will allow Global Commodities to adapt its existing vegetable oil processing plant at Hull in northeast England to produce more than 120 million liters a year.

"When the new production facility is up and running in about three months' time, UK manufacturing capacity will increase by an additional 120 million liters. It's quite a significant jump," said Rix Biodiesel spokesman Paul Burman. Rix currently markets its "Bio Blend 5" brand at more than 100 petrol forecourts in Britain and hopes to dramatically expand when production takes off. "Demand is far outstripping supply and we desperately need this additional amount," Burman said.

Global Commodities UK already has plans to build a separate facility to produce biodiesel from rapeseed. The 180 million-liter plant, to be based at Lowestoft in eastern England, is expected to be up and running in 2006.

A European Union directive demands that two percent of all diesel fuel consumed in the EU must be bio-degradable by 2005, rising to 5.75 percent by 2010.

7. Swedes Link Biofuels To Dioxin Pollution

Calculations published alongside a report by Sweden's environmental protection agency (EPA) suggest that biofuels - widely hailed as a green energy solution - could be among the biggest sources of highly toxic dioxins released in the atmosphere.

In terms of overall responsibility for dioxin emissions, taking into account residues and product contaminants, biofuels jostle for second or third place with iron and steel works and waste incineration. The EPA described current knowledge of the problem as "very
It noted that more than 10% of Swedes are still exposed via foodstuffs to levels of dioxin exceeding EU limits.

However, the aim of the report was not so much to raise the alarm over specific pollution sources as to highlight the vast margins of error in such calculations, and to encourage all concerned to use measures and technologies already in place to improve sampling and reporting routines in the run-up to implementation of the Stockholm convention on persistent organic pollutants (POPs).

8. UK CO2 Emissions Rise Again, May Miss Kyoto Target

Britain's carbon dioxide emissions rose by 1.5 percent last year mainly because of an increase in pollution from industry and the transport sector, the government has announced. This is the second year running the country's carbon dioxide (CO2) emissions have risen and environmentalists said the UK was in danger of missing its Kyoto Protocol target for curbing greenhouse gas pollution.

The UK's legally binding Kyoto target is to reduce emissions of six greenhouse gases, of which CO2 is the main one, to 12.5 percent below 1990 levels by 2009-2012.

Britain was well within its target until recently thanks to the replacement in the early 1990s of polluting coal-fired power stations with cleaner gas plants.

The government's figures, which are provisional, showed Britain churned out 158.5 million tons of carbon equivalent last year, up 1.5 percent on 2003. Britain has a domestic goal of reducing its CO2 emission levels by 20 percent below 1990 levels by 2010, and to curb CO2 pollution by 60 percent by 2050.

9. Diesel, Hybrids Vie For Europe's Car Buyers

Hybrid technology is trying to muscle in on Europeans' love of diesel cars in a struggle to set the standard for powering the next generation of autos. But there is little doubt that diesel engines remain for now the technology of choice for many Europeans who are drawn by the frugal consumption, durability and relatively lower fuel costs.

Executives at the Geneva car show painted sharply different visions of whether the hum of battery-assisted hybrid engines could eventually push aside the purr of new diesel motors while much-hyped hydrogen-powered cars remain stuck in the laboratory.

"We are convinced that the future of diesel is just beginning," declared Eckhard Cordes, head of DaimlerChrysler's premium Mercedes Car Group. He outlined ambitious plans to expand Mercedes-Benz' diesel lineup 70 years after it became the first carmaker to offer diesels as standard equipment. "There is a clear trend towards the clean, economical and sporty diesel engine," he said. "Over the past few months registrations of diesel-powered passenger cars across Europe as a whole outstripped petrol vehicles for the first time ever."

Not so fast, countered Yoshio Ishizaka, executive vice president and board member at Japan's Toyota Motor Corp., the world's second-biggest carmaker. "Hybrid is really not an intermediate technology. We think hybrid is the technology we have to see for the
future," he said in an interview, predicting it would become the global standard and even power sports cars some day. Toyota is having huge success with its hybrid Prius car in the United States, where some Hollywood stars have established their environmentalist credentials by driving the model and regular customers still joint waiting lists to get one.

Hybrid vehicles typically pair a gasoline engine with batteries to boost fuel efficiency, letting them hum along at low speeds on electrical power alone. But this added efficiency puts them just on par with cutting-edge diesel engines.

The popularity of diesels in the US market remains constrained by environmental standards, access to fuel and many customers' perception that they belong in trucks, not cars.

Toyota increased its Prius sales target in Europe to 20,000 this year from the previous goal of 15,000 and versus 8,200 in 2004. It aims to sell 300,000 hybrids around the world in 2006. Such economies of scale help offset the added cost of making hybrids and allow Toyota make a profit on the models. "In the initial stage it was rather difficult to make money" but now "we do make a profit," Ishizaka said. "Otherwise we might say we like to limit the numbers, but we are expanding."

Even Toyota is hedging its bets, however. It is working hard to boost the percentage of diesel-powered cars it sells in Europe, which currently accounts for around 36 percent of its sales. It is also rolling out a new 2.2-liter diesel motor it makes in Poland.

Other Asian carmakers like South Korea's Hyundai and Japan's Honda are also pushing to beef up European sales by offering more diesels. Shigeru Takagi, head of Honda's Europe operations, said that a diesel-powered version of the Civic compact is due in early 2006 and the launch of diesel versions of the CR-V offroader and the FR-V minivan in 2005 would drive sales growth. It expects one-third of the new Civic brands sold to use diesel-powered engines, he said.

Ford Motor Co.'s premium brand Jaguar is using diesel to fuel sales growth in Europe, but Ford too is looking to outfit some of its sleek Jaguars and Land Rover offroaders with hybrids, said Joe Greenwell, who heads the two brands. "We are not talking about next year or even the year after that, but within a five-year timeframe I do anticipate that Jaguar and Land Rover would be looking at having a hybrid version," he said in an interview.

A contrarian view came from General Motors Europe President Carl-Peter Forster, who said European sales of vehicles with petrol engines could rebound due to climbing costs of building diesel engines to meet new emissions standards. "Diesels will be very expensive engines," he said. "I think we should expect the gasoline engine, to a certain extent, to bounce back." Hybrid vehicles are also expensive. "It's a very costly solution. It's two drive trains in one vehicle," he said. Nevertheless, GM and DaimlerChrysler joined forces last year to work on developing hybrid vehicles.

Executives said fuel-cell cars that run on hydrogen and emit only water vapor were still a distant dream. "Fuel cell technology is far, far away, maybe 10 or 20 years," Toyota's Ishizaka said. Even if it catches on, fuel cells will still use much of the power technology developed by hybrids, he added.
10. French Think Tank Touts Hybrids In Annual Report

For the second year running, France's top environmental think tank on April 6 named a gasoline- and electricity-powered hybrid automobile produced by Japan's Toyota Motor Corp. as the most environmentally sound vehicle on the road. The French Agency for the Environment and Energy Management (ADEME), a government think tank under the joint authority of the environment and industry ministries, gave the Toyota Prius top marks in its annual survey of fuel consumption and carbon dioxide emissions for vehicles sold in France, noting that its gas mileage and emissions performance was an example that European automakers should follow.

The Prius emits just 104 grams of CO2 per kilometer, well below the voluntary ceiling of 140 g/km of CO2 that EU automakers have agreed to strive for by 2008.

Apart from its praise for the Prius, the ADEME report singles out DaimlerChrysler's mini-car, the SmartForTwo, as the greenest diesel-powered passenger car, and notes that several of France's top-selling models, including Renault's Clio, Megane, and Twingo vehicles, emit less than 120 g/km of CO2.

Not all trends identified in the car labeling report are positive, however. ADEME notes that environmental performance continues to be a minor consideration among vehicle buyers, with top-performing cars making up just 14 percent of the vehicle fleet. More worrisome still, French drivers are increasingly opting for gas-guzzling, high-pollution sport utility vehicles (SUVs), which now comprise 9 percent of market, versus just 1 percent 10 years ago, ADEME said.


11. Europe Sees Growing Diesel-Gasoline Imbalance

The imbalance between growing diesel oil consumption and falling gasoline demand in Europe—which especially affects France—will increase under European Union fuels specifications, said Jean-Paul Vettier, president of Total SA's refining division. Tax differentials favoring diesel automobiles helped increase diesel consumption in France by 3.4%/year since 1996 and reduced gasoline use by 3.1%/year, with a 5% drop registered in 2004. Automobile manufacturers have cut their production of gasoline engines. Gasoline accounts for 25% of total fuels consumption in France.

Refiners currently export 20% of their surplus gasoline and import 40% of the middle distillates required to bridge the diesel gap. The imports come mainly from Russia, along with some supplies from Algeria.

Total is building a 500 million euro hydrocracker at its Normandy refinery, due on stream in mid-2006, to produce 1.3 million tons/year of diesel and lower the sulfur content. The group also has hydrocrackers at Leuna in Germany and Flessingen in Holland.
French refiners had hoped that an EU directive requiring fuels to contain 2% biofuels by 2005 and 5.75% by 2010 would reestablish a balance between diesel and gasoline. But the French government required ethanol in gasoline, which is expected to maintain the imbalance between diesel and gasoline.

Oil industry trade group Union Française des Industries Pétrolières (UFIP), said five refiners plan 2 billion euros in refinery upgrade investments during 2005-09. The five are Total, BP PLC, Royal Dutch/Shell Group, Italy's Eni SPA unit Agip, and a unit of ExxonMobil Corp.

12. Europe Hydrogen Car Filling Network Feasible-Study

Europe could build a network of hydrogen filling stations for next-generation cars for just 3.5 billion euros ($4.6 billion) over the next 15 years -- much less than first thought, according to a new study. The expense of building up a new distribution system for hydrogen-burning cars that emit only water vapor has often been cited as a potential stumbling stock for the technology that could one day make standard petrol and diesel engines obsolete. But the study commissioned by German industrial gases group Linde and carried out by energy consultant e4tech and Imperial College, London, concluded the cost of building 2,800 hydrogen stations across the continent was manageable.

The study assumes some 6.1 million hydrogen cars will be on European roads by 2020. It foresees building up tank stations in heavily populated areas and along motorways first, eventually giving 120 million Europeans - a third of the EU population - access to hydrogen fuel. The filling stations could support cars with fuel cells, which use the chemical reaction between hydrogen and air to generate electricity and emit only water vapor, as well as those that burn hydrogen in converted standard engines.

Linde also proposed installing some 35 new hydrogen pumps on German highways linking Berlin, Leipzig, Munich, Stuttgart and Cologne to create a giant test track for hydrogen-powered vehicles. This could help Europe compete with campaigns in California and Japan to develop real-world hydrogen networks, it said.

Only around 500 hydrogen test cars are making the rounds now, and officials say costs have to drop drastically before they become commercially viable. That means manufacturers must boost volumes, simplify the technology and cut material costs.

13. EU Opens Public Consultation on Airline Emissions

The European Union opened a public consultation on March 11 to gather ideas on how to reduce emissions of greenhouse gases from airplanes. "In the EU, CO2 emissions from aviation grew by nearly 70 percent from 1990 to 2002," according to a statement from the European Commission announcing the consultation. The Commission, the EU executive body, "is seeking the views of European citizens on possible EU action to curb this growing trend." The eight-week, Internet-based consultation is open to the general public as well as to organizations. "The results will feed into a strategy planned for this summer focusing on how economic instruments could be used to reduce the climate change impact of aviation," the statement said.
14. PM Air Quality Limits Driving Push For PM Filters

German automakers and their suppliers are scrambling to deal with a sudden surge in anti-diesel sentiment in their home market. The main response is to rapidly equip diesel cars sold in Germany with particulate filters.

EU-imposed limits on air pollution – defined in 1999 – became tighter in January. They require that EU cities not exceed the PM limits more than 35 days a year. But when over the Easter weekend Berlin, Stuttgart and Munich neared those annual limits on fine particulates (smaller than 10 microns), media coverage and public demands on German politicians for solutions reached a near fever pitch. Berlin and other German cities are facing lawsuits by citizens alarmed about the health implications of tiny particulates.

Environmentalists are demanding a variety of strict measures to improve air quality in city centers. Proposals include city center bans on diesel cars that have no particulate filters, congestion charges, and selective bans on Sunday driving. A measure automakers endorse is tax subsidies on purchases of filters.

Other countries have already acted in anticipation of the new rules. Nine Italian cities have banned driving in city centers on selective Sundays. Austria offers a €300 tax incentive on diesel particulate filters; Germany and the Netherlands are poised to do the same. The Netherlands previously imposed an extra purchase tax on diesel cars, causing diesel new-car sales to hold at about 26 percent. Italy plans to increase taxes on petrol and diesel to pay for new environmentally friendly buses. Several Italian cities have also introduced partial traffic bans.

EU Industry Commissioner Günter Verheugen said member states would be given time to enforce the new air pollution rules. "The Commission won't start swinging the big stick and talking about treaty breaches straight away. We'll look at the experience of the first year and then we'll have to decide," Verheugen told German television.

Environmental lobby group BUND said the auto industry must install the filters to protect public health. "Clean air in cities and livable communities are more important. If necessary, road traffic has to take a secondary place to this," BUND director Gerhard Timm said. But the prospect of driving bans has sparked industry worries that business could be hit. "Retailers in the inner cities would be out of reach and would suffer drastic falls in sales," the managing director of the DIHK chambers of commerce association, Martin Wansleben, told the daily Die Welt. "Those are signals that do not fit with an environment where you have 5.2 million unemployed."

German Economy Minister Wolfgang Clement said the discussion risked harming one of the country's key industries. "Some of what we've been hearing has really not been helpful for the car industry or the economy," he said.

German carmakers are keeping their fingers crossed that the debate about diesel motors' impact on air quality does not scare away buyers at a time when sales are already weak.

"We have to take this topic seriously," Volkswagen marketing chief Georg Flandorfer told industry paper Automobilwoche in an interview. "Dealers have told me there is a lot of
customer interest to have particle filters retrofitted. We should concentrate on retrofit solutions for now because that does the most for the environment,” he added. VW will come up with such products by autumn while expanding its range of optional filters for new diesel cars, he said.

Other German manufacturers are also rushing to offer particulate filters as standard or optional equipment. DaimlerChrysler's Mercedes-Benz brand, for instance, boasts that it now offers 20 diesel models with maintenance-free filters, more than any other carmaker. The filters are standard in Germany, Austria, Switzerland and the Netherlands for newly ordered C-, E-, CLK- and M-class vehicles.

Automobilwoche cited German garages association ZDK as estimating that dealers were sitting on inventory of more than 100,000 diesel cars that did not have the filters and had thus lost up to 1,000 euros in value over the past two weeks.

A spokesman for the German car industry association VDA noted sales of diesel cars went up in March and in the first quarter versus the year-ago periods, but added the debate really heated up only late last month so April would be a key month. Diesel-powered cars accounted for 44.5 percent of new car registration in the first quarter, up 3.5 points from the year-ago period. Overall car sales fell 1.9 percent in the quarter.

German automakers and suppliers are using different approaches to respond to demands for diesel cars with particulate-reducing filters.

- BMW’s goal is to equip every BMW sold in Germany with particulate filters as soon as possible, spokesman Wieland Bruch said.
- The new Zafira medium minivan will be the first Opel diesel with a standard filter when sales start in July.
- Volkswagen’s Touareg and Phaeton and the new Passat have standard filters. Filters will be offered as an option on the Golf, Golf Plus and Touran by the second half of this year. No Audis will have filters as standard this year.
- DaimlerChrysler spokesman Norbert Giesen said: “Our decision [in 2003] to offer the particulate filter option was a good one.” By summer all Mercedes-Benz diesel cars sold in Germany, Austria, Switzerland and the Netherlands will have particulate filters as standard, he said. More than 80 percent of Mercedes’ customers in Germany ordered their diesel cars with filters in 2004, while only 4.8 percent of Mercedes diesel customers in France ordered filters. In Spain, the number was 0.5 percent.

15. Lawsuit Filed Against Berlin Over Diesel Vehicles

Under the aegis of the German organization Aid to the Environment (DUH), private citizens have filed a lawsuit against the city of Berlin for not complying with European Union limits on particulate matter, DUH announced March 21. The lawsuit is an attempt to force Berlin to establish in the core city areas a ban on diesel-powered vehicles that do not have filters to screen out particulate matter.

EU regulations establish a maximum average threshold of 50 micrograms of coarse particulate matter (PM-10) per cubic meter of air over a 24-hour period, which can be exceeded just 35 days over the course of a year. However, PM-10 levels in selected
sites in Berlin reached 129 and 143 micrograms per cubic meter of air on a single day in February, and so far this year, the 50-microgram limit has been exceeded 21 days due to the high traffic levels on these streets, the organization said.

Berlin has developed a plan to bring down particulate levels, but the measures do not take effect until 2008, according to environmental attorney Fabian Loewenberg who is representing the plaintiffs. The Berlin city plan envisages a ban in the central city areas on diesel vehicles that fail to meet Euro II emission standards beginning in 2008. Beginning in 2010, the ban would expand to cover vehicles that fail to meet the tougher Euro III standard and do not have a diesel filter.

With the lawsuit, DUH said it hopes to force Berlin to take short-term measures to reduce particulate matter, such as banning the use of diesel vehicles without filters in the city, and effectively to bring the planned measures forward three years.

DUH also is overseeing similar efforts against other German cities. Lawyers cooperating with the organization filed notices of intent to sue against the Stuttgart and Munich city governments, and they now have four weeks to respond before a lawsuit is filed. In addition to Berlin, Munich, and Stuttgart, other cities singled out for possible lawsuits include Düsseldorf, Dortmund, Augsburg, Braunschweig, and Passau.

DUH also claimed the federal government has been delaying measures to reduce particulate matter. The organization used the opportunity of announcing the lawsuit to call for the federal government to make good on its resolution to support the installation of filters on diesel-powered vehicles by offering tax incentives. Although the government announced in 2003 its intention to offer a car tax rebate to owners of new and used diesel cars who installed particle filters back, the most recent movement on the proposed measure came Feb. 3, when Chancellor Gerhard Schroeder, Environment Minister Jürgen Trittin, and Finance Minister Hans Eichel agreed to basic principles for the incentive. If the Ministry of Finance delays much longer on producing the necessary draft legislation, the environmental group cautioned, the measure will not be able to take effect in 2006 as intended under the proposal.

The Association of the German Automobile Industry dropped its long-standing resistance to including filters in July 2004 and agreed to fit all new diesel cars with filters by 2008. At that same time, Chancellor Gerhard Schroeder announced his support for the tax incentive for diesel owners who installed filters.

Greenpeace and other environmental organizations allege Finance Minister Hans Eichel is blocking the tax deal to give Volkswagen time to make up for its decision several years ago not to include diesel filters in its product line. Although Eichel agreed on basic principles for the incentive in early February, the Ministry of Finance has not produced the underlying draft legislation, DUH noted. The proposal would give owners of new cars with filters a €350 deduction from their automobile tax, and those who install filters in existing cars an automobile tax deduction of €250. For the draft measure to take effect, the Cabinet will have to adopt it and send it to Parliament, where it would have to pass both houses.

The cities of Braunschweig and Dortmund announced April 4 and April 5, respectively, a ban on diesel trucks in the inner city and on certain high-traffic streets, and the cities are also considering other measures to divert trucking routes and reduce idling time at
intersections. Separately, the state government of Bavaria announced April 5 it was granting municipalities with exceedances the authority to implement corresponding traffic management measures.

At the same time, the German government will make an effort to get the European Union to loosen the exhaust thresholds, Bernd Gottschalk, president of the German Automobile Industry Association, said. He said the number of violations would increase in 2010 when the 35-day annual threshold drops to seven days.

16. Dutch Minister Says EU Air Directive Not Workable, Seeks Changes

European Union air quality standards are driving a number of initiatives to control air pollution in the Netherlands, but they also are blocking needed infrastructure projects, which shows that the EU Air Quality Directive is overly stringent and should be relaxed according to Dutch Environment Minister Pieter van Geel. "The EU Air Quality Directive is not workable for a lot of countries," van Geel said. "What we see often in EU legislation is these directives are passed without being worked out in detail. In the past, we were very enthusiastic about new directives, without always knowing what the consequences would be. What we see now is it is hardly possible to implement this rule." Nevertheless, "we will do everything we can to comply," he said. But at the same time, the Netherlands will "start discussions in the European Commission to evaluate the standards."

One proposal van Geel said he will ask the Commission to consider would allow for an interpretation of the directive that would exempt air pollution from foreign and non-anthropogenic sources. According to van Geel, 85 percent of certain categories of air pollution in parts of the country comes either from natural sources, like salt and sand in ocean air, or from foreign sources in Belgium and Germany.

One of the detrimental side effects the directive has had in the Netherlands is to make it overly difficult to win approval for construction or infrastructure projects that could arguably add to the burden of air pollution, van Geel said. The Council of State, the Netherlands' highest administrative court, has ruled to block 11 large projects since September 2004 based on arguments that these would be detrimental to air quality. The projects included proposed industrial parks, highway expansions, and even a stadium in The Hague. These were typically approved at the local level before opponents sued to block them.

The components of the EU Air Quality Directive that will be most difficult for the Netherlands to meet concern PM-10 and nitrogen dioxide, according to the minister.

On another front, to reduce air pollution, the Environment Ministry is looking to expand incentives for cleaner vehicles. According to van Geel, one of the reasons the EU directive is problematic is because it set high standards for air quality, "but [it] did not at the same time impose strict enough standards for cars to achieve compliance," given existing road and car ownership patterns. To address this dilemma, the Netherlands is now offering incentives for the purchase of cleaner vehicles, defined as those meeting Euro 4 and Euro 5 auto emission standards. Euro 3 is the current standard, and Euro 4 is due to take effect across the European Union later this year.
The ministry is now drafting plans to offer incentives for the installation of exhaust filters on older vehicles, and Dutch Finance Minister Gerrit Zalm agreed April 8 to earmark additional funds for this initiative, van Geel said.

In a related field, the ministry is also developing plans to give incentives for cleaner ship engines. Ships are responsible for 20 percent of air emissions in the Netherlands.

17. WHO Says EU Can Save Billions Annually By Reducing Air-Pollution

Particulate matter (PM) air pollution claims an average of 8.6 months from the life of every person in the European Union (EU), but Germans lose more: 10.2 months of life according to the WHO Regional Office for Europe. According to WHO, evidence indicates that PM increases deaths from cardiovascular and respiratory diseases. Even a short-term rise in PM concentrations increases the risk of emergency hospital admissions for cardiovascular and respiratory causes. PM comprises tiny particles, varying in size, composition and origin. Inhaled, the coarse fraction (PM10 - particles with a diameter smaller than 10 µm) may reach the upper part of the airways and lung. Fine particles (PM2.5 -with a diameter smaller than 2.5 µm) are more dangerous, as they penetrate more deeply into the lung and may reach the alveolar region.

Council Directive 99/30/EC sets down limit values for PM10 of 50 µg/m3 for the 24-hour average and 40 µg/m3 for the annual average. Current policies to reduce emissions of air pollutants by 2010 are expected to save 2.3 months of life for the EU population as a whole and 2.7 months of life for the population of Germany. This is the equivalent of preventing 80,000 premature deaths and saving over 1 million years of life in the EU; the corresponding figures for Germany are about 17,000 premature deaths and over 240,000 years of life.

Since long-term exposure to PM is particularly damaging to human health and reduces life expectancy, reducing long-term PM concentrations and exposure is a priority. This would also bring important financial savings. In the EU, the estimated annual monetary benefit from decreased population mortality attributed to PM is €58-161 billion, and savings on the costs of diseases attributed to PM account for €29 billion. The corresponding figures for Germany are €13-34 billion and €6 billion per year, respectively.

"Measures to reduce the effects of air pollution on health and extend life expectancy already exist and work", says Dr Marc Danzon, WHO Regional Director for Europe. "The data presented emphasize that health damage due to PM exposure, its costs for European society and the ability of the current European legislation to reduce this impact, are critical arguments for the continuation and strengthening of all stakeholders' efforts to reduce air pollution."

Transport and use of fossil fuel in households are the major contributors to PM air pollution. In particular, diesel combustion contributes a third of total emissions of PM2.5. In 2000, Germany contributed up to 14% of total primary PM10 emissions in the EU, and up to 13% of primary PM2.5 emissions. The projected decline in PM10 and PM2.5 emissions in the period 2000-2020 is expected to be slower in Germany than in the rest of the EU.
Owing to the transboundary movement of PM, a substantial part of concentrations in a country originates in emissions from other countries. For example, it has been estimated that, on average, 41% of PM2.5 concentrations in Germany is of German origin while the rest is due to transboundary air pollution: for example, 14% is emitted in France. On the other hand, German emissions contribute to PM2.5 in other countries: for example, 21% of the total in Denmark and 20% in the Czech Republic.

Studies have been unable to identify a threshold concentration below which ambient PM has no effect on health. Although the reduction of PM levels to the EU limit values for 2005 is a key measure to benefit health, it will not eliminate all significant health effects of PM exposure. This means it is important to reduce PM pollution more than expected under the current legislation.

18. EU Parliament Oks Auto Recycling Legislation

On April 14th, the European Parliament approved a directive aimed at improving the "re-usability, recyclability, and recoverability" of materials used in passenger cars, vans, and other light commercial vehicles. The directive amends European Union law on type approval, the authorization that a manufacturer must obtain in order to market a new model vehicle. Under the new directive, manufacturers must in the future demonstrate compliance with waste reduction targets laid down in EU Directive 2000/53 on End-of-Life Vehicles, which was approved in September 2000.

Aimed at better management of the 8 million metric tons of vehicle waste generated in the then-15 member states of the EU, the ELV Directive requires that by Jan. 1, 2006, new vehicles weighing up to 3,500 kilograms must be "designed and constructed as to be re-usable and/or recyclable up to 85 percent by mass; re-usable and/or recoverable up to 95 percent by mass."

As part of the revised procedure, a manufacturer will have to present to the approval authority a "dismantling list"—a document required under the ELV Directive, as a guide to eventual recovery, re-use, and recycling operations.

The new directive includes a special provision covering hard-to-identify polymers and elastomers. These materials must be identified by marks determined by the European Commission under delegated powers.

The new directive also includes a list of components that must not be re-used in the construction of vehicles. The list includes catalytic converters and exhaust silencers on grounds that they "cannot be guaranteed to offer the required level of environmental protection." Air bag and seat belt systems are also excluded, on safety grounds.

The new type-approval procedure will become valid 12 months after the new directive enters into force, but it will not be mandatory for new models until 36 months after entry into force.

In an amendment to the European Commission’s original draft, lawmakers granted manufacturers extra time to secure type approval for new variants of existing model vehicles. Parliament allowed an additional 18 months beyond the 36-month deadline before the new procedures would be required for variants of existing models.
19. EU Parliament Oks Tighter Standards For Ship Fuel

On April 13th, the European Parliament approved a plan to tighten sulfur standards for fuels used by cargo and passenger ships, now seen as the largest source of sulfur dioxide emissions in the European Union. The new fuel standards for ships will set a threshold limit of 1.5 percent of sulfur for fuel as of May 19, 2006, or 12 months after the legislation enters into force.

Voting on a draft directive proposed by the executive European Commission, lawmakers agreed to drop their demands for even tougher sulfur standards, on the strength of a Commission promise to review the legislation in 2008.

In the 2008 review, the Commission will study whether likely environmental and health benefits would justify fuel tax breaks or other economic incentives for use of cleaner marine fuels. As part of the review, the Commission will revisit Parliament's earlier demands for a reduction to 0.5 percent.

Marine fuel in the European Union currently has a maximum sulfur content of 5.0 percent, or 50,000 parts per million, much higher than EU standards for automotive fuel, which will have to meet a limit of 10 ppm in 2007.

Hailing Parliament's "historic" vote, Finnish lawmaker Satu Hassi said, "Over the years, emissions from land-based sources have been cut, while ships have been producing more and more pollution with impunity." Speaking for Parliament's Environment Committee, Hassi nevertheless lamented that for years to come, marine fuels still are likely to contain 300 times more sulfur than is present in auto fuels. Hassi reported that EU environment ministers, who must also approve the directive, had threatened to block the legislation if Parliament insisted on early introduction of the tougher, 0.5 percent standard.

The commitment to review the standards forms part of a package of amendments negotiated between Parliament and ministers. The compromise will cut short EU legislative procedures, allowing ministers to sign the directive into law in the coming weeks.

Under the deal negotiated with ministers, application of the 1.5 percent standard will be linked in part to the designation of sea areas under the International Maritime Organization marine pollution convention known as MARPOL. The EU standard will be applied first to the North Sea, the English Channel, and the Baltic Sea area already designated an "emission control area" under MARPOL. Other EU sea areas will become subject to the 1.5 percent limit 12 months after entry into force of their designation as MARPOL emission control areas.

The legislation will reduce SO2 emissions by 500,000 tons annually, according to estimates cited by the Commission when the executive body published its proposal in 2002.
Then-Environment Commissioner Margot Wallström said the reductions were "targeted to deliver the greatest possible benefits around populated ports and coasts and acid-sensitive ecosystems."

Ministers representing the 25 EU-member countries reached a preliminary agreement on the draft in June 2004, after Greece and Italy had secured backing from other states for an implementation delay for passenger ships in the Mediterranean and exemptions for inter-island shipping.

**20. Transatlantic Climate Relationship "Is Thawing" Says EU**

EU environment commissioner Stavros Dimas claimed clear signs of a rapprochement between Europe and America on the issue of climate change policy following high-level talks between EU and US officials. "We moved beyond discussing technological innovation," he said in a statement. "The results of these talks could well mark the beginning of a new phase of US-EU cooperation on climate change," including on international controls post-2012.

Earlier in the week, Mr. Dimas repeated now familiar EU calls on the USA to re-engage in the multilateral policy making process, likening the transatlantic debate up to now to "navel gazing". The big surprise is that he has felt able to claim publicly that America's attitude has changed. In a speech delivered earlier in Washington, D.C., the commissioner stressed that the "burning issue" was what to do after Kyoto protocol emission targets expire in 2012. He called on the USA to recognize the need for a multilateral approach, not only because it is the world's largest carbon emitter but also because of Europe and America's "common responsibility" to show international leadership and to mobilize leading developing countries to participate after 2012.

Meanwhile, further details of ongoing UK-led efforts to re-engage America in the international climate change debate have emerged. An advisor to British Prime Minister Tony Blair said that G8 leaders would be asked to demonstrate "some kind of consensus" when they meet in July. Britain has already organized preparatory meetings on climate change science and between G8 environment and development ministers. The UK wants G8 leaders to agree on a "statement on the science" and a "package of measures", Henry Derwent told a conference on climate change in Brussels.

**21. Swiss Offer Compromise To Meet Kyoto Targets On Emissions Cuts**

The Swiss government has decided to endorse a compromise approach for a future carbon tax aimed at meeting the country's target for reducing emissions of greenhouse gases under the Kyoto Protocol. In a decision announced March 23, the Swiss Federal Department for Environment, Transportation, Energy, and Communication (DETEC) said the Swiss government would be imposing an obligatory tax on heating oil and other forms of carbon fuel starting in 2006 while opting for a voluntary charge on motor vehicle fuels.

The new tax would be imposed on carbon fuels such as natural gas, coal, and heating oil. The tax, set at 35 Swiss francs ($29) per metric ton of carbon fuels, will be the equivalent of 9 Swiss centimes (about 7.5 U.S. cents) per liter of heating oil.
However, the government refrained from imposing any obligatory tax on motor vehicle fuels in the immediate term, instead endorsing an industry-backed voluntary scheme called the "climate penny" initiative. Under this initiative, fuel importers would collect a charge on each liter of gasoline sold in Switzerland, with the revenue used to fund the development of cleaner fuels, improve fuel efficiency in buildings and infrastructure, and purchase emissions allowances under the Kyoto carbon trading scheme.

Although DETEC said the government would not have any influence over the amount of the charge, one option for a fuel tax outlined by the government last June foresaw the imposition of a 1 centime per liter (0.8 U.S. cent) voluntary charge on gasoline with the 9 centimes/liter heating oil tax. DETEC said the climate penny would operate on a "trial" basis and warned that the motor vehicle fuel charge could become mandatory--and more expensive--if it does not help to reduce the country's greenhouse gas emissions.

"If the climate penny does not demonstrate sufficient results by the end of 2007, the carbon tax (on other fuels) will be extended to gasoline," DETEC said, noting at the same time that diesel fuel could be exempted from a binding fuel tax.

The announcement was slammed by Swiss environmental groups. In a statement March 23, the Alliance for a Responsible Climate Policy said the government's decision not to opt for an obligatory gasoline tax "openly shows that the oil lobby pulls the strings" on climate change policy matters. "The central problem of relying too much on fossil fuels is not being addressed at the roots," complained the group, which includes Greenpeace, WWF Switzerland, and the Swiss Green Party. "The wasteful use of these fuels will continue."

The alliance also complained that the "climate penny" would do little to actually reduce emissions, since most of the money raised will be used for the purchase of carbon allowances, which it said were linked to projects of dubious benefit. For example, according to Greenpeace, companies could purchase emissions allowances from coal mines that have been shut down and turned into storage sites.

DETEC acknowledged that public consultations it held on the four fiscal mechanisms proposed by the government for achieving carbon cuts had revealed sharply divided opinions. The four options, first outlined last June, included:

- A 35-franc-per-metric-ton tax on carbon fuels, including natural gas, coal, and heating oil, equivalent to 9 Swiss centimes per liter of heating oil; for gasoline and diesel fuel, a 64-franc-per-ton tax would apply, equivalent to 15 centimes per liter of gasoline. The taxes would take effect from 2006; for gasoline and diesel, the tax would rise to 128 francs per ton starting in 2008;

- A 35-franc-per-metric-ton tax on heating fuels and a 64-franc-per-ton tax on gasoline, starting from 2006. Some 2 percent of the revenues generated would be used to purchase carbon emissions allowances on the international market in order to help meet the country's CO2 reduction commitments;

- The combined 35-franc-per-metric-ton tax on heating fuels and 1 centime per liter "climate penny" charge on gasoline, with the latter to be organized by fuel importers. At this level, the climate penny would raise an estimated 70 million francs ($58 million) in annual revenue.
• The "climate penny" option only, with the amount of the levy fixed at 1.6 centimes per liter of gasoline. At this level, the climate penny would raise an estimated 115 million francs ($96 million) in annual revenue.

"Opinions were very divided," DETEC said of the public consultations, which were launched last October. "It appeared, however, that a majority of the participants supported the tax on carbon fuels foreseen under the first three options. "In regards to motor vehicle fuels, however, there was no clear majority in favor of either the (obligatory) carbon tax or the (voluntary) climate penny," DETEC added.

The Swiss government has insisted the carbon tax is not a real tax, but rather an "incentive charge," since the revenues will eventually be redistributed back to Swiss residents through the country's national social security system rather than going into government coffers. DETEC said the amount of the reimbursement would average around 46 francs annually per inhabitant.

In a report last October reviewing the four options, DETEC acknowledged the third option eventually chosen by the government would have less of a negative economic impact than a pure obligatory tax on all fuels, but it would probably lead to a continued increase in carbon emissions, contrary to the objective set out under Switzerland's Law on CO2. The law requires an overall 10 percent cut in carbon dioxide emissions from 1990 levels by 2010, with subsidiary reduction targets of 15 percent for combustibles and 8 percent for transport fuels. Switzerland currently emits around 40 million metric tons of CO2 per year.

22. Uncertainty Could Hamper EU Firms In Early Phase of Kyoto Treaty

European companies facing carbon restraints under the Kyoto Protocol may be at a disadvantage during the early stages of the EU emissions trading system because of a lack of regulatory certainty in the future, according to a paper released March 29 by Resources for the Future. Companies that participate in the trading scheme will face a difficult challenge because of uncertainty over emissions reduction targets in the second phase of implementing the climate change treaty beyond 2012, according to the paper, Companies and Regulators in Emissions Trading Programs.

"This lack of clarity about the future will make planning difficult," the paper said. "It also will make it challenging for European industry to take a long-term approach to investing in climate-friendly technologies and to planning a least-cost, longer-term strategy for greenhouse gas abatement."

The paper was written by Joseph Kruger, a visiting scholar at RFF, a research group based in Washington. The paper compared the successful economic and environmental performances of U.S. emission trading programs for air pollutants such as sulfur dioxide and nitrogen oxides with the EU program.

The EU program was set up to help European countries comply with the emissions reduction targets established under the Kyoto Protocol, which came into force in February. To achieve the targeted cuts, facilities that emit relatively high levels of greenhouse gases can either take steps to cut their emissions or buy credits from firms.
that have lower emissions. The first phase of the treaty calls for industrialized countries to lower greenhouse gas emissions more than 5 percent from 1990 levels between 2008 and 2012.

Under Kyoto rules, parties may not yet determine what cuts will be required and by whom in a post-2012 Kyoto world. Such discussions may only begin officially between ministers at a Meeting of the Parties to take place Nov. 28-Dec. 9.

But "[w]ithout a longer time frame for planning, European companies will face challenges making the right investment decisions no matter how well they operate across departments, take advantage of sophisticated planning tools, manage the price risks of compliance, and utilize information technology," according to the paper.

Although it has many of the same features that have led to the success of U.S. emissions trading programs, the EU plan for emissions monitoring, reporting, and verification also differs in some respects, Kruger wrote. For example, the EU's proposed guidelines are less prescriptive and give considerably more flexibility to facilities and EU member governments, he said.

"It will be worth watching whether the flexible system of emissions reporting and verification for the EU ETS will provide the administrative certainty required for the efficient and effective operation of the program." For example, regulators in European countries implementing a Kyoto national compliance plan must balance between a more flexible monitoring and verification system in the European Union to create enough certainty for industry while still maintaining environmental integrity, according to Kruger.

"If flexibility leads to inconsistencies within or between member states, regulators may seek extended reviews of company emissions reports or third-party verification," he said.

As this is more likely to happen during the early years of implementation, the researcher warned that monitoring and verification issues will arise as emissions reports are reviewed. As a result, this will slow the process of making policy decisions on technical issues, which could be critical to giving companies the administrative certainty they need.

Moreover, the paper concluded that with the large number and diverse nature of facilities in the EU trading program, and considering the likely addition of more sectors in the second phase of the program, "it will be worth watching whether program administrators and third-party verifiers can handle the huge volume of information in what is largely a paper-based emissions reporting system."

23. Italy’s Air Quality Plan Draws Opposition

On March 29, the Italian government unveiled a five-year, €140 million incentive-based initiative aimed at improving the country's air quality, but environmental groups and opposition lawmakers quickly denounced the plan. The initiative changes the focus of the current law, which is based on establishing minimum air quality standards, regularly monitoring air quality, and sanctioning companies found polluting the air. Instead, the new law relies on the use of incentives aimed at encouraging potential polluters to invest in clean technologies or to take other steps that would result in lower levels of air pollution.
Unless it is repealed by Parliament within the next 30 days, the initiative will go into effect July 1, the day after current air quality legislation expires.

The new law keeps the broadest air quality standards in place, but removes other standards and calls for less monitoring.

The budget is about double the amount spent on air quality over the previous five years, the government said. The money will be spent partly on monitoring systems, but also on modernizing state industrial and transportation activities and incentives for the private sector, whereby companies can get funding for upgrading equipment to reduce pollution.

The initiative immediately came under fire from opposition figures. But the government brushed aside those concerns. Minister of Environment Altero Matteoli issued a statement defending the change, saying that the increase in air quality spending represented by the new law was the largest ever.

NORTH AMERICA

24. Engine Makers Warn Against Oil Industry Efforts To Delay Diesel Rule

Engine manufacturers are ramping up efforts to forestall a possible delay in EPA enforcement of clean diesel rules, in response to oil industry claims that EPA should offer flexibility allowing the industry more time to minimize fuel contamination during transport.

While the oil industry is stopping short of demanding wholesale changes to EPA's standard, officials appear to be outlining a possible basis for EPA or Congress to allow some fuel that exceeds the agency's sulfur content limit to be classified as clean fuel.

"It has come to our attention that some parties are advocating changes to the diesel fuel sulfur content standards," the Engine Manufacturers Association (EMA) says in a March 10 letter to several congressional and administration officials. The group argues, "It is far too late in the process to change the game plan." The group states that with design decisions made, engine manufacturers will not be in a position to meet the 2007 emissions standards if changes are made to fuel characteristics.

EMA sent the letter to a host of lawmakers and Bush administration officials, including White House adviser Karl Rove, White House Council on Environmental Quality head Jim Connaughton, EPA Administrator-nominee Steve Johnson, Senate Environment & Public Works Committee Chairman James Inhofe (R-OK), ranking member James Jeffords (I-VT), House Energy and Commerce Committee Chairman Joe Barton (R-TX) and ranking member John Dingell (D-MI).

At issue is implementation of EPA's rule setting strict new limits on sulfur contents in diesel fuel. Beginning in 2006, the rule phases in a 15 parts-per-million (ppm) sulfur content limit for highway diesel fuel, while providing a 2-ppm enforcement tolerance that provides a safety margin to account for contamination during transport or variability in measuring sulfur levels.
Oil industry officials say they need the enforcement tolerance because contamination of low-sulfur fuel during transportation could make them subject to enforcement and could result in the need to reclassify, or downgrade significant quantities of fuel to be sold as something other than low sulfur diesel. However, engine manufacturers -- who are subject to a separate rule calling for emissions reductions from highway diesel vehicles - - are seeking to limit reliance on enforcement tolerance because they are ultimately relying on the low-sulfur fuel to help them meet the new emissions standards.

While oil industry officials have long raised concerns about difficulties implementing the sulfur standard, they recently called on EPA to consider a higher enforcement tolerance for the fuel sulfur content at the start of the program to account for variability in the accuracy of tests as well as the contamination problem.

“The 2 ppm downstream compliance tolerance will likely not be sufficient to cover the variability associated with currently available test methods and the identified potential for sulfur contamination,” the American Petroleum Institute and National Petrochemical Refiners Association said in a Jan. 7 letter to EPA. Citing recent test data from companies such as Colonial Pipeline and Marathon Ashland Petroleum suggesting that even fuel well under the 15 ppm limit could exceed the limit once it picks up contamination in pipelines and terminals, the groups add that “the time to consider adjustment is now, rather than a year from now.”

In the letter, the groups also offer to help EPA do a new survey of refiners to determine how much sulfur refiners were planning to remove from their fuel below the 15-ppm limit to make up for contamination and testing uncertainties.

A presentation by Colonial Pipeline at a September 2004 fuels conference noted the company was lobbying Congress and several federal agencies including CEQ, EPA, the Department of Energy and the Department of Transportation to push for possible flexibility in implementing the regulation.

25. EPA Initiates Testing Program To Address Diesel Rule Feasibility

EPA is launching a testing program to assess the accuracy of procedures for measuring the sulfur content of diesel fuel. EPA has also asked the industry to suggest options for addressing concerns that contamination of the low-sulfur fuel could prevent compliance with the rule’s requirements.

At issue are two key industry concerns over implementation of a regulation that requires increasing amounts of highway vehicle diesel fuel to meet a sulfur content limit of 15 parts per million (ppm) beginning in 2006. Industry officials, including pipeline companies, have raised concerns that an existing 2-ppm enforcement “testing tolerance” in the rule is too small to account for variations in sulfur content measurement techniques. In addition, the industry has argued that possible contamination of clean fuel during transport through pipelines and fuel terminals that also handle higher-sulfur diesel could prevent significant quantities of clean fuel from complying with the sulfur limit by the time the fuel reaches the pump.
In a March 29 letter to industry officials, EPA Office of Transportation and Air Quality head Margo Oge says EPA will be launching a “round robin” testing program to evaluate test procedures used to determine compliance with the 15 ppm standard. “We intend to use the results to adjust the 2 ppm downstream test tolerance, as necessary, for ULSD [ultra low sulfur diesel] fuel,” she says in the letter.

Oge also says the testing will involve laboratories that have demonstrated compliance with EPA's Performance Based Measurement System qualification criteria for measuring fuel sulfur content -- criteria written into the diesel rule. “We ask that any labs wishing to participate begin this process now,” Oge says in the letter.

26. EPA Eyes Highway Bill To Provide Funding For Diesel Retrofit Projects

EPA is pushing for a final highway bill to provide funds for industry to retrofit diesel engines to help meet the agency’s air quality standards. The Senate Environment and Public Works Committee included the funding provision for the projects in its version of the federal highway financing bill that is now awaiting a floor vote. The House version does not contain similar language.

EPA’s push is part of its efforts urging states to be more aggressive in forcing industry to clean up old diesel engines, which the agency says is a cost-effective way to help counties meet aggressive new federal air quality standards for ozone and fine particulate pollution. Engine makers, automakers and other transportation groups have been struggling to significantly increase the number of ongoing retrofit projects nationwide, saying additional federal funds from the highway bill’s congestion mitigation & air quality (CMAQ) program would dramatically boost the pace of retrofits. The funds are especially crucial, proponents say, because EPA’s recent diesel rules only apply to new engines, thereby allowing old engines to continue emitting pollutants that have been linked to serious health problems such as cancer.

But the construction industry, which uses off-road diesel engines in equipment like bulldozers and cranes, is concerned that the provision in the Senate Environment & Public Works Committee’s highway bill, the Safe and Flexible Transportation Equity Act of 2005, S. 732, could give states first-time authority to set standards on retrofitting the engines. The industry is calling on the Senate to water down the language when the measure comes to the floor for a vote.

Margo Oge, director of EPA’s Office of Transportation and Air Quality, told attendees April 14 at a meeting of the National Conference of State Legislatures that EPA was looking at the highway bill to encourage the retrofitting of diesel engines. “EPA is working with the Senate and House, at the $1.6 billion annually that goes to states for environmentally sound projects, to see those resources go to incentives for off-road and on-road diesel engines,” she said. Oge’s remarks refer to language in the Senate bill that tells states to ensure “the deployment of the emission reduction strategies” for sources that receive money from the CMAQ program, which is funded at $1.6 billion for the life of the bill. CMAQ finances projects to reduce transportation-related emissions in non-attainment areas for ozone, carbon monoxide and particulate matter.

The highway bill, which the environment committee passed last month, is awaiting action by the full Senate. The House passed its highway legislation in March.
The Senate provision, contained in section 1612(c) of the bill, was inserted at the request of Sen. Hillary Rodham Clinton (D-NY). The language directs states to reduce emissions from construction projects by using strategies such as diesel retrofits and anti-idling efforts. The provision also clarifies that CMAQ funding can be used for construction equipment as well as highway equipment.

The construction industry has said in the past that it is inappropriate to apply CMAQ funds to the construction sector, because states do not include the vehicles in the Clean Air Act’s conformity process. Under the conformity process, states must demonstrate that emissions from cars, trucks and public transit will violate state or local air quality plans. If states do not demonstrate that their mobile source emissions conform to their air quality emission budgets, they lose highway funding.

But the Diesel Technology Forum, which represents engine manufacturers, petroleum refineries and technology suppliers, says providing incentives for retrofitting under CMAQ could dramatically boost the number of retrofit projects nationwide.


Unhealthy emissions from coal-fired power plants that blow across state lines would be reduced under a US regulation finalized a day after a Senate committee failed to approve a White House plan for similar legislation. The Environmental Protection Agency’s Clean Air Interstate Rule requires utilities to cut emissions of sulfur dioxide and nitrogen oxides in 28 eastern states and the District of Columbia.

Separate "Clear Skies" legislation stalled in the Senate (see below) because Democrats and a moderate Republican balked over the lack of controls on greenhouse gases and said targeted emission cuts were too weak.

The rules are aimed at coal-burning utilities mostly east of the Mississippi River in the Midwest and South, where many of the largest power plants operate. Federal rules are needed because prevailing wind currents carry the emissions across state boundaries, confounding local attempts to curtail them. The rules would cut sulfur dioxide 70 percent by 2015, while cutting nitrogen oxides by 60 percent.

Under the new EPA rules, states can either require power plants to participate in an EPA-administered cap-and-trade system, or set their own individual emission limits.

28. Utility Pollution Bill Stalls in Senate Committee

A Bush administration plan to cut air pollution from coal-fired power plants failed to pass the Senate Environment Committee Wednesday, a setback for a bill that critics said favors the utility industry over public health.

Senate panel chairman James Inhofe of Oklahoma, a Republican, delayed a vote by the committee three times in recent weeks as he tried to get one more vote for the so-called "Clear Skies" legislation. But the panel deadlocked 9-9, with Democrats, Rhode Island Republican Lincoln Chafee and independent Jim Jeffords of Vermont voting against the bill.
The bill would cut emissions of three harmful pollutants -- mercury, sulfur dioxide and nitrogen oxides -- from US coal-fired power plants by 2016 through a cap-and-trade system. Opponents say the plan would give utilities too much time to install costly pollution-reduction equipment while failing to require cuts in greenhouse gases like carbon dioxide that have been linked to climate change.

During the Senate panel's meeting, Inhofe blamed what he called "environmental extremists" for trying to block the bill.

29. US EPA Sets First Utility Mercury Emission Rules

The Bush administration has issued the first rules to limit toxic mercury emissions from coal-fired utilities by letting plants swap pollution rights - a program critics decried as an industry giveaway that will be challenged in court. The utility industry and environmental groups have clashed over the Environmental Protection Agency's plan to limit emissions of mercury, which contaminates water and fish and has been linked to neurological disorders in young children.

The new program aims to cut mercury emissions by 70 percent by 2018 through a cap-and-trade system. The EPA was required to issue the rules because of a court settlement with the Natural Resources Defense Council, an environmental group which sued the EPA 13 years ago.

The nation's 1,100 coal-burning units now emit about 48 tons of mercury each year, the largest unregulated US source. The new rule sets the cap at 38 tons per year by 2010 and 15 tons per year in 2018. However, actual emissions could remain much higher for many more years because of emissions credits that the EPA will let utilities "bank" from previous years when they reduce more than required, environmental groups said.

EPA issued a determination in 2000 that power plants were a major source of mercury, a hazardous air pollutant, and that it would set emissions limits based on maximum achievable control technology (MACT), defined by the Clean Air Act as the average of the best-performing 12 percent of sources. The limits were to go into effect in 2008. The agency said March 15, however, that it is withdrawing that determination so that it can institute the emissions-trading program instead.

Holmstead said mercury control technology is not available on a commercial scale, so the agency was unable to set a MACT standard. Instead, the emissions-trading system will provide the incentive for industry to develop such technology, Holmstead said. The 38-ton interim emissions cap, he said, is based on reductions that will result as a "co-benefit" of steps taken by power plants to reduce sulfur dioxide and nitrogen oxide emissions in compliance with the Clean Air Interstate Rule, which was finalized March 10 by EPA.

However, because power plants would be able to use early reductions to generate emissions allowances which they could "bank," or hold for later use, emissions will decline in the early years below the 38-ton cap, Holmstead said. However, this banking will result in the delayed compliance with the 15-ton cap, he said.
EPA officials said that while the new rule limits utility emissions, most mercury to which Americans are exposed comes from fish imported from other nations.

Democrats and environmentalists say the program -- similar to one the EPA finalized last week for utility emissions of sulfur dioxide and nitrogen oxides in the eastern United States -- is not appropriate for a toxic substance like mercury. Opponents wanted plant-specific caps and said the mercury rules give utilities a free pass because the targeted cuts will mostly come from the related rules on smog and soot.

The Bush administration's path to finalize the rules was marked by controversy -- the EPA's inspector general and the Government Accountability Office both said that EPA's process may have put political motives ahead of scientific evidence.

**30. US Study Finds Mercury Pollution, Autism Link**

Mercury released primarily from coal-fired power plants may be contributing to an increase in the number of cases of autism, according to a Texas researcher. A study to be published in the journal "Health and Place" found that autism, a developmental disorder marked by communication and social interaction problems, increased in Texas counties as mercury emissions rose, said Claudia Miller, a family and community medicine professor at the University of Texas Health Science Center in San Antonio.

About 48 tons of mercury is released into the air annually in the United States from hundreds of coal-burning plants.

The study looked at Texas county-by-county levels of mercury emissions recorded by the government and compared them to the rates of autism and special education services in 1,200 Texas school districts, Miller said.

The US Centers for Disease Control has said it does not know how many cases of autism there are in the country or whether the number has increased, but that the issue is under study. Some experts estimate there are 1.5 million people in the United States with autism, most of them children, and say the number of cases has risen rapidly in recent years.

For every 1,000 pounds of mercury released environmentally in Texas counties, researchers found a 17 percent increase in autism rates, according to Raymond F. Palmer, the study's lead author and an associate professor in the Health Science Center's department of family and community medicine.

The study is among the first to examine the relationship between potentially chronic, low-dose mercury exposure and a developmental disorder such as autism, according to Palmer. Researchers used statistical modeling that showed the increases in the rate of special education were associated with higher mercury release levels.

Large-scale mercury exposures such as accidental spills long have been associated with development disabilities, the study said. The study suggested the need for further research regarding the association between environmentally released mercury and developmental disorders such as autism.
The authors cautioned that the study is an ecological investigation based on county levels of mercury and school district data. The study did not assess changes in mercury levels over time as a predictor of rates of change in developmental disorders.

The researchers suggested that future studies should investigate the association using other methodologies and samples.

31. Ontario Program to Promote Fuel Cell Technology

Ontario Economic Development and Trade Minister Joseph Cordiano in January unveiled a three-year program to support the development of low-emissions fuel cell technologies. The Ontario Fuel Cell Innovation Program will provide C$3 million (US$2.6 million) per year through 2008 to support the development of alternative energy sources, Cordiano said in a statement. "We are helping our alternative energy sector be more competitive," he said. "We're pushing harder on research and development so that hydrogen and fuel cell technologies can be fully commercialized here in Ontario." The program is specifically aimed at linking small and medium-sized businesses with fuel cell researchers and venture capital, he said.

32. FirstEnergy Settles With US Govt Over Emissions

US utility FirstEnergy Corp. has said it reached a settlement with the Department of Justice and Environmental Protection Agency related to emissions at an Ohio plant and will invest $1.1 billion in environmental improvements. The company, based in Akron, Ohio, will also pay an $8.5 million penalty to the Department of Justice and contribute $25 million over five years to support environmentally beneficial projects.

FirstEnergy said the settlement, which was also signed by the states of Connecticut, New Jersey and New York, will resolve actions brought in 1999 against its W.H. Sammis plant in Stratton, Ohio, as part of a federal government initiative to bring coal-fired plants into compliance with Clean Air Act guidelines. It said the $1.1 billion investment is in line with its previous assumptions for its long-term spending plan and would help the company meet new regulations announced by the EPA.

FirstEnergy plans to install environmental controls at Sammis as well as a number of other plants. The equipment to be installed at the Sammis plant could reduce up to 95 percent of sulfur dioxide emissions and 90 percent of nitrogen oxide emissions at its two largest units.

The company said that under the settlement new or improved environmental controls could be installed on nearly 75 percent of its 7,400 megawatts of coal based generating capacity. It expects to begin installing the improvements in 2005 and to complete them by 2012. Most of the company's spending on the settlement is expected to be made between 2008 and 2010.

FirstEnergy provides electricity to about 4.4 million customers in Ohio, Pennsylvania and New Jersey.
33. EPA, Arizona OK Air Permit for First US Refinery Since 70s

Federal regulators have approved air permitting for a proposed oil refinery in Arizona, eliminating a major obstacle for what could be the first such plant built in the United States since the 1970’s. The refinery would be built by Phoenix-based Arizona Clean Fuels (ACF) on desert land 40 miles east of Yuma. Arizona, one of the fastest-growing US states, has seen gasoline prices spike several times in recent years.

"The EPA had 45 days to review the permitting and it did not object to the draft air permit," said Wendy Chavez, spokeswoman for the Environmental Protection Agency in San Francisco. The draft air permit, written by the Arizona Department of Environmental Quality, sets emissions limits and pollution control requirements for the proposed refinery.

The EPA air permit approval is one of several regulatory hurdles ACF would need to clear before starting construction of the $2.5 billion refinery.

ACF initially applied for an air permit in 1999.

Arizona currently relies on fuel by pipeline from California and is prone to high fuel prices.

The refinery would also need large amounts of water in a dry state and the proposed site may harbor significant Native American archeological remains, according to the science magazine Nature.

Arizona Clean Fuels plans to supply the plant with Mexican crude oil which would be transported in a yet-to-be-built pipeline to Arizona.

34. Canada Adopts Off-Road Diesel Engines Norms Similar to U.S.

Environment Canada has issued final regulations aimed at cutting emissions from diesel industrial machines used in the construction, mining, farming, and forestry. The Off-Road Compression-Ignition Engine Emission Regulations set Canadian emissions standards in line with U.S. rules, the department said in a regulatory impact statement published with the regulations in the Feb. 23 issue of the Canada Gazette, Part II.

Draft regulations were published for public comment in May 2004.

In the final version, Section 12 was modified in response to technical suggestions from the Engine Manufacturers Association to enable alternative standards for replacement engines when there is no appropriate current model-year engine available, it said.

The new regulations will apply to engines of 2006 and later model years, and they are based on the U.S. Environmental Protection Agency's Tier 2 and Tier 3 standards for off-road diesel engines, the department said. Canada intends to amend the regulations to incorporate the EPA's Tier 4 standards once they are finalized.

The standards set maximum emissions levels for carbon monoxide, particulate matter, and combined nonmethane hydrocarbon and nitrogen oxides emissions. They also set a smoke opacity standard.
Environment Canada has projected that the standards will help reduce emissions from excavators and graders by 63 percent, 69 percent, and 62 percent, respectively, for particulate matter, carbon monoxide, and combined nonmethane hydrocarbon/nitrogen oxides.

35. Truck Emissions Along U.S.-Mexico Border To Be Measured

The U.S. Environmental Protection Agency and Arizona announced a pilot project March 11 to use "remote-sensing" technology to measure air pollution from trucks crossing into the United States from Mexico. The three-week project will collect data on emissions of the commercial truck fleets crossing the border, which officials expect will increase as the result of a ruling allowing more free passage of Mexican trucks into the United States.

Trucks from Mexico have been limited to a 20-mile zone around the border as a result of a 1995 Clinton administration decision, but the U.S. and Mexican governments are negotiating possible changes to this restriction. In addition, the U.S. Supreme Court ruled unanimously June 7, 2004, that a federal transportation safety agency did not need to evaluate the potential environmental impact before allowing Mexican trucks to enter the United States.

The remote-sensing pilot project will make use of a $200,000 EPA grant to Arizona to determine baseline tailpipe emissions from trucks entering the United States at the Mariposa-Nogales port of entry.

The remote sensing technology casts a narrow beam of ultraviolet light across a roadway to measure tailpipe emissions as a vehicle crosses the beam's path, the state said. The beam will capture data on carbon monoxide, nitrogen oxides, hydrocarbons, and fine particulate matter being emitted from Mexican trucks.

The three-week study is intended to allow the Arizona Department of Environmental Quality to extrapolate the level of pollution in the area when larger numbers of Mexican trucks are allowed to cross the border.

"While we have been working with Mexico to reduce pollutants by doing things such as retrofitting older diesel engines to burn the cleaner, ultra-low sulfur diesel, we are very concerned that the anticipated increase in Mexican commercial truck traffic entering through Nogales could dramatically increase pollution along the border," Arizona DEQ Director Steve Owens said. "If older, dirtier trucks are going to be allowed to come into Arizona, we need to have adequate data to deal with the air quality problems they may bring with them."

36. Scientific Advisory Panel Endorses Stricter Standard for Fine Particles

A scientific advisory panel said on April 7 that it supports a recommendation by Environmental Protection Agency staff that the air quality standard for fine particles should be tightened. According to members of the Clean Air Scientific Advisory Committee, a scientific basis exists for lowering both the annual and 24-hour average standards for fine particles with diameters smaller than 2.5 microns (PM-2.5). The group
also called for some form of new standard for coarse particulate matter and generally backed a visibility standard.

CASAC was convened April 6-7 to evaluate the draft document compiled by EPA staff that includes recommendations for changes to the particulate matter air quality standard. The document is the staff's second draft and also provides a discussion of and citations to relevant scientific studies and data that support those recommendations.

Under the terms of a consent decree, EPA is to issue a proposal regarding the results of its review of the particulate matter standards by Dec. 20, 2005, and a final notice by Sept. 27, 2006.

EPA established the current standard for fine particulate matter in 1997 after concluding they caused illness and death. That standard supplemented an earlier standard for coarse particles, those smaller than 10 microns in diameter (PM-10). The existing standard for fine particles is 15 micrograms per cubic meter based on an annual average and 65 micrograms per cubic meter based on a 24-hour average.

In its draft recommendations, the agency staff suggested the consideration of two alternative approaches for revising the standard.

One of the options included in the draft would retain the current annual fine particle standard but lower the 24-hour standard to between 25 micrograms and 35 micrograms per cubic meter. The other option would be to lower the annual standard to between 12 micrograms and 14 micrograms per meter in conjunction with a lowering of the 24-hour standard to between 35 micrograms and 40 micrograms per cubic meter.

Members of the scientific review panel said there was much more recent scientific evidence that supported lowering the 24-hour standard. Lowering that standard appeared to be more protective of human health while also resulting in a decrease of annual emissions.

However, the group generally said that there was insufficient data to support a 24-hour standard as low as 25 micrograms per cubic meter. CASAC members therefore said they favored a lowering of the existing 65 microgram-per-cubic meter standard to between 30 micrograms and 35 micrograms per cubic meter.

Regarding the annual standard, members of the panel said there was not as much new health effects data on long-term effects as short-term effects. However, the group did recommend that a lowering of the 15 micrograms-per-cubic-meter standard to 14 micrograms per cubic meter be made to be more protective of human health.

CASAC members generally supported EPA's call for a 98 percent compliance rate. It is more stable and easier to measure and would not result in as many changes in the classification of complaint areas as a 99 percent compliance rate would, they said. However, some members argued that the 99 percent rate was more protective of human health and should also be considered.

As far as issuing a new standard for coarse particulate matter, experts on the panel generally supported a standard, but were unsure of what level of control was appropriate.
The staff paper recommended a new standard for "thoracic coarse particles, those between 10 microns and 2.5 microns in diameter." The current standard for coarse--or PM-10--particles is 150 micrograms per cubic meter.

EPA staff said the agency should consider setting a 24-hour standard for thoracic coarse particles at between 65 micrograms per cubic meter and 85 micrograms per cubic meter. The paper also said there was some evidence to support consideration of a standard set between 30 micrograms per cubic meter and 35 micrograms per cubic meter.

"We think there is a basis for concern" about the health effects of coarse particulate matter, according to Jonathan M. Samet, epidemiology professor with Johns Hopkins University. However, the panel said there was much uncertainty about the composition, geographical variation, and health effects of the coarse particles, which made setting a level difficult.

Some members of the panel said EPA should consider controlling certain sources to deal with the issue of natural dust. Separate standards targeting road dust and industrial sources were among the suggestions panelists made.

A "place-holding" standard was said by members of the group to be desirable, as further monitoring and effects studies would be more difficult to generate without one.

Regarding a visibility standard, panelists generally agreed that there was a very strong scientific basis for controlling particulate matter to improve visibility.

Although the recently enacted regional haze rules are likely to have an impact on national parks and wilderness areas, panelists generally agreed that improvements in the visibility of other areas not affected by the rules are desired by the public. The most criticism of EPA's approach to the visibility standards was aimed at the staff recommendations that a 90 percent compliance rate be included. CASAC members believed that the compliance rate should be higher and could be coupled with a higher concentration limit than the lower rate.

EPA staff asked CASAC to provide a report on their recommendations within three or four weeks. A final version of the staff paper on particulate matter is scheduled to be completed for the EPA administrator's consideration by June 30.

37. Canadian Minister Introduces Environmental Measures in 2005 Budget

Canadian Finance Minister Ralph Goodale March 24 introduced legislation that would implement the environment-related measures announced in the federal government's 2005 budget, including initiatives to reduce greenhouse gas emissions.

Bill C-43 would implement the following environmental initiatives outlined in the budget for fiscal 2005-2006, introduced Feb. 23 in the House of Commons:

- creation of a new agency within Environment Canada to administer the C$1 billion ($850 million) Climate Fund, which is to provide incentives to industry and individual Canadians to reduce emissions of greenhouse gases;
• amendment of the Canadian Environmental Protection Act to ease the future addition of greenhouse gases to the list of substances contained in a schedule to the act, permitting the federal environment minister to regulate emissions of those gases and to implement the proposed large final emitter regime and emissions trading system;

• creation of a Technology Investment Fund to provide companies that are ultimately regulated under the proposed large final emitter regime with a compliance mechanism promoting investments in greenhouse gas mitigation research and development;

• allocation of an additional C$300 million ($255 million) to the existing Green Municipal Funds program, with half of the amount to be earmarked for helping communities clean up and redevelop brownfields (abandoned sites with serious environmental contamination); and

• transfer to Canadian municipalities of a share of federal gasoline tax revenues, totaling C$600 million ($510 million) in 2005-2006, to support environmentally sustainable infrastructure projects.

Introduction of the budget bill sets the stage for a confrontation between Prime Minister Paul Martin's minority government and opposition politicians in the House of Commons. Conservative Party leader Stephen Harper had threatened March 23 to vote against any budget bill that contains measures that could force Canada's oil and gas industry to reduce carbon dioxide emissions. Specifically, Harper told reporters that his party would not support amendments to the Canadian Environmental Protection Act to permit regulated limits on carbon dioxide emissions. "If any proposal is not in the national interest, we will not support it," he said.

Harper would not speculate, however, on whether he was willing to force a federal election over the issue. "That's a decision the prime minister has to make," he said. Defeat of budget legislation would constitute a vote of no confidence in the government and would force the prime minister to call a general election.

Bloc Quebecois Party leader Gilles Duceppe said he was unsure whether he could support the budget legislation's inclusion of Kyoto Protocol-related measures. "We want to have a separate Kyoto plan, but before making a decision on something I don't know, we'll take the time to look at it, study it, and then we'll make a decision," Duceppe told reporters.

Environment Minister Stephane Dion stressed that a new federal regulatory regime is necessary to implement Canada's Kyoto Protocol commitments, and that amendment of the Canadian Environmental Protection Act is the best way to reduce emissions of greenhouse gases.

38. Canada and Auto Industry Sign Emissions Deal

Canada's auto industry has entered into a voluntary agreement with the federal government to cut greenhouse gas emissions in new vehicles, in an effort to help Canada meet its targets under the Kyoto protocol. Ottawa and the auto sector said the
agreement aims to cut emissions by new vehicles by 5.3 megatons a year by 2010 compared to a base case estimate of potential emissions without the agreement. In other words, it would keep greenhouse gas emissions at the annual rate of 85.2 megatons by 2010 rather than rising to the projected annual rate of 90.5 megatons if nothing is done.

To do this, the Canadian auto industry will offer and promote a variety of fuel-saving technologies for new cars and light trucks. Some of these include hybrid powertrains, cylinder deactivation technology and advanced diesel technology.

A joint government and auto group will monitor the annual performance to ensure progress, and if emissions targets are not met, the government could step in to regulate the industry.

In a good year, Canadians buy about 1.5 million new vehicles.

The Globe and Mail newspaper quoted sources close to the talks as saying the car makers would cut emissions by developing and deploying new fuel-efficient technologies and improving air conditioning systems. Environmentalists cautiously welcomed the news but said they would wait to see details of the agreement before giving their final verdict.

39. Ford Delivers 5 Fuel Cell Cars For Canada Tests

Ford Motor Co. has delivered five fuel cell-powered vehicles for a demonstration program to be conducted by Canadian government agencies to cut down automobile pollution. Ford plans to place 25 more Ford Focus Fuel Cell Vehicles in fleets in the United States and Germany by the end of the year, the company said.

"B.C.'s 2002 Energy Plan lays out a path for future energy use and production, with a key focus on alternative energy, including hydrogen fuel cells, which will ensure environmental sustainability -- one of our key goals for the next decade," British Columbia's Minister of Energy and Mines, Richard Neufeld, said in a statement.

BC Hydro, B.C. Transit, Ballard Power Systems, the City of Vancouver, Fuel Cells Canada, the National Research Council, Natural Resources Canada and the Government of British Columbia will use the vehicles in daily driving conditions under a three-year hydrogen fuel technology demonstration program.

The Canadian government has invested $4.5 million in this project, said Ford, which is based in Dearborn, Michigan.

The Ford Focus FCV is a hybrid-electric vehicle that uses the Canadian-made Ballard Mark 902 series fuel cell engine and Dynetek compressed-hydrogen storage tanks. The performance of each car will be monitored over the next three years.

40. House Energy Legislation Lacks Significant Conservation Component

A. Bush Says US Needs Smarter Ways to Meet Energy Needs
Under pressure over rising gasoline prices, President Bush said that energy legislation to be debated on Capitol Hill must encourage conservation and increased production of energy at home. Bush introduced energy legislation four years ago that languished in Congress through his first term. With gasoline prices hovering at record levels, he and members of Congress appear to be feeling the heat from anxious Americans.

"American families and small businesses across the country are feeling the pinch from rising gas prices," Bush said in his weekly radio address. "If you're trying to meet a family budget or a payroll, even a small change at the pump can have a big impact." In his radio address, he said he wanted energy legislation to encourage the use of technology to improve conservation.

Sources of US Oil Imports

"We must find smarter ways to meet our energy needs, and we must encourage Americans to make better choices about energy consumption," he said.

The energy legislation, he said, must also encourage more production of energy at home, diversify the energy supply by developing alternative sources such as ethanol or bio-diesel and find better, more reliable ways to deliver energy to consumers by upgrading transmission lines and pipelines.

Bush, who worked in the oil business early in his career, said US energy consumption had increased by about 4 percent, while domestic production had dropped by 1 percent in the past three years. "That means more of our energy is coming from abroad. To meet our energy needs and strengthen our national security, we must make America less dependent on foreign sources of energy," he said.

Energy Secretary Samuel Bodman said in a speech the country was pursuing ways to make electricity and transportation fuel without fossil fuels in order to reduce emissions and reduce dependence on foreign oil. As examples, Bodman cited renewable motor fuels like ethanol, bio-diesel and clean diesel.

"Already there are eight models of clean diesel vehicles and more than 20 models of ethanol-compatible vehicles available to US consumers," Bodman said. "We also are working to develop hydrogen-powered cars, and to make greater use of renewable electricity sources such as wind and solar power."

B. Panel Rejects Boost in Car Mileage

A US House committee voted against requiring US automakers to ratchet up fuel efficiency to a fleet average of 33 miles per gallon by 2014 from the current 27.5 mpg for passenger cars. The House Energy and Commerce Committee voted 36 to 10 against
the proposal to raise federal mileage requirements, which was offered as an amendment to a broad energy bill.

Democrat Edward Markey of Massachusetts, who sponsored the proposal, said higher fuel standards were needed to reduce oil demand and make the United States less dependent on foreign petroleum suppliers like OPEC. "The price of oil is controlled by OPEC," said Markey. "We can't break (the cartel) up."

US oil demand averages 21 million barrels a day, with imports supplying three of every five barrels consumed. With gasoline demand the biggest component of oil consumption at about 40 percent, many environmentalists say the only way to significantly reduce petroleum demand is to boost vehicle fuel efficiency. But committee Democrats from Michigan, where the auto industry is based, said Congress can't mandate what type of automobiles Detroit should make. "People are driving around in big cars, because they like them, because they feel safe," said Democrat John Dingell of Michigan. Opponents to the amendment said higher mileage requirements would force automakers to produce dangerous, small cars to meet the stronger fuel standard. "You'll never get your soccer moms and soccer kids in there," said Democrat Bart Stupak of Michigan, referring to the feared subcompact vehicles. "It's not what Americans want."

C. Committee Votes To Open Artic Refuge

Despite objections from Democratic lawmakers, the House Resources Committee voted to allow oil companies to drill in Alaska's Arctic National Wildlife Refuge. Giving oil companies access to the refuge's 1.5-million acre coastal plain and billions of barrels of crude oil is a key part of the Bush administration's national energy plan to help reduce US oil imports. The committee voted 30 to 13 against a Democratic-sponsored amendment to drop the ANWR drilling language.

The panel’s bill calls for the Interior Department to lease to oil companies at least 200,000 acres in the coastal plain within two years after the legislation is signed into law.

D. MTBE Lawsuit Costs Remain Contentious

Big US oil companies are lobbying hard to win protection from billions of dollars in liability lawsuits for a water-damaging gasoline additive. Controversy over the additive -- methyl tertiary butyl ether or MTBE -- was one of the icebergs that sank efforts to pass a $31 billion energy bill in the Senate last year.

US refiners began adding MTBE to gasoline in 1979 as an anti-knock agent that replaced lead, but its use soared in 1995 to comply with a federal law to make fuel burn cleanly. But MTBE has seeped into underground water supplies in all 50 states through leaky underground storage tanks. It renders water undrinkable because of a turpentine-like odor and taste.

The cost of cleaning up the mess is estimated by municipal water experts at $29 billion. Consultant Komex H2O Science Inc. said in 2004 that the cost could soar as high as $63 billion.

"It has come out of left field to become our most important issue," said Don Duncan, a vice president who runs the Washington office of ConocoPhillips, the No. 3 US oil firm.
"The writing was on the wall for us that this had the potential to be the next tobacco," Duncan added, referring to the huge settlement of more than $200 billion reached by tobacco companies with states in 1998.

Powerful House Republicans, including Majority Leader Tom DeLay and Rep. Joe Barton of Texas, want to revive the energy bill this month, including a provision to protect oil companies and other MTBE makers from defective product lawsuits, meaning they could not be sued simply for manufacturing MTBE. They contend that the Clean Air Act required refiners to use additives like MTBE to reduce ozone, and refiners should not be punished for following the law.

Moderate Republicans and many Democrats in the Senate vehemently oppose the liability shield as a get-out-of-jail free card that would allow companies like ExxonMobil, ConocoPhillips and Lyondell Chemical Co. to duck liability and stick communities with the cleanup bill.

Rep. Henry Waxman, a California Democrat, points to documents which he says prove that Congress never meant to require refiners to use MTBE. In a 1994 letter to the Environmental Protection Agency opposing a proposal to mandate ethanol, lawmakers including DeLay and Barton said "the point can be no more clear" that the Clean Air Act was meant to be "entirely fuel neutral."

"Congress wanted cleaner burning fuels, but no one told the oil companies they had to use MTBE," Waxman said in a statement. "Oil companies are making record profits, yet are asking local governments and ratepayers to pay $29 billion or more to clean up the oil companies' pollution."

Senate Energy Committee Chairman Pete Domenici has opposed its inclusion in the Senate version of the bill, but it could be inserted in a House-Senate bargaining session that would follow the bill's passage by both chambers.

Product liability was the basis for a landmark MTBE case in California in 2002, where a jury found several oil companies liable for making a defective product. The companies settled for $69 million before the jury could award damages.

Oil firms say they are willing to pay for cleaning up spills, but should not be sued for merely making MTBE.

E. Ways And Means Offers Modest Clean Vehicle Incentives

The House Ways and Means Committee has rammed through an $8-billion package of energy subsidies that offers little or no support for the massive $2.5-billion hybrid/alternative fuels subsidy package being envisioned by Senate counterparts. In offering only a $73 million subsidy for clean diesel technologies, committee Chairman Bill Thomas (R-CA) explained that his mark represents, more than anything, his opening tack for perennially trying negotiations with the Senate counterparts.

The chair's strategy on hybrid/fuels incentives in the CLEAR Act (Clean Automobiles Resulting From Advanced Car Technologies legislation) appears to be part of an overall strategy to increase the number of provisions for which the Senate needs House approval. "One of the things the chair is concerned about is meeting repeatedly with the
Senate on the same subject matter,” Thomas told his committee in opening the April 13 markup.

Staffers say that this does not mean there is no support for hybrids in the House, but rather the Senate needs to convince the House to agree with its provision on hybrids. Thomas told the committee that “any examination of this bill as the majority party's statement on energy coming out of the House is a bit premature.”

One of the chairman's staffers explained that past conferences have begun by taking everything the two chambers' bills have in common and folding them into the report immediately, then “continuing to pile everything else on top.” The bill passed out of Ways and Means this session includes only very core incentives and those which Thomas believes are important but will not be included in the Senate version. One observer drew out this example: If Thomas brings incentives for both hybrid gasoline-electric and clean-burning diesel cars, then the hybrid incentives, matching the Senate version, would be left in and Thomas is left fighting for the diesels. But as the bill was reported out of committee, with no incentives for hybrids, Thomas goes into the conference on more equal footing because the hybrid incentives are not automatic.

The strategy of bringing the narrower, more tapered bill, H.R. 1541, to the conference table drew consternation from some committee members, notably Rep. Jim McDermott (D-WA), who questioned Thomas as to whether it would be smarter to be bringing a fatter bill “so you have things to give away.” “The chair believes he is more experienced in dealing with the Senate in conference,” Thomas retorted.

The chairman added in the hearing that, while he thought the strategy was necessary to produce a successful conference, his committee members might have to sacrifice the political capital earned by authoring favored incentives, which will be brought in from the Senate side instead. A key example here are the production tax credits for wind, biomass and other renewable energies, which Thomas has chosen to deal with in “extender packages” with various other, mostly energy unrelated incentives. The wind, solar and biomass incentives were extended to the end of 2005 and biodiesel and ethanol through 2006 in tax bills late last year.

At the markup, Iowa Republican and Budget Committee chairman, Rep. Jim Nussle, lamented that he wanted the renewable credits dealt with in energy policy and not tax policy debates. Nussle brought to the markup and had distributed an amendment that would have extended the credits for wind and open- and closed-loop biomass to 2011, and for biodiesel to 2010. Nussle eventually demurred to Thomas and withdrew the amendment.

The vast bulk of the package that Thomas did move through his committee -- accounting for $6.2 billion of the total $8.1 billion -- relate to energy infrastructure. For natural gas distribution pipelines, the bill would accelerate depreciation from 35 years to 15 years; and for electricity transmission lines, from 20 years to 15 years. These provisions scored at roughly $1.5 billion each.

The main gift to coal burners, scoring at $1.4 billion: the repeal of a date requirement so that air pollution control facilities can be depreciated over five years regardless of when the plant was built. Under current law, air pollution control facilities may be depreciated over five years only if used to control pollution in a power plant built prior to 1976.
For the nuclear industry, the bill reforms treatment of reserve funds used to pay for a nuclear power plant’s decommissioning costs. Contributions to the fund, for example, are deductible only if they meet a cost of service requirement and the fund may accumulate only enough reserves to pay for decommissioning costs incurred after 1984. The provision repeals the cost of service requirement and the post-1984 limitation, allowing plant owners to accumulate enough reserves to pay 100 percent of the plant’s decommissioning costs. This provision scores at $1.3 billion.

For the oil industry, the bill would allow for deduction of all “geological and geophysical costs” incurred for the purpose of obtaining data to assist with the exploration and acquisition of minerals, if they are incurred in connection with domestic oil and gas exploration. This provision scores at $982 million.

Environmental groups lamented that only 5 percent of the package is directed at renewables, and Republican committee staff were quick to retort that “the renewables incentives moved in front of this package.” Toward the end of the 108th Congress, about $3.5 billion in credits for wind, biomass, geothermal, solar and other renewable sources were passed via the Working Families Tax Relief Act and the JOBS Act. But environmentalists counter that many of these renewable production tax credits are set to expire at the end of this year.

F. Major Provisions of US House Energy Bill

Key elements of the House bill include the following:

**OIL/GAS**

- Opens Arctic National Wildlife Refuge in Alaska to oil and gas drilling.
- Suspends federal royalty payments five years for drilling in Gulf of Mexico deep water of more than 400 meters.
- Earmarks $2 billion in royalties from federal Outer Continental Shelf for research in ultra-deepwater drilling.
- Eases environmental constraints to build or expand oil refineries in economically depressed areas.
- Expands the Strategic Petroleum Reserve by 300 million barrels to 1 billion barrels, and halts new shipments if US oil futures prices rise above $40 per barrel.
- Authorizes more than $3 billion in research for oil, gas and coal industries.
- Gives Federal Energy Regulatory Commission final say if localities object to new liquefied natural gas projects.

**FUEL/TRANSPORTATION**
• Limits product liability for makers of methyl tertiary butyl ether (MTBE), a fuel additive and suspected carcinogen that has fouled groundwater in cities across the nation.

• Bans MTBE use by 2014 and gives more than $1.7 billion in transition aid for MTBE makers to switch to other products.

• Cuts number of special gasoline blends now required to ease air pollution in cities and regions.

• Requires at least 5 billion gallons of corn-blended ethanol be used in US gasoline supply by 2012.

• Offers $750 million in subsidies to build new ethanol production plants.

COAL

• Doubles funding to develop low-emission coal plants to $2.5 billion.

• Offers federally guaranteed loans for five petroleum coke plants and a coal gasification plant in West Virginia.

NUCLEAR ENERGY

• Extends expiring accident insurance protection for owners of nuclear power plants by 20 years.

• Spends $1.3 billion for experimental Idaho reactor that would also produce hydrogen fuel.

ELECTRICITY

• Sets mandatory reliability standards for the electric power grid to prevent a repeat of the August 2003 blackout that left 50 million people in the dark.

• Offers financial incentives to generate more electricity from solar, wind, biomass and geothermal sources.

MISCELLANEOUS

• Extends annual US daylight-saving time by two months to cut energy use.

• Extends deadline for cities downwind of polluting factories to comply with smog standards if states can prove that most pollution comes from outside their borders.

• Requires 20 percent cut in federal buildings' energy use by 2015.

• Authorizes more than $3 billion annually to help poor families pay winter heating bills.
41. US Senate Backs Opening ANWR To Oil Drilling

As US oil prices soared to a record high, the Senate gave President Bush's energy plan a major boost by voting to open Alaska's Arctic National Wildlife Refuge (ANWR) to oil drilling. Republicans have tried for more than two decades to open ANWR to oil exploration. The Bush administration, which views ANWR as the centerpiece of its national energy plan, was blocked the past four years by a Senate coalition of moderate Republicans and Democrats.

Pete Domenici, chairman of the Senate Energy and Natural Resources Committee, led the fight to defeat a Democratic effort to strip ANWR drilling language from a budget resolution to fund the federal government. The vote was 51 to 49 in favor of keeping the drilling provision in the bill.

However, the Republican plan to give oil companies access to the refuge is far from a done deal. Last year, Congress failed to reach a budget agreement. The House and Senate have sharply different versions of budget plans for tax cuts and spending reductions that may not be reconciled this year.

The refuge, about the size of South Carolina, sprawls across more than 19 million acres in northeastern Alaska. Drilling would occur in ANWR's 1.5-million acre coastal plain.

Bush welcomed the vote as a step toward making "America less dependent on foreign sources of energy, eventually by up to a million barrels of oil a day."

Opponents said there is not enough oil in the refuge to justify harming the area's caribou, polar bears and other wildlife. Instead, they say, Congress should boost mileage standards for vehicles to reduce US oil demand and reliance on oil imports.

The government has estimated energy companies would find it cost-efficient to recover at least 6 billion barrels of oil from ANWR if prices were at or above $35 a barrel. US crude oil prices soared to a new high of $56.50 a barrel at the New York Mercantile Exchange, after a government report showed a steep decline in gasoline stocks.

The ANWR provision calls on the federal government to raise more than $5 billion from companies in leasing fees to hunt for oil. Alaska would keep half of the money.

Republican leaders put the ANWR provision in the budget resolution because budget bills cannot be filibustered under Senate rules, as Democrats had threatened to do to any measure that allowed drilling in the refuge. The budget resolution requires a simple majority for passage, instead of the 60 votes needed to end a filibuster on other bills.

Drilling supporters also argued ANWR could eventually boost US oil supplies by an extra 1 million barrels per day (bpd), cutting US dependence on oil from the volatile Middle East. The United States consumes about 20.8 million barrels of oil a day and imports account for 58 percent of supply.

The following are key facts about ANWR:
LAND

Encompasses 19.6 million acres in northeastern Alaska that includes the Brooks Mountain Range with peaks over 9,000 feet high, lakes, rivers and a rock mesa. Within the refuge, 8 million acres are designated as federal wilderness. The entire refuge lies north of the Arctic Circle and is about the size of the state of South Carolina.

About 90,000 acres within ANWR and adjacent to its coastal plain is owned by the Kaktovik Inupiat Corp., a native tribe of about 220 residents.

WILDLIFE

Home to 45 types of land and marine mammals including the bowhead whale, polar and grizzly bears and moose. ANWR's coastal plain is used as a nursery by caribou in the summer months and by polar bears in the autumn.

Some 180 species of birds have been observed in the refuge, including migratory birds such as Dunlins from China, Buff-breasted Sandpipers from Argentina and Tundra Swans from Maryland.

OIL POTENTIAL

The Interior Department and the US Geological Survey believe the best geologic prospects for a major oil discovery are in ANWR's coastal plain, located about 100 miles east of Alaska's Prudhoe Bay. The government estimates up to 16 billion barrels of oil in ANWR are technically recoverable, although much of that would be too expensive to produce at today's prices. With prices at or above $35 a barrel, energy companies could economically recover an estimated 6 billion barrels of oil from ANWR.

The oil estimates are based on seismic surveys, aerial surveys and geological investigations. No exploratory drilling has been allowed in ANWR except for one well in the winter of 1984-85 on land owned by the Kaktovik Inupiat Corp.

If leasing is permitted on ANWR and commercial exploration and development begins, it could take up to 12 years before any oil reaches the market, according to government and industry estimates.

42. Canada Calls US Alaska Oil Drilling Plan "Big Mistake"

Canada said that a US plan to drill for oil in an Alaskan wildlife refuge was "a big mistake" and vowed to keep pressuring Washington to scrap the idea. Ottawa says drilling in the Arctic National Wildlife Refuge (ANWR) in northeast Alaska would ruin the calving ground of the Porcupine caribou herd, on which native Gwich'in Indians in Alaska and Canada have depended on for thousands of years.

"We think it's a big mistake and we will continue to pressure (Washington) so that it should not happen," Canada's environment minister, Stephane Dion, said.
Ottawa, which says both countries should provide permanent protection for wildlife populations that straddle the border, has banned development in areas frequented by the Porcupine herd on the Canadian side of the border.

"We must be sure the caribou are protected. It's a very frail ecosystem there. I'll meet my (US) counterpart pretty soon and will continue to look at that very carefully," Dion said.

43. National Security Experts Lobby Against US Gas-Guzzlers

A group of former national security officials has taken up the cause of weaning US drivers from their oil addiction -- normally the realm of environmental groups -- and asked the Bush administration to spend $1 billion on lighter, more fuel-efficient automobiles.

Retail US gasoline prices now averaging above $2 a gallon make US reliance on foreign suppliers like Venezuela and Saudi Arabia a looming national security crisis, a group of 31 national security officials said in a letter to President Bush. "This really constitutes a national security crisis in the making," said letter signer Frank Gaffney, head of the Center for Security Policy, a think tank, and a former Defense Department official under former President Reagan. Other signers included Robert McFarlane, Reagan's national security advisor, and James Woolsey, Central Intelligence Agency director under President Clinton.

In an uncharacteristic move, the security experts sought input from groups like the Natural Resources Defense Council, which have long lobbied for more fuel-efficient cars. "It's strange bedfellows but this is actually the real American majority," said Nicole St. Clair, a spokeswoman for the NRDC. "It's common sense." Policymakers should address rampant oil demand from gas-guzzling vehicles, and stop trying to solve the problem by opening land like the Arctic National Wildlife Refuge to drilling, she said.

The letter urged the government to encourage car makers to design vehicles from lighter materials to improve mileage. It also endorsed the use of "plug power" -- hybrid vehicles that can run off internal batteries for short trips before switching to their internal-combustion engines.

The program would cost $1 billion over five years.

Corporate Average Fuel Economy (CAFE) standards require automakers to achieve an average fuel economy of 27.5 miles per gallon for all passenger cars sold, and 20.7 mpg for vans, sport utility vehicles and pick-up trucks. The standards have not been tightened for more than a dozen years due to opposition from Detroit. The average fuel economy has steadily dropped since 1988. It was 20.8 mpg for all 2003 model vehicles, according to the Environmental Protection Agency's annual mileage report.

McFarlane told the White House that stricter mileage standards could help cut US crude oil imports in half.

The group's recommendations gave short shrift to hydrogen-powered vehicles, a Bush administration priority, because they will take decades to field.
US drivers should not depend on foreign suppliers like Saudi Arabia for security reasons, they said. Although Saudi officials say the kingdom's oilfields are protected from terror attacks, McFarlane said the oil installations are "extremely vulnerable from a military point of view." If Saudi oil facilities are damaged, "You're not talking about $100 (per barrel) oil. You're talking about well beyond that," McFarlane said. US crude oil prices peaked March 17 at $57.60 a barrel.

44. Stricter Auto Fuel Efficiency Standards Would Slow Oil Demand - EIA

A bipartisan commission's proposal to tighten fuel efficiency standards for new US cars, trucks, mini-vans and sport utility vehicles would cut forecast American oil demand in 2015 by 2.5 percent, the Energy Information Administration said Wednesday. With retail gasoline prices at a record high, environmentalists, Democrats and even a group of former US national security officials have urged Congress to tighten federal regulations known as the Corporate Average Fuel Economy (CAFE) standards.

Current CAFE standards require automakers to achieve an average fuel economy of 27.5 miles per gallon for all passenger cars sold, and 21.0 mpg for vans, SUVs and pick-up trucks. The requirements have not been changed for more than a dozen years despite a steady drop in the average US fuel economy to 20.8 mpg for 2003 model vehicles.

The EIA, the statistical arm of the Energy Department, said it analyzed the package of energy proposals the National Commission on Energy Policy issued last December. The privately funded commission is a group of energy experts, company executives and government officials from both political parties.

The EIA said the panel's proposal to tighten mileage standards would slow the growth in US oil demand.

Although the commission was unable to agree on a specific increase in CAFE standards, the EIA said it based its analysis on a 36 percent increase by 2015. Boosting CAFE standards by 6.8 miles per gallon in 2015 would trim forecast US oil demand by 2.5 percent, or 610,000 barrels per day (bpd), to 24.06 million bpd, the EIA said. A further increase of 6.3 mpg by 2025 would cut forecast oil demand by 5.8 percent, the EIA said.

"The increases in measured fuel economy are smaller than the increases in the CAFE standard because new light duty vehicles are projected to exceed the existing CAFE standard," the EIA said.

Although the EIA assumed a 36 percent increase in CAFE standards, the agency said that rise would be partially offset by older, existing vehicles on the road and the fact that drivers typically do not achieve the full fuel efficiency rating of a new vehicle.

The EIA report noted that stricter mileage requirements would boost the price of new vehicles by about $1,400 in 2015 and by $1,200 in 2025, as measured in current dollars.

Other proposals by the bipartisan commission to promote hybrid vehicles, stricter energy efficiency standards for new buildings and appliances, and launch a greenhouse gas
trading scheme for companies would further slow the growth in US oil demand, the EIA said.

The policy package would cost the average American household about $78 annually through 2025, the EIA said, while also addressing greenhouse gases linked to climate change.

**45. Americans See Fuel Efficient Cars as "Patriotic"**

Most Americans believe it is "patriotic" to buy a fuel-efficient vehicle to help wean their country off Middle Eastern oil, according to a new poll. Some 66 percent of participants in the survey said they agreed that driving vehicles that require less fuel to run was patriotic, since it could help reduce the US dependency on Mideast crude.

The survey, conducted for the nonpartisan Civil Society Institute think tank, also showed that 57 percent of self-described conservatives considered the purchase of a fuel-efficient vehicle an act of patriotism.

Even 67 percent of NASCAR racing fans concurred that fuel-efficiency and patriotism go hand in hand, the poll said.

Based on telephone interviews with 1,013 adults in private US households, the poll was conducted on Feb. 10-13. Its margin for error was three percentage points.

The poll also showed that an overwhelming 89 percent of Americans agreed on the importance of government action to reach a 40 mile per gallon fuel efficiency level for US vehicles, to cut greenhouse pollution as well as dependency on Mideast oil.

In response to rising US gasoline prices, 50 percent of those surveyed said they had already purchased or were considering buying a more fuel-efficient car.

The US rules that govern fuel efficiency, known as Corporate Average Fuel Economy standards, were first imposed in 1975 after the Arab oil embargo. The standards have remained at 27.5 mpg for cars since 1990 and at 20.7 for trucks since 1996. In its annual fuel economy report last year, the Environmental Protection Agency said that in the 2004 model year, light duty vehicles sold in the United States were estimated to average 20.8 mpg. That was within the 20.6 to 20.9 range registered in the previous eight years but 6 percent below a 1987-1988 peak of 22.1 mpg, the EPA said.

**46. US Court to Hear States Push EPA on Global Warming**

A US court of appeals has agreed to hear arguments in a case to determine whether existing laws require federal environmental regulators to limit carbon dioxide emissions from automobiles. New York, Massachusetts, California, as well as nine other states and environmental groups including Greenpeace, will argue that the federal Clean Air Act gives the Environmental Protection Agency the authority to regulate any air pollutant that may hurt public health or welfare.

The EPA acknowledges that global warming has risks, but said in 2003 it does not regulate greenhouse gas emissions because Congress has not granted it authority to do
so under the air act. The US Circuit Court of Appeals for the District of Columbia will also hear arguments from 10 states that support the EPA's 2003 decision. Authorities from Michigan, home of Detroit's Big Three automakers, have said carbon dioxide regulations could add anywhere from hundreds to thousands of dollars to the price of new automobiles.

The court is expected to turn greenhouse gas regulation over to the EPA or decide that the Clean Air Act doesn't address the gases. Its decision could take months.

47. Mexico INE Releases Climate Change Book

On February 16th, the National Ecology Institute of Mexico released the book, “Climate Change: A View From Mexico.” The book was presented by Environment Secretary Alberto Cardenas to President Fox at a ceremony to celebrate the entry into force of the Kyoto Protocol. The book gathers contributions from more than 30 experts on different aspects of the climate change issue.

A PDF version of the book, in Spanish, can be downloaded from www.ine.gob.mx

48. Canada Wants Environment To Be Focus Of Transport Policy

On March 24th, Federal Transport Minister Jean Lapierre introduced amendments to the Canada Transportation Act that provide for the first time a focus on environmental impacts in Canada's national transportation policy. The proposed amendments include a new, modernized National Transportation Policy Statement that cites environmental protection as an explicit objective in transportation policy decision making, Lapierre said in a statement accompanying introduction in the House of Commons of Bill C-44.

"These amendments address key long-term transportation issues in Canada," he said. "They will improve the efficiency of the rail and air sectors, enhance competition, help protect the environment, and provide a stable framework for investment."

The amendments would establish a broad framework for transportation policy decision making, and a strategic environmental assessment of the proposed changes concluded that the guidance provided by the new framework will provide environmental benefits, Transport Canada said in a background document.

"Extensive consultations with industry stakeholders have demonstrated significant support for several provisions that would advance environmental objectives, including new powers to address railway noise complaints and measures to support the provision of public transportation services," the department said.

The changes to the National Transportation Policy Statement would establish respect for the environment as a principle, it said. The statement would direct the development of federal transportation policy instruments and would provide guidance to the Canadian Transportation Agency and courts in exercising discretion in interpreting the Canada Transportation Act's environment-related provisions, it said.
49. Canada Kyoto Implementation Plan To Cost More Than C$10 Billion

On April 13th, Federal Environment Minister Stephane Dion unveiled a plan to implement Canada's Kyoto Protocol commitment to reduce greenhouse gas emissions at a cost of more than C$10 billion ($8.5 billion) over the next seven years.

The plan focuses on improved energy efficiency and increased renewable energy production, emissions reductions by major emitters, consumer incentives, and purchases of domestic and international emissions reduction credits.

Canada is committed under the Kyoto accord to reduce greenhouse gas emissions 6 percent from 1990 levels by 2008 to 2012.

Canada's approach to reducing emissions is "pragmatic" and carefully balances the need to address climate change issues while ensuring the continued competitiveness of Canadian industry, Dion said at a news conference.

It will improve air quality and make cities more livable, while making Canada's environmental industries world leaders in energy efficiency and alternative energy, helping them make "megatons of money," he said. "The Kyoto Protocol merely gives us another reason to do the right thing."

Dion and senior Cabinet colleagues dismissed suggestions that the plan is already in jeopardy because of the tenuous situation of Prime Minister Paul Martin's minority government in the House of Commons.

Opposition politicians have threatened to force an election over the inclusion of Kyoto-related provisions in legislation to implement the government's 2005 budget and have indicated they believe they would also benefit from the ongoing sponsorship scandal that has involved the current prime minister and predecessor Jean Chretien.

The plan, Moving Forward on Climate Change: A Plan for Honoring our Kyoto Commitment, calls for measures that would reduce Canada's greenhouse gas emissions by 270 megatons per year by 2012:

- The Climate Fund would reduce emissions by 75 megatons-115 megatons at a cost of C$4 billion-C$5 billion ($3.4 billion-$4.4 billion), including C$1 billion ($850 million) over five years in the 2005 budget, by using a market-based mechanism to purchase emission reduction credit domestically from agricultural producers, businesses, and communities, and internationally.

- The Partnership Fund is designed to cut emissions by 55 megatons-85 megatons at a cost of C$2 billion-C$3 billion ($1.7 billion-$2.6 billion) over the next 10 years through agreements with provincial and territorial governments to finance, on a cost-shared basis, investments in major technology and infrastructure projects including clean coal, phasing out of coal-fired electricity generation, carbon dioxide capture and storage, and completion of a Canada wide, East-West electricity grid.
• A "Large Final Emitters" program calls for reductions of 45 megatons by the 700-plus large emitters through technology upgrades, purchases of emission reductions from other large emitters, and purchases of verified international credits, plus investments in the Greenhouse Gas Technology Investment Fund.

• Energy efficiency initiatives would cut emissions up to 40 megatons at a cost of up to C$2.8 billion ($2.4 billion) through 2012, using existing programs such as the EnerGuide for Houses Home Retrofit Incentive, similar incentives for retrofits of commercial and institutional buildings, reduced emissions from the transportation sector, and increased availability of alternative fuels.

• Carbon sinks would reduce emission up to 30 megatons through credits for the use of "business-as-usual" sinks, which are stores of carbon in soils and forests through existing practices, plus the potential for further reductions through purchases of carbon sequestered through farming and forestry management projects.

• Renewable energy initiatives are designed to slash emissions by 15 megatons at a cost of up to C$2.1 billion ($1.5 billion) over 15 years, using initiatives such as those outlined in the 2005 federal budget, including quadrupling of the Wind Power Production Incentive and establishment of a Renewable Power Production Incentive for other renewable sources such as solar, small hydro, and biomass.

• Consumer action is expected to cut 5 megatons at a cost of C$120 million ($102 million) through 2012 via increased information and incentives for individual Canadians, including increased technical advice and services and continued promotion of the One-Ton Challenge, which urges Canadians to reduce their individual greenhouse emissions by one ton per year.

• Automotive industry initiatives would cut 5.3 megatons through a voluntary memorandum of understanding recently signed with domestic and foreign-based automakers through increased fuel efficiency, advanced emissions technologies, and increased production of alternative fuel and hybrid vehicles.

• A Greening Government initiative would cut 1 megaton and be funded through internal budget reallocations. It would continue efforts to reduce federal government emissions of greenhouse gases through a Green Procurement Policy, efforts to ensure that new buildings meet strict energy efficiency standards, and replacement of vehicles with more efficient alternatives, including hybrids.

The plan notes that cost estimates are based on an assumption that international greenhouse gas emission reductions will be available at a cost of C$10 ($8.50) per ton of carbon dioxide equivalent, the price at which it says many such transactions are currently occurring.

50. US Gasoline Consumption High Despite Record Prices

Demand this summer for US gasoline will rise 1.8 percent from last summer, helping push pump prices to a peak monthly average of $2.35 a gallon in May, the federal
government has announced. American drivers will consume an average 9.331 million barrels per day of gasoline this summer, according to the US Energy Information Administration. The forecast from Energy Department's analytical arm is for the busy summer driving season running from April through September.

The expected growth in summer gasoline demand would remain above the five-year average, the agency said, although it would be slightly lower than previously estimated as some drivers flinch at higher pump prices.

"We're looking at a global crude market that is straining" to meet world demand, said EIA administrator Guy Caruso.

In its report, EIA estimated China's oil demand will jump 12 percent this year to 7.4 million bpd. China's runaway growth in oil consumption has helped to push crude prices higher.

The higher demand for US gasoline "is caused by the increasing number of drivers and vehicles, and increasing miles traveled per vehicle," the EIA said. A flat to declining fuel efficiency in the entire US vehicle fleet is also a factor.

With no slowdown in US gasoline demand, refiners will have to pump out more fuel, the EIA said.

US refiners' summer production of gasoline will average 8.382 million bpd, up 0.5 percent from last year. But that slight increase cannot keep up with demand growth "due to limited growth in refinery capacity," the EIA said. Imports will have to make up the difference to meet demand. This summer's net imports of motor gasoline and blending components are projected to average a record 893,000 bpd, up 4.7 percent from last year. But those foreign supplies "may be harder to obtain than in previous summers and are expected to be costly," the EIA said.

US gasoline inventories have declined in recent weeks, but Caruso said motor fuel stocks will be "just adequate" to meet summer demand.

While gasoline prices should peak in May, the nationwide price for the summer should average $2.29 a gallon, up 38 cents from last year, and not far from this week's $2.22 a gallon. When adjusted for inflation, the most expensive US gasoline was in March 1981 at $3.12 a gallon, the EIA said.

Rising oil prices are pushing up pump costs. "Almost all of the increase (in the cost of gasoline) is due to the crude oil price," Caruso said. The price for US crude should average $56.62 a barrel this summer, compared to $41.12 for the same period last year. The EIA said it expects crude costs to stay above $50 a barrel for the rest of 2005 and 2006.

51. Bush Picks Scientist to Head EPA

US President George W. Bush has nominated Acting Environmental Protection Agency Administrator Steve Johnson to be the first career EPA employee to head the agency.
Johnson, who has worked at the EPA for 24 years, would be the first professional scientist to lead the agency.

Bush said in an announcement at the White House that Johnson was "a talented scientist and skilled manager with a lifelong commitment to environmental stewardship." He said one of Johnson's responsibilities would be to push Congress to pass the administration's "Clear Skies" plan that is designed to reduce power plant pollution by 70 percent.

Bush also said Johnson was an expert on pesticides and helped design new regulations to improve food safety, and that Johnson will lead federal efforts to ensure the security of US drinking water supplies.

Johnson, who turns 54 this month, said he would carry out an environmental agenda "while maintaining our nation's economic competitiveness."

Some environmental groups hope that because Johnson comes from within the EPA, the agency will make policy decisions that benefit the public more than the energy industry that is closely linked to the Bush administration. Nonetheless, Johnson is expected to follow, more than establish, the administration's positions on environmental issues.

The Bush administration has taken a hit from its European allies for not allowing the United States to be a part of the international Kyoto treaty that seeks to reduce global warming emissions spewed by industrialized countries. When Johnson was asked by a Japanese newspaper last year whether the United States might rejoin the Kyoto agreement, he responded: "That question is easy, and its no."

If approved by the US Senate, Johnson would follow Mike Leavitt, who now serves as Bush's health and human services secretary.

Before becoming EPA acting administrator, Johnson served as the deputy administrator of the agency and held several other EPA jobs. Johnson previously served as director of operations at Hazelton Laboratories Corp. and Litton Bionetics Inc.

The EPA has over 18,000 employees and an annual budget of $8.6 billion.

52. White House's EPA Nominee Blocked Again in Senate

The Bush administration's nomination of Stephen Johnson to head the Environmental Protection Agency (EPA) was blocked again after he refused to analyze a Democratic proposal to cut utility air pollution. A day after the Senate Environment and Public Works Committee approved Johnson's nomination in a 17-1 vote, Delaware Democrat Tom Carper placed a hold on his nomination. The action will delay or kill the nomination in the full Senate.

Carper's move came after Johnson, now acting EPA administrator and a career agency scientist, refused to commit his agency to study legislative alternatives to the administration's plan to cut utility air emissions through a cap-and-trade system.
Johnson last week responded to a similar threat from Sen. Barbara Boxer of California by canceling a program to test pesticides on Florida infants.

Carper said the White House has restrained the EPA from doing objective scientific analysis of his proposal to reduce utility pollution. "For the life of me I don't understand the reluctance of the administration to do that," he said. "I've repeatedly been denied an analysis of my proposal, presumably because the White House is afraid of what it might show."

Carper said Johnson late Wednesday told him "he's not in a position to provide the information at this point and time." Johnson said he is reluctant to commit EPA staff to the study -- which would take about 10 weeks -- without the approval of Senate Environment Committee Chairman James Inhofe, Carper said.

Inhofe tried to pass a version of the administration's plan in his committee, but the panel deadlocked over the speed of emission cuts and Republicans' decision to exclude action on heat-trapping carbon dioxide.

"Senator Carper has more information about the multi-pollutant legislation then Congress ever has," an Inhofe spokesman said, referring to 10,000 pages of documents the EPA has produced to the committee. "We hope that the obstruction of a nominee of his caliber and bipartisan support will not continue," Inhofe's spokesman said.

Democrats and Vermont Independent James Jeffords have proposed utility legislation that would make quicker and deeper cuts in utility emissions of sulfur dioxide, nitrogen oxides and mercury than the administration's plan.

### ASIA – PACIFIC

#### 53. Recent Developments in Japan

**A. Proposed New Standards**

On February 22rd, the Automobile Experts Sub-committee of the Air Quality Committee of the Central Environmental Council issued proposed new emissions limits for both diesel and gasoline cars and trucks. Comments are invited on the proposed limits until the end of March. Following a review of the comments, final limits are expected to be adopted by the end of April. Since the vehicle and engine manufacturers agreed to the proposal before it was released, no changes to the limit values are expected.

<table>
<thead>
<tr>
<th></th>
<th>PM</th>
<th>NOx</th>
<th>NMHC</th>
<th>CO</th>
<th>Date in Effect</th>
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<td>0.08</td>
<td>0.024</td>
<td>0.63</td>
<td>2009</td>
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<tr>
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<td>(-62%)</td>
<td>(-43%)</td>
<td>(-0%)</td>
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<td>0.024</td>
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<td>2009</td>
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<td><strong>Weight</strong></td>
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### New Proposed Gasoline Vehicle Standards For Japan

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<tr>
<th>Category</th>
<th>PM</th>
<th>NOx</th>
<th>NMHC</th>
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<th>Date in Effect</th>
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<tr>
<td><strong>Passenger Car</strong></td>
<td></td>
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</tr>
<tr>
<td>Light-Weight (GVW 1.7t or less)</td>
<td>0.005 (New)</td>
<td>0.05 (0%)</td>
<td>0.024 (-0%)</td>
<td>0.63 (-0%)</td>
<td>2009</td>
</tr>
<tr>
<td>Middle-weight (GVW over 1.7t ~3.5 t or less)</td>
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<td>0.07 (0%)</td>
<td>0.024 (-0%)</td>
<td>0.63 (-05)</td>
<td>2009</td>
</tr>
<tr>
<td>Heavy-weight (GVW over 3.5t)</td>
<td>0.01 (New)</td>
<td>0.7 (0%)</td>
<td>0.17 (-0%)</td>
<td>2.22 (-0%)</td>
<td>2009</td>
</tr>
</tbody>
</table>

**Notes:**
1. Units – Heavy Weight Trucks: g/kWh; all other in g/km
2. Lower column means percent reduction from 2005 standards
3. GVW = Gross vehicle weight; NMHC = non methane hydrocarbons

A review of the proposed limits indicates the following:
1. The additional PM reduction for diesel vehicles beyond the 2005 limits ranges from 53% for trucks and buses between 1.7 to 3.5 tons to approximately 62% for all other vehicle categories.

2. The additional NOx reduction for diesel vehicles is approximately 40 to 43% for all vehicle categories except trucks and buses over 3.5 tons where the reduction will be about 65%.

3. There is no change in the NMHC or CO standards for any vehicle category.

4. There is no change in NOx requirements for gasoline fueled vehicles.

5. NOx requirements for diesel vehicles remain slightly more lenient than for gasoline fueled vehicles.

6. A new PM limit is introduced for lean burn, direct injected gasoline engines. These limits will only apply to gasoline vehicles that concurrently have three characteristics:
   a. Lean Burn
   b. Direct Injection, and
   c. Equipped with NOx Adsorption Reduction-type Catalyst

The need for the new PM limit for lean burn, GDI technology is apparent when reviewing the figure below which shows substantially higher PM emissions from vehicles equipped with this technology than even from diesels equipped with a DPF.

The new standards also indicate the intention to consider a further tightening of the NOx standard for heavy diesel trucks and buses by introducing a so-called challenge target. It is intended that in 2008, a technological review will be carried out, taking into account the improvement of the air quality and the measures taken for CO2 reduction and other factors that might influence the situation at that time. Based on this review, new target values and the date for their implementation will be determined.

B. Anticipated Technologies
Regarding technologies for diesel vehicles, the Ministry anticipates that most vehicles this year will be equipped with a diesel particulate filter, although there will be some limited use of SCR with oxidation catalysts but only on trucks larger that 12 tons. To make SCR feasible, Nissan Diesel has worked closely with the oil industry and has established a urea infrastructure in almost 1000 fueling stations across the country. (Urea currently costs about 60-70 yen/liter but this is expected to drop to about 30-40 soon. It is expected that a truck will be able to travel about 2000 km before needing to refill the urea tank.

In 2009, they anticipate widespread use of DPFs, DOCs and SCR with some introduction of HCCI technology. They also expect that NOx adsorber technology will be used.

C. Fuel Quality
In parallel with the tighter vehicle standards, gasoline and diesel fuel sulfur levels must be reduced to a maximum of 10 ppm by 2007. In fact, the oil industry has already begun to introduce this fuel quality since the beginning of this year and has announced that all gasoline and diesel fuel will meet these limits by April 1 of this year.

D. Retrofits

Starting October 1, 2003, the Tokyo Metropolitan Government (TMG) and three neighboring prefectures (Saitama, Chiba and Kanagawa) required older vehicles not meeting required standards to be retrofitted with diesel particulate control devices. About 400,000 diesel vehicles in Japan have been retrofitted with aftertreatment technology. About 340,000 are fitted with DOCs and about 60,000 with DPFs. One supplier, Mitsui, subsequently admitted that it used false information when getting approval of its device with the result that TMG believes that about 20,000 of the DPFs are only reducing emissions by 30-40% compared to the targeted 60%. In spite of this TMG considers the program to have been a major success based on the substantial improvement in air quality that has occurred.

As illustrated above, available data from a very heavily traveled tunnel show an average per vehicle reduction of 49% in carbon emissions and 58% in SOF emissions from 2001 to 2003. Similar reductions have been measured along busily traveled roads. Subsequent studies in 2004 showed that the reductions in the tunnels have now climbed to 68% and 84% for EC and SOF, respectively. EC reductions at the major traffic intersection have now climbed to 44% and total suspended PM has come down an average of 29% as measured by 34 monitoring stations across Tokyo. These dramatic improvements seem to be the result of the targeted retrofit effort, the improvement in fuel quality and the acceleration of the new vehicle standards at the national level.

54. Japan Car Industry Sets Voluntary Guidelines For Reducing VOCs

On February 14th, Japan’s auto industry unveiled voluntary guidelines for reducing volatile organic compounds (VOCs) in motor vehicle cabins, in part to address consumer
demands. The guidelines would be implemented in new-model vehicles sold in Japan from April 2007, the Japan Automobile Manufacturers Association said.

The targeted VOCs include formaldehyde, toluene, xylene, and styrene, which are among 13 such substances identified by Japan's Ministry of Health, Labor, and Welfare.

In response to passenger complaints of suffering "sick building syndrome" as a result of spending long hours in new cars, Japanese automakers over the past few years have been installing cabin air-cleaners. Some models carry such cleaners as standard equipment.

Symptoms of "sick building syndrome" include nostril and throat irritation, fatigue, and loss of appetite.

The voluntary guidelines for vehicle cabin VOC reduction reflect the "JAMA vehicle cabin VOC testing method" to measure cabin VOCs, according to the auto industry. JAMA plans to apply the guidelines to passenger cars from April 2007 and later to commercial vehicles.

An official of the Japan Automobile Importers Association expressed concern that the guidelines might become a de facto non-tariff trade barrier.

55. India Short of Low Sulfur Diesel to Meet Deadline

Oil suppliers in India will only be able to supply low-sulfur diesel to two-thirds of the country by an April 1 national deadline. The rest of the country will have to wait another three to six months for cleaner diesel.

Regulations that take effect April 1 require firms to sell diesel and gasoline having a sulfur content of no more than 350 parts per million in India's 11 largest cities and 500 parts per million in the rest of the country. The top official at the Ministry of Petroleum and Natural Gas, S.C. Tripathi, said there was "no problem at all" for supplying cleaner gasoline and diesel to the country's largest cities by April 1. However, he said there would be delays in supplying low sulfur diesel to parts of eastern India and to the western state of Rajasthan. Tripathi said domestic oil firms would fail to meet the deadline because they had held up plans to modernize refineries and because of inadequate supplies of the fuel from abroad.

56. Toyota Aims to Sell 62,000 Hybrid SUVs in 2005

Toyota Motor Corp. said it planned to sell a combined 62,000 units of its two new hybrid sport utility vehicles (SUVs) worldwide this year, with sales starting in most major markets over the next three months. Unveiling the new Harrier and Kluger SUVs in Tokyo, Toyota said it expected monthly sales of 500 units in Japan for each model.

Japan's top auto maker plans to export the models, called RX400h and Highlander in most overseas markets, to North America, Europe and Australia between April and June, aiming to sell a total 52,000 units abroad this calendar year.
Sales of fuel-sipping gasoline-electric hybrid vehicles have grown rapidly over the past few years, particularly in the United States and Europe led mainly by Toyota's aggressive drive to sell 300,000 hybrids annually either by this year or 2006.

But the bulk of the sales is expected to come from the US market, where Toyota has said the Harrier -- to be called the Lexus RX400h -- had collected at least 11,000 pre-sale orders before its April launch despite a price premium of about 500,000 yen ($4,753) over the non-hybrid version.

Including other features such as a high-tech stability control system, the Harrier hybrid -- the world's first luxury SUV to mount a hybrid system -- costs 850,000 yen more than the gasoline-only version, at 4.095 million yen ($38,920) in Japan.

The world's second-biggest auto maker said it would eventually aim to boost annual hybrid sales to 1 million units.

The new SUVs, being built at its domestic plant in the southern island of Kyushu, are powered by a 3.3-liter V6 gasoline engine coupled with an improved hybrid system that gets acceleration comparable to a 5.0-liter gasoline engine while releasing less harmful emissions.

Both SUVs can be driven 17.8 km on a liter of gas (41.9 mpg) -- comparable to a compact car and a significant improvement over the 9.3-9.4 km/liter for the same models fuelled by a gasoline engine only.

57. Gas-Guzzler Sales May Be Hit By New China Rules

Most American cars and half of European models do not meet new fuel consumption standards that China will introduce at mid-year, a European Commission official said on Friday.

But car industry officials played down any concerns that their sales in a crucial market might be at risk. "China plans to introduce next summer tough environmental norms. Eighty percent of US-made cars would not fulfill these and 50 percent of European cars," Timo Makela, director of sustainable development and integration at the European Commission, told a seminar in Helsinki.

"For some reason, most of French cars would fulfill the demands," he said, adding his information came from industry sources.

Volkswagen, Europe's biggest carmaker and market leader in China, said it was relaxed about the new norms for cars and light commercials vehicles to be launched in July and toughened in 2008.

"I can only speak for Volkswagen, but all the cars we make and import will meet all the fuel consumption standards for both 2005 and 2008," he said, adding the rules would "definitely not" hinder sales in China.

"German manufacturers are certainly positioned to fulfill these (rules) but not in all areas or segments," he said.
China unveiled the standards last October as part of its strategy to conserve energy and protect the environment.

Car sales in China were up just 15 percent last year after nearly doubling in 2003, hammered by government-ordered credit curbs to cool an economy in danger of overheating. What's more, China's car market has been racked by a price war, which worsened when sales began slowing dramatically in the first half of 2004. This has cut margins and depressed profits.

58. Petrochina Planning Hydrocracking Unit

According to a report in the Oil and Gas Journal, PetroChina Co. Ltd. decided to use proprietary technology developed by UOP LLC, Des Plaines, Ill., in a hydrocracking unit to be built as part of a refinery expansion project in Dushanzi, Xinjiang Province in northwestern China. Plans call for the hydrocracker to be commissioned in 2007. PetroChina is spending 27.2 billion Yuan ($3.29 billion) for the overall expansion project to its refinery and petrochemical complex.

UOP said the unit will be configured as a once-through, single-stage unit to process 41,000 b/sd of a gas oil blend feedstock and produce diesel and ethylene feedstock.

59. China Adopts Euro 3 and 4 Standards For Light Duty Vehicles


The new standards for light-duty, heavy-duty vehicles and motorcycles and mopeds, regulates not only emission limits of pollutants but also the requirements of implementation and supervision” Luo Yi said, “comparing with the No. II standards, the No. III and IV standards for light-duty vehicles make significant changes in technical contents such as further lowering emission limit values, adding requirements of onboard diagnosis system to ensure the stability of complying with the emission limit values and secure the durability of emission control system, as well as prescribing new fuel property specifications suitable to China’s conditions of vehicle fuel characteristics.”

As China’s vehicle production and population increase rapidly in recent years, exhaust gas and noise emitted by vehicles have brought extensive concern from the society. Automobile manufacturing technology level in China is not good enough, resulting in the large amount of vehicle emission pollutants and low durability of emission control performances; the sharp increase of pollutants emission amount by fast growth of
automobiles population impairs urban ambient air quality improvement. Vehicle emission has become the first important air pollution source in some large cities, pointed out by Luo Yi.

Environment capacity will to a great extent limit the increase of vehicle population. If China wants to have more vehicles in a certain environment capacity, it has concluded that it has to reduce the individual vehicle emission load, i.e. to comply with the emission control regulations and standards. The promulgation of the new emission standards symbolizes a higher level of China’s vehicle emission control. Low, even zero emission vehicles will be the future development direction of China’s auto industry. To implement the Number III and IV emission standards will have great significance to future vehicle emission control work and enhance the competence of China’s domestically produced vehicles, according to Luo Yi.

60. Beijing Also Moves To Put Private Cars In Check

Beijing plans to take measures to check private cars in the Chinese capital, according to a senior official with the Beijing Environmental Protection Bureau. "We will neither control nor limit the growth of private cars, but we will put it in check," Xinhua News Agency quoted Pei Chenghu, deputy chief of Beijing's Environmental Protection Bureau as saying. “The check is to protect the air quality in Beijing," added Pei. And the check will be realized through the adoption of stricter exhaust gas emission standard, the report said.


According to information released by Beijing bureau of statistics, the number of private cars in the city reached over 1.298 million units, or 11 cars for every 100 permanent residents in the city.

Beijing is expected to adopt the Euro III standard for gas emission this year, with the Euro IV standard to be adopted by 2008. This measure is sure to phase out some of the popular sedans in Beijing.

Another measure the city’s authorities are pondering is to increase parking fees in the downtown areas, and they hope the rising parking fee would discourage car owners to drive to the central areas, relieving traffic jams and reducing tail gas emission. Analysts say many potential car buyers would have to give it a second thought when the costs to own and use a car in Beijing rise. At present, such costs include insurance, road maintenance fee, fuel costs that are also on the rise, car maintenance and parking fees.

The authorities in Beijing have no intention of following the controversial Shanghai practice of auctioning vehicle platen, the Xinhua report said.
Beijing municipal government will adopt 22 tough new measures to control air pollution this year, building on the progress achieved over the last six years. The new measures include stricter controls on industrial smoke, automobile exhaust fumes and construction dust. Other measures include relocating some heavy polluters - such as coking plants in southeastern suburbs - out of the city area.

Automobile emissions, which are an increasing threat to the city's air quality as the number of motor cars rises, will be put under more rigorous supervision and control this year, according to the Beijing Municipal Environmental Protection Bureau. Motor vehicles that meet emission standards usually have a yellow or green tag pasted on their front windows after an annual inspection. However, cars without such tags are often seen on the roads. This year, the municipal environmental protection bureau will team up with local traffic management authorities to guard against vehicles without such tags on the road. People driving such cars will be fined 200 yuan (US$24), said Pei Chenghu, deputy director of the bureau.

Pei said the city plans to phase out 3,800 old buses and 20,000 taxis, both blamed as major pollution sources, by the end of this year. The cost of changing the buses alone is expected to reach 3 billion yuan (US$363 million), according to sources with the Beijing Public Transport Group. All new buses and taxis must meet Euro III emission standard, said Feng Yuqiao, chief of the Air Pollution Prevention and Control Division under the bureau.

Apart from exhaust fumes, the city will also take tough measures to slash industrial emissions, which are another major source to air pollution. A second batch of heavy polluters, that could include more than 20 industrial plants, is expected to be told to clean up operations this year, said Pei. His bureau made public the first batch of 28 heavy polluters last June, which produced a total of 78,000 tons of sulfur dioxide and 13,000 tones of dust and smoke annually. All the 28 blacklisted enterprises, mainly engaged in electricity and heating supply, and petrochemical and steel-smelting industries, had adopted measures to reduce their emissions by the end of last year, according to the bureau.

The steel giant Shougang Group, which has long been blamed as the biggest industrial polluter in Beijing, has been ordered to close down a blast furnace before July and a coke oven by the end of this year. Ji Lin, vice-mayor of Beijing, said at a conference last month that Shougang should try to remove all its pollution-producing plants out of Beijing by 2008. The relocation of Shougang, which has been discussed for nearly a decade and was finally decided early this year, is expected to cost at least 50 billion yuan (US$6 billion). "If the relocation project cannot be finished before 2008, all its smelting operations will be suspended during the 2008 Olympic Games," said Ji.

This year, the city vows to ensure 230 days meet good or excellent air quality standards. That means air pollutants, such as sulfur dioxide, nitrogen oxides and suspended particulate, are kept at a low level.

61. Japan Issues Climate Change Policy, Will 'Consider' Environmental Tax

On March 29th, Japan unveiled a new national policy to reduce its greenhouse gas emissions as promised under the Kyoto Protocol, urging industries to redouble their
emission reduction efforts but saying only that the country will "consider" introducing an environmental tax. The new policy was worked out by the Global Warming Policy Headquarters, an ad hoc panel reporting to Prime Minister Junichiro Koizumi and comprising the Ministry of Environment, the Ministry of Economy, Trade, and Industry, and other ministries.

The Koizumi Cabinet will formalize the policy at the end of April, a Ministry of Environment official said.

The policy said Japan takes stock of the importance of an environmental tax, but it did not provide details. The MOE had been coaxing other ministries to support introduction of an environmental tax in fiscal 2006, initially setting a 1.5 yen (1.4 cent) gasoline tax. The proceeds would be used to finance the research and development of energy conservation technologies, subsidizing housing insulation, and other energy-related measures.

However, the MOE met strong resistance from other ministries and the business community, forcing the headquarters to backpedal on earlier plans and to say only that the government will "consider earnestly" the introduction of the tax.

In a prepared statement, Nippon Keidanren (the Japan Business Federation) Chairman Hiroshi Okuda, who also is chairman of Toyota Motor Corp., said Japanese industry will "make the best effort in achieving the 'Keidanren environment voluntary plan' to reduce office, business, and transport sector GHG emissions [but] we remained opposed to the introduction of an environmental tax because it would rob the industry of resources for technological innovations and capital expenditures and sap economic vigor."

The Kyoto Protocol, which entered into force in February, requires Japan to reduce its greenhouse gas emissions by 6 percent by the end of the 2008-2012 period, compared with 1990 levels.

In fiscal 2003, which ended in March 2004, Japan's emissions generated from the use of energies totaled 1.336 billion carbon equivalent tons, up 0.4 percent over fiscal 2002 and up 8 percent over the base year of 1990, according to Ministry of Environment statistics.

The new policy is an updated version of the current program, which expires March 31. Like the current program, it calls for voluntary efforts to achieve new emission-reduction targets set for the three sectors--industry (manufacturing factories); transport (road, surface, ocean-going, coastal, and air transport); and homes, offices, and businesses (restaurants and shops).

For the first time, the policy sets a reduction target for emissions trading.

For industry, which accounted for 37.9 percent of greenhouse gas emissions in fiscal 2003, the policy calls for reducing emissions by 8.6 percent by 2010, compared with 1990 levels and the current reduction target of 7 percent. In fiscal 2003, its emissions were down only 0.02 percent compared with 1990.

For the transport sector, which accounted for 20.7 percent of fiscal 2003 emissions, it would allow a 15.1 percent increase, or slower growth than the current 17 percent. In fiscal 2003, the sector's emissions were up a sharp 19.5 percent over 1990 levels.
For the home, office, and business sector, which accounted for 29 percent of fiscal 2003 emissions, it would allow a 10.7 percent increase, compared with the current target that calls for a 2 percent reduction. In fiscal 2003, the sector's emissions jumped 32.9 percent compared with 1990 levels.

The policy calls for reducing greenhouse gas emissions by 1.6 percent using the Kyoto Protocol flexible mechanisms such the Clean Development Mechanism for cooperation with developing nations and Joint Implementation of climate change prevention projects.

62. China To Double Environmental Spending Under Next Five-Year Plan

China plans to nearly double its spending on environmental protection for the five-year period beginning in 2006, even though it has fallen short of spending targets for the five years through 2005, state media reported March 30. China will set a spending target of about 1.3 trillion Yuan (US$ 157 billion) for environmental protection projects under the 11th Five-Year Plan (2006-2010), the official China Daily quoted Chen Bin, deputy director of planning and finance at the State Environmental Protection Administration (SEPA), as saying.

At the same time, Mr. Chen projected that only 70 percent of the CNY 700 billion allocated for that purpose during the 2001-2005 period would actually be spent by the end of this year.

Chen said that during the coming five years, the government would place priority on capacity building for environmental supervision and management; treatment of hazardous waste, urban sewage, and solid waste; and installing desulfurization equipment in the country's coal-burning power plants.

According to the official Xinhua News Agency, Wang Yuqing, deputy director of SEPA, told a seminar on financing for environmental protection in China that the government will also focus on improving the safety of drinking water in urban and rural areas; combating the pollution of key lakes and rivers; reining in air pollution in large cities; and mitigating soil pollution.

Chen said the projected budget for 2006-2010 would account for between 1.4 percent and 1.5 percent of gross domestic product during the period. He said this level of investment would be enough only to keep pollution in check, but that an investment equal to 3 percent of GDP would be required to bring about noticeable improvement in the quality of China's environment.

63. Soot Reduces Sunshine Over China, Study Finds

It is not as sunny as it used to be over China and pollution is probably to blame, Chinese researchers have reported. They found a significant decrease in daily surface solar radiation and less sunshine per month compared with 1961 -- especially over the eastern part of the country where most people live and most factories are located.

The best explanation is a rise in aerosols -- little particles that include soot, dust and even smaller bits produced by burning fossil fuels such as coal and oil, Huizheng Che
and colleagues at the Chinese Academy of Sciences in Xian reported in Geophysical Research Letters. They measured several components of sunnyness, including daily global radiation, annually averaged solar direct radiation and daily diffuse radiation, as well as the annually averaged daily clearness index. "Almost all stations in China showed decreasing trends in the clearness index," they wrote in their report.

"From these results, we conclude that the increasing emissions of anthropogenic (human-made) aerosols have likely affected the magnitude and variability of solar radiation and sunshine duration over much of China, especially the eastern part of the country."

64. China to Probe Environment Dispute After Riot

China pledged to investigate an environmental dispute that led to rioting by thousands of villagers, in a move apparently aimed at ending a stand-off between peasants and factories accused of polluting. Thousands rioted in a village outside Dongyang city in eastern Zhejiang province, injuring up to 50 policemen, after rumors spread that two of about 200 elderly women keeping a two-week vigil and protesting against factory pollution died during police efforts to disperse them.

"The Zhejiang provincial government has set up a special team to investigate the environment dispute case of Huashui Township in Dongyang city," the official Xinhua news agency said, quoting provincial government sources.

Protesters outnumbered police, who fled the scene after trying without success to tear down sheds and road blocks set up by villagers outside an industrial park housing 13 chemical factories.

"The Zhejiang provincial government has arranged dialogue between local officials and villagers, and sent environmental specialists to study the case," Xinhua said without giving further details.

The comments softened the official line from the Dongyang city government, which said on Monday the protest disturbed order and endangered public safety.

The rioting was the latest in a string of outbreaks of rural violence as the world's most populous nation faces disgruntlement over a widening wealth gap and widespread corruption. More than 3 million people staged about 58,000 protests nationwide in 2003, according to the latest available statistics.

65. New Zealand Weighs Carbon Tax, Emissions Trading Options

A research paper recommending New Zealand adopt a greenhouse gas emissions trading system is part of the policy development work of the New Zealand Treasury and does not signal a move by the government towards such a system according to Steve Rylands, the Treasury's principal adviser on climate change policy. Rylands said the government in October 2002 adopted a set of climate change policies that included a charge of NZ$ 25 ($17.50) per metric ton of carbon on greenhouse gas emissions from fossil fuels and industrial processes. The charge will apply from 2007 at the earliest.
However, Rylands said the government at the time left the door open for emissions trading as an alternative policy option, in the event an international carbon market would be operating with a price reliably below the NZ$ 25 cap. While it is not known yet whether those conditions will be fulfilled, the Treasury needs to be in a position to advise the government when the time comes and commissioned the research as part of its policy development work, Rylands said.

The research, published April 1 as a Treasury working paper under the title, Taxes vs. Permits: Options for Price-Based Climate Change Regulation, was written by Motu Economic and Public Policy Research, an independent nonprofit research institute. The report evaluates the characteristics of both carbon taxes and tradable emission permits. It discusses market-based instruments for climate change policy and examines the potential net benefits from shifting to a tradable permit system for emissions reduction.

The authors recommend--for fossil fuel carbon dioxide emissions--a hybrid permit system with a high trigger price at which companies could purchase permits from the government. Such a scheme would work as a permit system as long as international carbon prices were below the trigger price and behave like a tax system if the international market failed or international permit prices rose beyond the trigger price.

They conclude that tradable permits:

- are politically feasible because of the option to "grandparent" (grandfather) some sectors or firms;
- are economically optimal if the international carbon market functions;
- allow more flexibility in the allocation of risk than taxes; and
- would be simple and work well.

The authors say a hybrid system would protect firms against a failure in the international market, extremely high international prices, or the collapse of international cooperation. Carbon sequestration in plantation and indigenous forests should, in the authors' view, be integrated into the permit system.

Rylands said the Treasury had not taken a position on the report's recommendation.

66. Costs, Coal Cap PetroChina Natural Gas Ambition

PetroChina has developed the country's biggest natural gas field and built a 4,000-km (2,500 mile) pipeline over the past several years. If China's dominant oil and gas producer is to protect its already thin returns on the $8.5 billion West-to-East pipeline project, it must quickly develop the market for its gas before competitors rush in.

It's an uphill battle -- consumers are reluctant to switch away from coal, the cheaper but dirtier fuel that makes up two-thirds of China's primary energy mix.

Although the pipeline's long-term profitability looks assured as China pushes ahead with plans to shift to cleaner gas, the short-term outlook is less rosy.
PetroChina's gas potential is enormous. Assuming all of its proved gas reserves of 7.2 billion barrels of oil equivalent can be sold at $25 a barrel -- less than half of the current oil price -- the reserve would be worth $180 billion.

But PetroChina is not going to make any quick profit and may have to live with mediocre returns for a long time as it nails down customers in Shanghai and nearby Jiangsu province, where it hopes to sell two-thirds of the pipeline's annual designed capacity of 12 billion cubic meters. Returns on the project, which pumps gas from the remote west to China's booming east coast, will be further capped by the more cost-competitive liquefied natural gas (LNG) to be imported to Shanghai later this decade.

The average price of the pipeline gas is 1.28 Yuan ($0.155) per cubic meter or $4.38 per million British Thermal Units (roughly $24 a barrel). The price is similar to the estimated price of LNG to be imported by the parent of China offshore giant CNOOC from Australia's Northwest Shelf and Indonesia's Tangguh to the southern provinces of Guangdong and Fujian, respectively.

But the cost of the West-to-East pipeline gas is higher. And the gas is a tough sell to cities along the pipeline since they are near coal-rich provinces such as Shaanxi and Inner Mongolia. A 50 percent jump in thermal coal prices in China since the start of last year is making gas more affordable. But for power plants, which typically are the main users of gas, the cost of using gas is nearly twice as much as coal.

Mao Zefeng, head of investor relations for PetroChina, said power plants would consume 30 percent of the West-to-East pipeline gas, with households using 40 percent and others the remaining 30 percent.

China, the world's second largest energy consumer after the United States, aims to more than double its gas use to 7 percent of its energy mix in 2010 in an effort to cut pollution. It consumes only as much gas as Argentina despite having 35 times more people.

CNOOC's parent is building an LNG terminal in Shanghai to receive overseas gas, while CNOOC and refining giant Sinopec Corp. are targeting the city as a main market for their massive Xihu Trough gas field offshore Shanghai.

Natural gas, accounting for 15 percent of PetroChina's overall 2004 output of 918 million barrels, would add little to PetroChina's earnings in the near future, although it will grow another 20 percent this year amid flagging crude output.

67. China Weighs Stripping Environmental Costs From GDP

Growth in China's economy would be cut by two percentage points if the cost of the country's explosive growth on its environment and natural resources was included, the China Daily said. The toll would be taken into account in assessments of gross domestic product in 10 cities and provinces as part of an experimental campaign to set up a "green GDP" system, the newspaper said.

"Experts estimate that when environmental costs are deducted, the average annual GDP growth rate in China will be cut by as much as 2 percentage points," it said.
China posted 9.5 percent economic growth in 2004, its second straight year of expansion above 9 percent.

"Given that the country's economy is rapidly growing while its environment has been worsening, environmental officials and experts have been calling for the adoption of green gross domestic product throughout the country," the China Daily said.

Worried about over-investment that has depleted natural resources and polluted land and rivers, Beijing is trying to change the mentality of many officials still obsessed with rosy growth numbers, which are closely linked to their promotions.

Many analysts inside and outside China have questioned the reliability of Chinese data, prompting authorities last year to say they will start issuing revisions to growth data.

Wang Jinnan, chief engineer for the Chinese Academy for Environmental Planning, said similar calculations were being made at the state level, but results would not be posted until May.

While revising data could give a more realistic picture of regional growth and force officials to be more concerned about the environment, the plan would not be enough to turn things around, Chen Kun of the Chinese Society for Sustainable Development was quoted as saying.

"Green GDP can expose existing problems," Chen said, "but it is not the solution."

68. Rolls-Royce in US$ 100 Million Singapore Fuel Cell Venture

British engine maker Rolls-Royce Group Plc. and a Singapore state-linked consortium will invest US$ 100 million to develop a power system based on fuel cell technology, the firms have announced. Rolls-Royce, which began researching fuel cell technology in 1992, will own 75 percent of the venture, Rolls-Royce Fuel Cell Systems Ltd., with EnerTek Singapore Pte. Ltd. owning the remainder, the firms said in a joint statement.

Fuel cells have been touted as environmentally sound electricity producers that could replace fossil fuels such as coal, oil and natural gas as the world's primary energy source. They operate by generating electricity through a chemical reaction that leaves water and heat as byproducts. Some companies are developing the technology to produce fuel cell-powered cars, portable gadgets and other equipment.

Singapore's consortium includes powerful state investment agency Temasek Holdings Pte. Ltd., the Singapore government's Economic Development Board and Accuron Technologies, a private precision engineering and technology company.

They hope to build a system using fuel cell technology to generate one mega-watt of environmentally friendly electricity -- sufficient for 200 households -- by 2007 or 2008, the venture's chairman and chief executive, Charles Coltman, told a news conference.

Rolls-Royce has invested a total S$350 million ($212 million) in Singapore since 1998, said an official at the engine maker.
Singapore's junior trade and industry minister, Vivian Balakrishnan, said global demand for fuel cell systems was expected to reach US$ 15.1 billion by 2015. "Every customer that is using the conventional source is a potential customer for this product," Rolls-Royce chief executive Sir John Rose told the news briefing.

Rolls-Royce has employed 500 people in Singapore through its various projects. The island-state also houses its headquarters for Rolls-Royce Commercial Marine and Energy Business.

69. Haze Hangs Over Singapore as Air Quality Worsens

A layer of smoke has descended over Singapore, blown from Southeast Asia's pockets of raging bush fires and causing the island's air quality to approach unhealthy levels, the government said. The pollutant standards index (PSI) hit a high of 95, almost in the unhealthy range, the National Environment Agency said on its website. It averaged 61, the highest daily average this year.

"The prevailing winds are blowing some smoke haze from hot spots from peninsular Malaysia and Sumatra," the agency said, referring to the Indonesian island of Sumatra and adding that Singapore's bush fires also contributed to the hazy skies.

Singapore was hit by its worst dry spell in 29 years last month, sparking rare bush fires in the densely populated Southeast Asian island just 140 km (85 miles) north of the equator. February was the driest month since 1976.

"The haziness is expected to persist from time to time over the next few days as the wind conditions are light and not able to fully disperse the smoke haze particles," the agency said.

But the air quality was not expected to reach an unhealthy range as defined by a PSI reading of more than 100, it said.

MIDDLE EAST

70. Abu Dhabi Environment 2005 Exhibition and Conference Seen As Success

More than 11,000 people visited the third edition of Environment 2005 Exhibition and Conference in Abu Dhabi between the 30th of January and the 2nd of February. The international conference covered all aspects of sustainable transportation in developing countries. At the exhibition, 338 participants from France, the UK, the Netherlands, the US, India and 36 other countries presented their newest technologies in managing natural resources and recycling waste.

Held under the patronage of Sheikh Khalifa Bin Zayed Al Nahyan, President of the United Arab Emirates, Environment 2005 proved to be the biggest meeting place for discussing the environment in the Middle East and North Africa. Driven by the will to increase investments in environmentally friendly technologies, the Environmental Research and Wildlife Development Agency (ERWDA) and the General Exhibitions Corporation (GEC) jointly organized this event.
After four days of various lectures and debates linking transportation to: the environment, the economy, health and the society, a declaration for the promotion of sustainable transportation in developing countries was drafted on the 2nd of February. A ministerial roundtable grouping 20 ministers from all over the Arab World and headed by Hamad Abdul Rahman Al Madfa, Minister of Health in the UAE approved the declaration and announced the creation of a fund to be based in Abu Dhabi for the support of sustainable transportation.

"Information and raw data do not have passion, until someone transforms them into intelligence and into judgments of comparative advantage," with these words Dr. Carlos Dora from the World Health Organization conveyed the spirit of the Abu Dhabi conference on sustainable transportation.

Preliminary to the conference, five workshops were organized to allow decision makers, researchers and scientists to exchange ideas and experiences on transportation issues in order to come up with adequate sustainable strategies for developing countries.

Tens of papers discussed the importance of implementing environmentally sustainable transportation systems in developing countries and their positive effect on the quality of air and human health.

Dr. Dora explained that "traffic is a key determinant of the global burden of disease". He presented alarming data linking transportation to health problems: for instance, urban air pollution contributes to approximately 800,000 deaths worldwide each year, two thirds of which occur in the developing countries of Asia. Road accidents, on the other hand, kill 1.2 million people a year and injure or disable between 20 to 50 million people worldwide.

Buses occupy an important place in sustainable transportation. According to Dr. Lewis Fulton from the International Energy Agency, "in order to reduce traffic congestion, pollutant emissions and energy use, Bus Rapid Transit Systems will be crucial for the future". These systems that are now being installed in many countries around the developing world feature high capacity and high speed buses.

The future of sustainable mobility lies in technological advancement for the development of new cleaner fuels and engines. As Dr. Hans-Wolfgang Luke from Shell Global Solutions pointed out: "the key will be to provide fuels which respond to sustainability challenges in the most cost effective way as well as being attractive to consumers". He added that, "the use of renewably produced hydrogen or advanced biofuels might take decades to realize. The focus in the near future will be on cleaner gasoline and diesel in addition to more advanced and efficient internal combustion engines."

Several lecturers advocated the use of bicycles or walking as the ultimate sustainable transport mode. While many people in developing cities depend on them, transport policies in those cities are only designed for motorized transport.

In the lack of cycle tracks and proper sidewalks, safety and security will always be a determining concern for those who wish to use non-motorized modes of transportation. The UNDP advocated for the development of people-centered public transport systems. Lecturers agreed that transport policies should lay appropriate infrastructures and develop land use patterns that respond to people's needs in cities.
The next international conference on sustainable transportation will take place in 2006 in Beijing.

SOUTH AMERICA

71. Brazilian Congress Passes Bill Making Biofuel in Diesel Mandatory by 2008

Brazil's Congress has passed a law that authorizes the voluntary sale of biodiesel fuel for the next three years and that will make it mandatory for distributors to add biodiesel to all diesel fuel in January 2008. The congressional bill (No. 11.097) was passed Jan. 13, adding the requirement for mandatory biodiesel after 2008 to an executive provision passed in January, which only called for voluntary measures, Ricardo Dornelles, general coordinator for renewable fuels at the Ministry of Mines and Energy, told reporters in mid February.

The Dec. 7 government measure authorized the voluntary sale of biodiesel and offered some tax breaks to support development of the market.

With the new measure, however, "Congress decided to put teeth into the government's measure and make the sale of biodiesel mandatory in three years to create a biodiesel market much quicker," Dornelles said. "Now that the private sector knows there's going to be guaranteed sale of the product, they'll more readily invest in producing it."

The called-for blends include "B-2 biodiesel," which is 2 percent biofuel and 98 percent regular diesel; and "B-5 biodiesel," with 5 percent biofuel. Biofuel consists of vegetable oil and sugar-cane ethanol, which serves as a reagent, or catalyst. Brazil has a ready supply of both, since it is the world's second largest producer of soy and the largest producer of sugar and sugar-based ethanol.

"By 2008, when B-2 biodiesel becomes mandatory, vegetable oil producers will need to make 800 million liters per year of it to supply the market, as opposed to the 150 million liters per year they'll be making for the market by the end of 2005," Antonio Carlos Ferreira Batista, a researcher at the University of São Paulo's biodiesel program, said. "Making biodiesel mandatory will greatly boost biodiesel output."

72. Peru Sets Timeline to Reduce Sulfur in Diesel Fuel

On February 15th, Peru published a decree calling for a substantial reduction in sulfur content in diesel fuel. Supreme Decree 012-2005-PCM gives the Minister of Energy and Mines (MEM) 45 working days to draft a plan for achieving "a final goal is establishing between 50 and 350 parts per million as the maximum limit of sulfur in diesel fuel." Gustavo Navarro, head of MEM's hydrocarbons section, said his team was developing short- and long-term plans for reducing sulfur. "The short-term plan involves importing diesel with a lower quantity of sulfur, but that does not solve the problem," Navarro said. "We need to make substantial improvements to our refineries, which will take more time and money." Navarro said he expects to have draft legislation ready long before the 45-day deadline. MEM estimates that it needs at least US$ 300 million to improve the state-owned refinery to meet the targets. According to MEM, Peru imports some of the world's dirtiest crude oil. Crude imported from Ecuador has a sulfur content of 0.9 percent per barrel, nearly double the sulfur content of fuel produced in Colombia and Venezuela.
CENTRAL AMERICA

73. Central American Countries Sign Agreements on Environmental Cooperation

On February 18th, the seven signatory countries to the U.S.-Dominican Republic-Central America Free Trade Agreement (DR-CAFTA) signed two pacts to supplement and augment the DR-CAFTA’s environmental provisions. The DR-CAFTA countries are the United States, Costa Rica, El Salvador, Nicaragua, Honduras, Guatemala, and the Dominican Republic. The pact is expected to be considered in the U.S. Congress this year.

One of the agreements signed at the Organization of American States signing ceremony sets up a secretariat to administer a public submission process under the agreement. The other agreement— the Environmental Cooperation Agreement (ECA)—is aimed at guiding long-term environmental cooperation in the region.

Under Secretary of State for Global Affairs Paula Dobriansky signed the ECA on behalf of the United States. The agreement on the secretariat was signed by Assistant U.S. Trade Representative for the Americas, Regina Vargo.

During remarks at the signing ceremony, Vargo said that DR-CAFTA goes beyond previous FTAs by establishing a public submission process that will allow members of the public to petition if they believe a signatory is not effectively enforcing environmental laws. DR-CAFTA is the first trade agreement to contain such a mechanism in the text of the agreement itself, she said.

She credited Sen. Max Baucus (D-Mont.), ranking member of the Senate Finance Committee, for his input in establishing the environmental provisions. Baucus successfully pushed for the inclusion of a citizen submission process in DR-CAFTA, which allows individuals and environmental groups to challenge the failure of DR-CAFTA governments to enforce their own environmental laws. He also worked with the administration on an environmental capacity building program.

The agreement on the secretariat, which contemplates that a request will be made to the Organization for Central American Economic Integration (SIECA) to create a new unit to serve as the secretariat, contains provisions aimed at ensuring that the secretariat is independent and has appropriate expertise. The new unit will report solely to the Environmental Affairs Council under DR-CAFTA, which will establish a roster of environmental experts to help out in preparing factual records, USTR said in a statement.

The ECA establishes benchmarks to identify short-, medium-, and long-term goals for improving environmental performance in the region. The ECA also provides for outside monitoring of progress in meeting the benchmarks. A work plan will be developed by the Environmental Cooperation Commission established by the ECA to develop future cooperative projects. The commission may also consider recommendations on capacity building activities, USTR said.
The United States concluded FTA negotiations with the five Central American members of the DR-CAFTA on March 15, 2004. The Dominican Republic was added after separate negotiations.

GENERAL

74. Kyoto Takes Effect Without U.S., Australia

The Kyoto Protocol for reducing greenhouse gas emissions came into force Feb. 16, legally obligating 37 industrialized countries to cut their collective emissions by 5.2 percent from 1990 levels over the period 2008 to 2012. The treaty takes effect without the participation of two large industrialized economies: the United States, the world's largest emitter of greenhouse gases, and Australia. Nevertheless, foreign officials and observers in the United States and abroad said that forces set in motion by the treaty will have effects even on businesses based in the only two developed countries that have not ratified.

The U.S. administration remains opposed to the treaty. Scott McClellan, White House spokesman, told reporters Feb. 15, "The president is making decisions based on what is in the best interests of the American people, and that's what he will continue to do."

Still, proponents of the treaty maintain it will serve as the only viable framework for reducing global greenhouse gas emissions.

According to the United Nations, 39 countries as well as institutions and organizations planned events to mark the date.

As of Feb. 2, 141 nations had ratified the Kyoto Protocol.

One of the achievements of the treaty will be to establish a global framework for acquiring and trading greenhouse gas emissions allowances.

The treaty will require U.S. corporations with industrial investments in other developed markets to reduce carbon emissions according to their host nation's rules. This will likely create "an internal dynamic of its own" within corporate America, according to former Vice President, Al Gore.

In a Feb. 16 letter addressed to the White House and congressional leadership, 33 U.S. business and environmental organizations called for U.S. efforts to reduce emissions. "The United States must act to greatly reduce its production of greenhouse gases through a mix of policies designed to shift its energy use away from fossil fuels and towards greatly improved energy efficiency and a vast expansion of the use of renewable energy sources," the letter said.

Noting that 2004 was the fourth-warmest year on record and citing a series of recent studies suggesting that global climate change may be occurring more rapidly and with more severe consequences than earlier thought, the groups said that in spite of the consistency and severity of warnings, the U.S. administration "remains wedded to a climate policy that is based almost totally on voluntary measures, carbon sequestration, and long-term research. Such a policy is not only inadequate, it is irresponsible."
"It is now long past the time when the United States, responsible for a quarter of the world's greenhouse gas emissions but having only 5 percent of the world's population, should have embarked on a serious campaign to address this problem," the letter said.

The group offered seven recommendations for action consistent with those recently put forth by the International Climate Change Taskforce.

The letter called on the United States to "officially acknowledge the severity of the threat posed by climate change, commit to preventing global average temperature from rising more than 2 degrees Celsius above the pre-industrial level, re-engage with the world community in a global framework that builds on the Kyoto Protocol and enables all countries to be part of concerted action on climate change, and share in the global financial burden of adequately addressing this problem."

75. World Bank Sees Limited Time for CDM Projects

Although the Kyoto Protocol just took effect on February 16th, time is already running out for the initiation of new projects under the treaty's Clean Development Mechanism provisions, World Bank Carbon Funds Manager Ken Newcombe told reporters Feb. 15. "The window of opportunity for CDM projects is closing fast," Newcombe told a press conference on the eve of the climate change treaty's coming into force. "The next two years are critical to identify and finance projects to reduce carbon dioxide emissions."

Kyoto's CDM provisions allow entities in the developed world to earn credits toward meeting emission-reduction targets by investing in projects to reduce greenhouse gas emissions in the developing world.

After 2006, it will become almost impossible to launch new CDM projects in time to accrue emission-reduction credits for Kyoto's 2008-2012 compliance period at a level sufficient to justify the investment, Newcombe said. Large projects require up to five years of lead-time, and even small projects typically require at least two years before they begin generating credits.

The Kyoto Protocol sets greenhouse gas emission targets for developed countries in terms of reductions below 1990 levels by the period 2008-2012. No targets beyond 2012 have yet been formally discussed.

To continue to make new CDM investments feasible beyond the next two years, parties to the Kyoto Protocol will have to establish rules and targets for controlling emissions after 2012, Newcombe said.

"It is absolutely crucial that by 2007 at the latest there is some certainty about post-2012," he said. "Without that, the market will go up very quickly, but then fall away."

Overall, the treaty calls on industrialized economies to reduce emissions by 5.2 percent by the end of the 2008-2012 period, based on 1990 levels.

According to the World Bank, developed countries will have to reduce emissions by the equivalent of 5 billion tons of carbon dioxide over the four-year period to comply with
Kyoto. However, the International Energy Agency and the U.S. Department of Energy say these countries will achieve only a fraction of the needed reductions domestically and will have to acquire the equivalent of 1 billion tons of reduction-credits abroad to meet their targets.

This, according to Newcombe, means there will be a boom in demand for credits from CDM projects.

While it also would be possible, he said, for governments to purchase "allocated allowance units" from Eastern European countries and Russia to meet their targets, such a move would be politically unpopular in most countries, since it would do nothing to actually reduce greenhouse gas emissions.

Many formerly communist countries experienced substantial industrial contraction in the 1990s following the collapse of the Soviet Union, bringing them well below their 1990 greenhouse gas emissions levels. The Kyoto treaty would allow these countries to sell their surplus emissions quotas beginning in 2008. However, the European Union, Canada, and other countries that will have to reduce emissions have indicated they will limit any purchase of credits from these countries.

The World Bank's Carbon Finance Unit manages about $800 million in funds targeting projects to reduce greenhouse gas emissions, particularly in the developing world.

76. U.N. Officials Plan 'Meeting of the Parties' in Montreal

Officials with the U.N. Framework Convention on Climate Change met in Kyoto Feb. 16, the day the Kyoto Protocol to cut greenhouse gases came into force, and announced the first Meeting of the Parties to the treaty will take place Nov. 28-Dec. 9 in Montreal. They characterized the meeting as historic because it will be the first session of the Conference of the Parties (COP) serving as the Meeting of the Parties (MOP-1) to the Kyoto Protocol.

This first Meeting of the Parties could be held only after the Kyoto treaty became international law.

Government delegates from all parties to the convention, including the United States, also will hold their Eleventh Conference of the Parties to the U.N. convention, or COP-11 Nov. 28-Dec. 9.

More than 140 nations have signed the Kyoto Protocol, but the first commitment period only required emission reductions from industrialized nations.

At the Montreal meeting, Kyoto parties officially will begin discussions on how to curb greenhouse gas emissions further after the first period of the Kyoto pact expires in 2012. Moreover, parties expect to discuss how the treaty may be amended to include shared responsibilities for reducing emissions by developing countries or those without commitments during the first period.

The U.N. officials also announced Feb. 16 that informal talks by convention and protocol parties will take place May 16-17 in Bonn in conjunction with the meeting of the
convention's scientific and technical counsel bodies. The Subsidiary Body for Scientific and Technological Advice (SBSTA) and the Subsidiary Body for Implementation (SBI) will hold their twenty-second sessions of the subsidiary bodies from May 16-27.

The meetings this year represent significant milestones for several reasons.

Such conferences typically evaluate the status of climate change and the effectiveness of the treaty, according to the convention secretariat. At the conferences, parties also review all national communications and emissions inventories, consider new scientific findings, and share experiences with efforts to address climate change.

However, the U.N. official said, the first MOP may begin the process of amending or augmenting the convention framework document as parties did in 1997 in adopting Kyoto as an addition to the framework.

"This is the first time parties will meet with the Kyoto protocol in force, and that is important in its own right," said the official. "But it is also important because one of the main topics of the talks will be how to include countries that are so far not participating. And the biggest polluter and the most important non-participant [the United States] is right next-door."

The United States has ratified the Framework Convention on Climate Change but not the Kyoto Protocol, which serves to implement it. Therefore, the United States will assume only observer status at the COP-11/MOP-1, U.N. officials told reporters at the conclusion of COP-10.

Prior to the first MOP, parties to the convention will hold a high-level "Seminar of Governmental Experts." This two-day meeting was announced by U.N. officials in Bonn after consultations with the convention's bureau in Kyoto, the secretariat said Feb. 16.

The seminar will be designed to assist parties "to continue developing responses to climate change and to review the policies and measures adopted to implement the Convention and the Kyoto Protocol," according to the U.N. secretariat.

A State Department official said that delegates will represent the United States and attend the seminar, but the official said who will attend has not been determined. As a party to the convention, the United States has committed to its ultimate objective of stabilizing greenhouse gas emissions "at a level that would prevent dangerous anthropological (human induced) interference with the climate system." However, after President Bush's 2001 decision to pull out of Kyoto negotiations and implementation, U.S. delegates have had input only as framework parties at each COP since that decision.

Nevertheless, at times, the U.S. delegation held the upper hand in negotiating. For example, other countries had to accommodate opposition from the United States and a number of oil-exporting and developing countries at the last COP in December 2004 regarding a desire by the European Union and others to hold informal talks this spring.

77. ICAO Adopts Stricter But Still Weak NOx Aircraft Emissions Rules
Aircraft engines will be subject to tougher emissions standards for nitrogen oxides by 2008 under guidelines announced by the U.N. International Civil Aviation Organization March 2. The new standards are 12 percent stricter than current limits. The standards approved by the ICAO council, the U.N. organization's 36-member governing body, will apply to engines produced after Dec. 31, 2007. The current standards were adopted in 1999 and apply to engines manufactured in 2004 or later. The new standards contain varying emissions limits depending on the pressure ratio of the motor and the amount of engine thrust. ICAO established engine emission standards in 1980 through Annex 16 to the 1944 Convention on International Civil Aviation. Annex 16 contains ICAO environmental standards. The U.N. organization has strengthened those standards a number of times since then but they remain quite weak and much higher than is currently being achieved by several production engines.

78. Airline Industry Adamantly Opposed To Fuel Tax

Representatives from aircraft manufacturers, air carriers, and airport operators voiced their strong opposition March 18 to the introduction of any emissions tax on kerosene fuel, arguing that improvements in aircraft technology and air traffic management were the best ways to reduce carbon emissions. Speaking at the first "Aviation and the Environment Summit" held in Geneva March 17-18, the industry executives insisted that taxing aviation fuel to meet emissions reduction targets is unfair given the large subsidies that exist for operators in both the road and rail transport sectors.

"Taxes and charges take away our ability to invest in environmentally friendly equipment," insisted Giovanni Bisignani, director general and chief executive officer of the International Air Transport Association (IATA), which serves as the global forum for inter-airline cooperation. "We pay completely for our own infrastructure, around $40 billion per year," Bisignani added, noting that in Europe alone government subsidies for the rail sector total $50 billion per year. "Other industries don't have to pay for their transport infrastructure."

Kees Blekxtoon, Boeing vice president for Northern and Western Europe, described an emissions tax on kerosene as a "blunt instrument which would have little environmental impact."

Instead, executives said that improvements in air traffic management--particularly in Europe, where management responsibilities are fragmented among European Union member states--would help achieve immediate and important reductions in carbon dioxide emissions. In 1999, the European Commission launched the "Single European Sky" initiative in an effort to coordinate national air traffic control systems. The proposal was adopted in March 2004, with the Commission currently drafting further legislation in the field of air traffic management. According to Bisignani, if one minute could be saved on every flight each year, this would cut carbon dioxide emissions globally by 4.2 million metric tons and reduce fuel costs by $700 million. "Simply eliminating delays in Europe would save 1 million tons of CO2 emissions, 15 million minutes of unnecessary flight, and $1.5 billion in wasted operating costs," he declared.

Industry representatives at the conference adopted a statement calling on aircraft manufacturers to develop and promote new technologies and products that minimize fuel use and carbon dioxide emissions, on air navigation service providers to modernize
operations in order to reduce fuel consumption and emissions, and on airlines to achieve, by 2008, an overall fleet fuel efficiency of 4 liters per 100 passenger kilometers (from 4.5 liters in 2002).

Assad Kotaite, president of the U.N. International Civil Aviation Organization (ICAO), noted that civil aviation was responsible for around 3.5 percent of man-made global greenhouse gas emissions in 1992 and that this proportion was expected to grow due to the sharp increase in global air traffic. Estimates are that air traffic will grow by 4 percent a year over the next 15 years, leading to a nearly doubling of traffic by 2020. Kotaite noted that while international civil aviation is not specifically covered by the Kyoto Protocol, the climate change treaty contains a provision calling on industrialized countries to try to limit emissions from cross-border air traffic through ICAO.

Last year ICAO’s governing assembly was given a mandate to examine what, if any, economic measures are needed to address environmental performance in the aviation industry and to come up with recommendations by 2007. Kotaite noted that ICAO has made "significant" progress on the idea of applying voluntary emissions trading to the aviation sector. In contrast, talks on the possibility of voluntary greenhouse gas emissions charges was an issue "on which it has so far been difficult to make progress," he admitted.

The ICAO assembly urged member governments to refrain from the unilateral implementation of any emission charges prior to the next ICAO assembly in 2007, where the issue will be discussed again.

Blekxtoon noted that major gains have already been made by aircraft manufacturers in reducing aircraft fuel consumption (down by one-half from the 1960s) as well as noise (down by two-thirds). Newer aircraft already have a fuel efficiency of 3.5 liters consumed per 100 passenger kilometers. Blekxtoon said this figure was set to drop again with the introduction of the latest generation of aircraft such as Boeing's 787 "Dreamliner," which will achieve fuel consumption of no more than 2.4 liters per 100 passenger kilometers.

79. First Hydrogen Car For Sale in 2012 - DaimlerChrysler

DaimlerChrysler's first hydrogen-powered car using fuel cell technology will be on sale from 2012, a company executive has announced. The firm has sent 60 Mercedes-Benz A-Class cars to Japan, Germany, Singapore and the United States for tests. Many car companies are developing hydrogen-powered cars to help wean the globe off diminishing oil supplies.

The Mercedes car uses fuel cell technology where electricity is generated through the chemical reaction between hydrogen and air, emitting only water vapor.

"It (commercialization) will start in 2012," Herbert Kohler, Vice President of the Body and Powertrain research unit at DaimlerChrysler told reporters in Brussels, on the margins of a hydrogen car technology exhibition. But there are still technical obstacles to overcome such as extending fuel cells' reliability and durability; ensuring that they start at sub-freezing temperatures; reducing costs, and storing enough hydrogen in a small enough space to be workable.
The car industry is also waiting for the roll-out of hydrogen filling stations.

Shell Hydrogen Chief Executive Jeremy Bentham said once consumers demanded hydrogen filling stations, energy companies would meet it. "We see that these vehicles have the potential to be attractive to consumers," he told reporters. "Our job is to make sure we are prepared for that business." Hydrogen is already produced in refineries for industrial purposes and the energy industry needs to build the infrastructure to sell it to consumers, said Bentham. He said Europe would need 50 million tons of hydrogen per year to power cars.

80. Himalaya Glaciers Receding Fast Due To Warming

Himalayan glaciers are receding at among the fastest rates in the world due to global warming, threatening water shortages for millions of people in China, India and Nepal, a leading conservation group has announced. The Worldwide Fund for Nature (WWF) said in a new study that Himalayan glaciers were receding 10-15 meters per year on average and that the rate was accelerating as global warming increases.

In India, the Gangotri glacier is receding at an average rate of 23 meters per year, the study said.

"Himalayan glaciers are among the fastest retreating glaciers globally due to the effects of global warming," the WWF said in a statement. "This will eventually result in water shortages for hundreds of millions of people who rely on glacier-dependent rivers in China, India and Nepal," it said.

"The rapid melting of Himalayan glaciers will first increase the volume of water in rivers causing, widespread flooding," said Jennifer Morgan, director of the WWF's global climate change program. "But in a few decades this situation will change and the water levels in rivers will decline, meaning massive economic and environmental problems for people in western China, Nepal and Northern India," she said.

WWF released the study before a two-day ministerial roundtable in London this week of the 20 greatest energy-consuming countries, to be followed by a G8 meeting focusing on climate change in Africa.

Himalayan glaciers feed into seven of Asia's greatest rivers, the Ganges, Indus, Brahmaputra, Salween, Mekong, Yangtze and Huanghe He. The glaciers ensure a year-round supply of water to hundreds of millions of people in China and the Indian subcontinent.

The WWF called for work toward reducing carbon dioxide emissions -- blamed for global warming -- plus increasing the use of renewable energy and energy-saving measures.

81. UN Predicts 9.1 Billion People on Earth by 2050

The human race is expected to swell from the current 6.5 billion to 9.1 billion people by 2050, with populations exploding in hungry developing countries and stagnating in rich nations, the United Nations has predicted. The increase of 2.6 billion people is equivalent to the combined populations of China and India today, according to the UN
Population Division's "2004 Revision" report. The growth is projected to be fastest in poor countries already struggling to feed their people.

But the overall trend shows a lower rate of growth than during the past 20 to 50 years, confirming previous estimates that the global population is rising but slowly stabilizing. "The population continues to grow but at a lower pace, said Thomas Buettner, author of the report. "Family planning and lower fertility make the difference."

In rich nations, declining birth rates means little or no population growth. An exception is the United States, which benefits from a relatively high number of immigrants, who have more children in the first generation. Industrial countries as a whole are expected to see little change in their total population of 1.2 billion. In fact, a decline is forecast by 2050 in Germany, Italy, Japan, Russia and other states of the former Soviet Union. "They have gone into territory that is unknown in human history," Haina Zlotnik, director of the Population Division, told a news conference. "Mortality is low and fertility is extremely low." Populations in Europe would fall even further were it not for immigrants, estimated at 2.2 million each year, the report said.

In contrast, the population of poor nations is expected to climb from 5.3 billion today to 7.8 billion by 2050. Very rapid growth is forecast in the least-developed nations, where birth control is rare and five children per family is the norm.

Between 2005 and 2050, the population is projected to triple in Afghanistan, Burkina Faso, Burundi, Chad, Congo, the Democratic Republic of Congo, East Timor, Guinea-Bissau, Liberia, Mali, Niger and Uganda. "They are the ones not being able to provide adequate shelter, adequate food for all their people," Zlotnik said. "If fertility dropped downwards, they would be buying time to face the problems they are facing." In each of these countries surveys showed that women would like less children, if they had the choice, she said.

By 2050 India will have surpassed China in population and the two will account for about 50 percent of the world's inhabitants. Women in India have an average of 3 children compared to 1.7 children in China, the report said.

The AIDS pandemic and other diseases like malaria and tuberculosis are slowing population increases in about 60 developing countries, the report said. In southern Africa, especially in South Africa, where AIDS is prevalent, life expectancy has fallen from an average of 62 years in 1990-1995 to 48 years in 2000-2005.

UN forecasts say the average life span would fall to 43 years in the next decade before a slow recovery begins, because "in the long term we hope humanity is going to have success in combating this disease," Zlotnik said.

AIDS and poor health care also means a fall in life expectancy in Eastern Europe, particularly in Russia and Ukraine.

Most of the world's population lives in a very few countries. Four out of 10 people live in China or India and 8 of 10 inhabitants live in the United States, Indonesia, Brazil, Pakistan, Russia, Bangladesh, Nigeria and Japan, the report said.
The Health Effects Institute (HEI), a research group that focuses on health effects of mobile source pollutants, is launching a major new effort to identify the most toxic components of fine particles (PM) that may indicate what industry sectors EPA and states may target in current and future air regulations. The plan is moving ahead at a time when an electric utility research group recently unveiled preliminary study results that suggest PM from automobiles may be more harmful to human health than PM from power plants.

HEI, which is funded jointly by EPA and industry, is poised to announce a multi-million dollar, five- to ten-year grant to investigate which components of PM appear to present the most risk. The research will combine test animal studies and human epidemiology, which may allow regulators to “get the biggest public health bang per control dollar,” according to an HEI source.

The sponsors hope some information will become available for consideration as EPA develops new PM standards ahead of a 2012 deadline and for state and local air officials as they submit plans to EPA for implementing existing PM standards over the next eight years.

The multi-disciplinary research group that wins the HEI grant to conduct the investigation will use PM monitoring data from 54 EPA and 240 state and local sites that measure the composition of PM particles every three to six days. In addition, the study will support research on animals exposed to air with concentrated ambient particles from different cities and with different component profiles.

HEI is scheduled to discuss the research grant at its annual conference in Baltimore on April 17-19.

Children on school buses collectively inhale as much or more exhaust emitted from those buses as does the rest of the city’s population, according to a new analysis by researchers at the University of California. The results highlight the problem of "self-pollution," or exhaust from the vehicle leaking into the cabin, particularly among older buses. This also is the first study to specifically look at how much exhaust is breathed in on school buses.

"Although environmental regulators focus on controlling the amount of exhaust emitted by vehicles and other sources, knowing how much of a pollutant is inhaled is a better indicator for related health impacts," said Julian Marshall, a Ph.D. student at the University of California, Berkeley's Energy and Resources Group and lead author of the study, which is scheduled to appear in the April 15 issue of the journal Environmental Science and Technology.

"Diesel is the last big source of air pollution that has yet to be reigned in," said Marshall. "As a policy matter, it seems clear from this analysis that reducing emissions from school buses should be a very high priority."
The researchers noted that children are especially vulnerable to air pollution because, compared with adults, their immune systems are less mature and, per body weight, they inhale more air per day.

"For every metric ton of pollution emitted by a school bus, the cumulative mass of pollution inhaled by the 40 or so kids on that bus is comparable to, or in many cases larger than, the cumulative mass inhaled by all the other people in an urban area," said Marshall. "That the values were even close was shocking."

The researchers analyzed results from tracer-gas experiments conducted by scientists at UCLA and UC Riverside. They measured the air in six empty school buses traveling through established routes in south-central and suburban Los Angeles, all areas within the Los Angeles Unified School District. Nine runs were made with windows open and seven runs with windows closed in April, May and June 2002.

Five of the buses were powered by diesel fuel and built between 1975 and 1998. One of the diesel buses, a 1998 model, was equipped with a particle trap to reduce emissions. The sixth bus, built in 2002, ran on compressed natural gas.

Sensitive detectors on the buses tested for sulfur hexafluoride, a gas used as a tracer because it can be picked up at levels as low as 10 parts per trillion and is not present in background air. Sulfur hexafluoride was released into the engine exhaust manifold of the buses so researchers knew that any traces of the gas must have come through the exhaust system of the bus.

Eduardo Behrentz, a post-doctoral researcher at the Environmental Science and Engineering Program and the School of Public Health at UCLA, participated in the experiments and co-authored the new analysis.

"We determined that concentrations of key air pollutants were higher inside the bus cabins than outside the cabins," said Behrentz. "While the conditions inside the cabin were affected by the emissions of other vehicles on the road, our tracer gas measurements revealed that a significant amount of the pollutants found inside the buses originated from the buses’ own exhaust systems, especially when the windows were closed."

The experiments included measures of exhaust from neighboring vehicles, but this new analysis focuses on the amount of emissions inhaled from the school bus exhaust system.

The analysis assumed a typical ridership of 40 children per school bus with an average breathing rate of 15 liters of air per minute. The researchers calculated the collective amount of bus emissions inhaled for all riders, called the self-pollution intake fraction, as well as the average intake fraction for individuals.

The researchers found that for every million grams of pollutants emitted by the bus, 27 grams would be inhaled by all 40 riders, or 0.67 grams per child.

"In comparison, a city of 1 million people will inhale about 12 grams per million grams of exhaust emitted," said Marshall. "In a single day, a child riding a school bus will breathe
in anywhere from 7 to 70 times more exhaust from that bus than a typical L.A. resident will inhale from all school bus emissions in the area."

Not surprisingly, the highest levels of self-pollution were found with the two older buses, particularly when the windows were closed. The intake fraction for a 1975 model diesel bus measured 94 grams of pollution inhaled per million grams emitted, a level 3.4 times greater than average.

The newer model diesel buses are more representative of those found in current school bus fleets. But notably, a survey by School Bus Fleet magazine, a trade publication that tracks statistics in school transportation, finds that California has the highest percentage of pre-1977 school buses in the country. Ten percent of California's fleet consists of pre-1977 buses, while second-place Missouri reports six percent of its fleet made up of pre-1977 buses. In comparison, 35 other states have no buses built before 1977 in use, and nine states have 1 percent or fewer pre-1977 buses in use.

Interestingly, the differences among the newer buses, including the one with the particle trap on the exhaust pipe and the one running on compressed natural gas, were inconsistent. A 1993 bus with windows closed had an intake fraction level of 10 per million, equivalent to the value for a trap-equipped bus with windows open.

The researchers said this may be because the exhaust is leaking into the cabin of the bus further up the system than the tailpipe, which is where the particle trap is located. Exactly how that exhaust is entering into the cabin is a subject of further study.

"The broader message from this study is that there are many exposures to air pollution that are flying below the radar because they are not being picked up by our current air monitoring system," said William Nazaroff, a UC Berkeley professor of civil and environmental engineering who was not part of the study.

Diesel exhaust particulates are considered by public health officials to be a toxic air contaminant and a major source of cancer risk from outdoor air pollution.

"Because so many children ride school buses, reducing the emissions of a school bus would give policymakers more bang for their buck than the same reduction of emissions from other diesel vehicles, such as an 18-wheeler or a construction truck," said Marshall.

Yet despite the findings, the researchers said that riding school buses is still safer than being driven to school in passenger vehicles and that parents shouldn't yank their kids from bus ridership.

"School buses are built like a tank, and the chances of children getting killed or seriously injured from a traffic accident in a private passenger vehicle are significantly greater than if they are on a bus," said Marshall.

This work was supported in part by the University of California Toxic Substances Research and Teaching Program and the University of California Transportation Center.

84. Sharp Oil Price Rises Threaten Growth – IMF's Rato
Further sharp increases in oil prices could present a serious threat to global growth, the head of the International Monetary Fund said two days after crude prices soared to a record $58.28 per barrel. Until now, the IMF, which oversees the health of the globe's economy and financial markets, has expressed little concern that oil prices will hurt the global economy, partly because the rise was due to strong global demand.

But with fears that rapid growth in energy demand in Asia's emerging economies, in particular China, could outpace growth in oil supply, the IMF is now warning that further oil price rises pose a growing risk to global growth. "So far, the effects of higher oil prices on global growth and inflation have been manageable, partly because higher oil prices owe much to strong global demand, and partly because of the improved anti-inflationary credibility of central banks," IMF Managing Director Rodrigo Rato said in a speech at Georgetown University in Washington. "But, further sharp increases may have more serious effects," he warned.

His remarks came as the IMF prepares to release a report on the oil market, part of its bi-annual World Economic Outlook.

Rato said the oil market remained vulnerable to price shocks, with prospects for building spare capacity limited.

Rato strongly urged producing and consuming countries to work together to ensure market stability through better energy conservation, reduced obstacles to investment and improved transparency of oil data.

In his speech, Rato also said global growth should remain robust this year but has become less balanced and "unduly dependent" on the United States and China. Meanwhile, growth in Europe and Japan, which account for close to a quarter of global output, have fallen short of expectations, he added. "Among other things, this is complicating the resolution of the global imbalances," said Rato, a former Spanish finance minister.

He said global monetary conditions were still highly accommodative, which has helped keep interest rates unusually low -- despite recent increases -- and corporate and emerging market spreads close to historical lows.

But the size of the US current account deficit -- $665.9 billion last year -- and surpluses in Japan, emerging Asia and increasingly in Middle East oil-producing countries were a "mounting concern," Rato said.

The gaping deficit had been supported by flows from Asian governments, while the adjustment in the US dollar has been orderly, he added.

But the demand for US assets was not unlimited, he said.

"A sharp reduction, or a reversal, of capital inflows could entail serious consequences for currency and capital markets," Rato warned.

Tackling the imbalances -- and yawning US deficit -- would require fiscal consolidation by the United States, reforms in Europe and Japan, and greater exchange rate flexibility in China and its regional partners, he said.
85. Kyoto Protocol Tough For Emerging Economies

It will be impossible for emerging industrial powers such as China and South Korea ever to comply with the UN Kyoto Protocol on curbing greenhouse gas emissions, South Korea's environment minister said. After years of delays, the UN plan to fight global warming went into force last month, but key countries such as the United States and Australia have refused to join the 1997 pact because they said it unfairly excluded developing countries. Minister Kwak Kyul-ho hosted a five-day environment conference in Seoul bringing ministers from the Asia-Pacific region to discuss environmentally sustainable economic growth.

The UN pact legally binds 39 developed countries to cut the emissions of greenhouse gases by 5.2 percent of 1990 levels by 2012, but excludes from mandatory cuts big developing countries responsible for sizeable emissions of the heat-trapping gases.

"No matter what the cut required would be, it is impossible to follow the Kyoto Protocol measures that are based on the 1990 levels even if those countries wanted to," Kwak said in an interview, listing South Korea, China, India and Brazil.

Despite criticism from opponents of the Kyoto pact, there is no blueprint to include large developing countries, which are considered some of the biggest producers of greenhouse gases. Kwak said such countries had come a long way since 1990 in terms of economic development, and it would be unrealistic ever to expect them to be able to cut greenhouse gas emissions based on that year's levels, Kwak said.

South Korea is the ninth largest emitter of carbon dioxide, he said, the most significant of the six global warming gases covered under the UN pact. He said Seoul's commitment to take part in cutting greenhouse gas emissions was firm, but called on the international community to devise a more realistic standard to curtail global warming.

"We must look for greenhouse gas reduction measures that all countries can take part in," Kwak said.

He said Seoul, a bustling metropolis that is home to more than 10 million people, had been both a success and a failure in merging environmental concerns with rapid economic development. Kwak said the shape of the hugely modernized city, still undergoing transformation to an even greater concentration of high-rise structures, offered a fitting setting for an international conference to study how to tackle preservation of the environment as a vital part of development.

"The lessons we have learned in healing environmental destruction is that it should not be post-development response but prevention," he said. "South Korea has paid a very expensive price of destruction and pollution in the process of development," said Kwak, a technocrat who spent his entire career on merging environmental concerns with pressing development issues.

South Korea, the world's 11th largest economy, still relies heavily on manufacturing industries and international trade.
86. Climate Impact Of Ozone Depleters Declining, U.N. Panel Says

The impact on the world's climate from ozone-depleting substances such as chlorofluorocarbons (CFCs) is declining as they are phased out from global commerce, according to a report issued April 11 by the Intergovernmental Panel on Climate Change (IPCC). The report also suggested that steps should be taken to mitigate the potential impact on climate from substitutes such as hydrofluorocarbons (HFCs) for ozone-depleting substances.

The report issued by the IPCC is an 18-page "Summary for Policymakers" of a report to be issued "in about a month," according to Susan Solomon, a scientist at the National Oceanic and Atmospheric Administration Aeronomy Lab and a co-chair of one of the working groups that wrote the report.

CFCs and other ozone-depleting substances such as halons and hydrochlorofluorocarbons (HCFCs), used in a variety of applications from aerosol can propellant to refrigeration, are gradually being phased out under the Montreal Protocol on Substances That Deplete the Ozone Layer.

The protocol banned most production and use of CFCs in 1996, but grants developing countries a 10-year grace period before phase-out compliance schedules are imposed. Those countries were required by 1999 to freeze production and consumption of chlorofluorocarbons at average 1995 to 1997 levels.

CFCs and other ozone-depleters, as well as their substitutes, also have powerful global warming properties, in some cases thousands of times stronger than carbon dioxide, the principal greenhouse gas blamed for climate change. With the decline in use of CFCs, halons, and HCFCs, the global warming impact of them has declined from the equivalent of about 7.5 gigatons of carbon dioxide in 1990 to about 2.5 gigatons in 2000, the IPCC report said. A gigaton is a billion metric tons.

As a result of the Montreal Protocol, the global warming impact of ozone-depleting substances has declined from about 33 percent of the total effect in 1990 to about 10 percent in 2002, the report said. Under a business-as-usual scenario, with no new action taken, the global warming potential from ozone-depleting substances and their substitutes will decline further to the equivalent of 2.3 gigatons of carbon dioxide in 2015, the IPCC report said.

However, offsetting the decline in global warming impact from CFCs and other ozone depleters is a projected increase in the global warming potential from HFCs and perfluorocarbons (PFCs) if no new actions are taken.

HFCs have many of the same uses as CFCs but have no ozone-depleting potential. However, HFCs can be powerful greenhouse gases, like CFCs. Perfluorocarbons are another group of substitute materials, but they are much less widely used than HFCs.

Under the business-as-usual scenario, the global warming potential of HFCs is expected to increase from the equivalent of 0.4 gigatons of carbon dioxide in 2002 to 1.2 gigatons of carbon dioxide in 2015, the report said.
The report said, however, that the application of best management practices could cut the global warming potential of HFCs and ozone depleters in half by 2015. Sixty percent of the reduction would come from reducing HFC emissions.

These practices include:

- improving the containment of the substances in the devices, such as refrigerators, in which they are used;
- reducing the amount used in each application;
- better recovery of the substances at the end of product life;
- increased use of other substitutes; and
- use of technology that does not require the substitutes.

The energy-efficiency improvements possible through the use of HFCs could reduce global warming, the report said, but more research is required in this area.

In refrigeration, direct emissions of greenhouse gases can be reduced by 10 percent to 30 percent by using alternatives, improved containment, and other steps, the report said.

87. World Bank Official Says US Key To Second Phase Of Protocol

The Kyoto Protocol may not run to a second phase if the United States fails to take "significant steps" to reduce greenhouse gas emissions, a World Bank official said March 23. The U.S. role in extending the period of emissions reductions under the climate change treaty beyond the 2008-2012 time frame is crucial, according to David Freestone, the bank’s deputy general counsel and co-editor of a new book that examines legal issues surrounding the Kyoto accord. "Without the United States taking action to significantly limit GHG emissions, it is doubtful whether there’ll be a second phase of the Kyoto Protocol after 2012," he said.

Freestone was speaking at the launch of the book, Legal Aspects of Implementing the Kyoto Protocol Mechanisms, Making Kyoto Work, which he edited with Charlotte Streck, a former bank official. Streck is now with Climate Focus, a Rotterdam-based consulting firm.

The protocol, which entered into force in February, requires industrialized economies to reduce greenhouse gas emissions by 5.2 percent by the end of the 2008-2012 period, based on 1990 levels. The United States, the world's largest emitter of greenhouse gases, signed the 1997 treaty, but the Bush administration in 2001 announced that it would not participate in the Kyoto implementation process.

The parties to the treaty have not set any emissions reduction targets beyond 2012.

The protocol contains a variety of mechanisms to enable industrialized countries to reach the Kyoto targets. They include an emissions trading system that allows high-emitting countries to buy credits from countries that can more easily meet their goals and
a clean development mechanism that enables industrialized countries to earn credits by investing in environmentally friendly projects in developing countries.

The bank's Carbon Finance Unit manages about $800 million in funds targeting projects to reduce greenhouse gas emissions, particularly in the developing world.