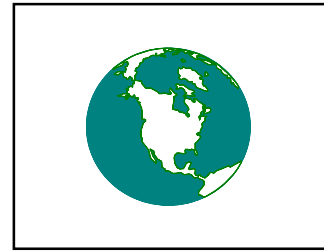


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CAR LINES

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Lead Free Gasoline Worldwide 2004

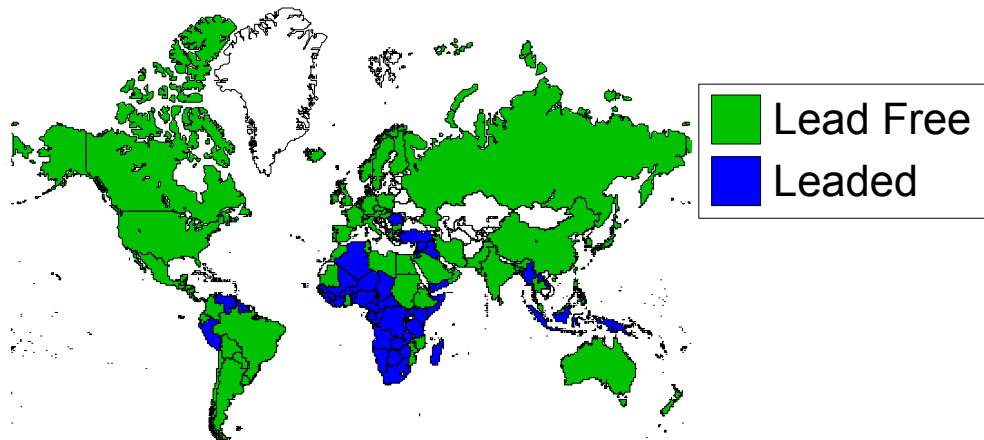


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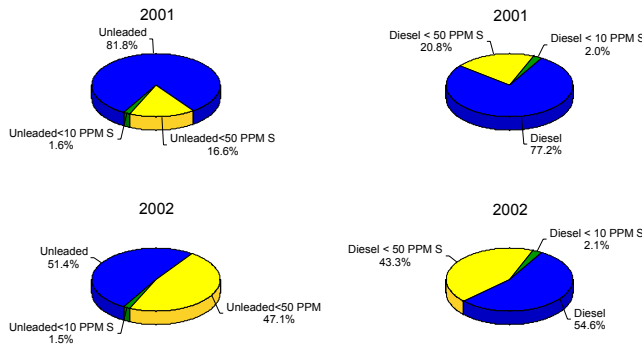
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EUROPE

1. Motor Fuel Sulphur Levels Falling in the EU

The EU-15 market share of low-sulphur petrol grew three-fold and sales of its diesel counterpart more than doubled between 2001 and 2002, anticipating a legal sulphur limit still to take effect, the European Commission has reported. All road fuels must meet the standard of 50 parts per million (ppm) sulphur from 1 January 2005 under the EU's 1998 fuel quality directive. Under the same directive, sulphur limits effective from 2000 have been much looser, at 150 ppm for petrol and 350 ppm for diesel.

Sulfur Trends in EU Fuels



In its first annual report on the directive's implementation, the Commission says that low-sulphur fuels had already attained a market share of 47% for petrol and 43% for diesel by 2002. Some countries, including Germany and the UK, encouraged the use of lower-sulphur fuels through tax incentives. By 2002, six states had defined a separate grade of low-sulphur fuel.

There was no change between 2001 and 2002 in the market share of fuels classed as sulphur free, which accounted for 2% of the market. This share is likely to have expanded considerably since 2002 under the influence of a separate directive agreed in that year that requires all road fuels to be sulphur free from 2009. Germany already offers tax incentives for the near zero sulphur fuel.

2. EU Air Pollution Rules Not Anticompetitive

There is virtually no evidence that EU air pollution legislation has significantly damaged the competitiveness of European industry, according to a consultancy study released by the European Commission's enterprise directorate. The study was ordered following an EU conference on industry's environmental performance last November, at which competitiveness concerns were a prominent theme. Focusing just on air pollution legislation, the Commission's study picks apart the various ways in which it has been claimed EU controls could be damaging industry and rebuts them.

Air pollution standards in the EU and major trading partners the USA and Japan are broadly similar, despite differences in the details. The cost to industry of all these laws is similar: industrial environmental expenditure as a percentage of gross value-added is 0.1% in Japan and 0.4% in both the EU and USA, the study says. More important than the four-fold difference is the fact that all the costs are so small as to be unlikely to have competitiveness effects.

EU air pollution controls are indeed stricter - and more strictly enforced - than in non-OECD trading partners such as China, the study concedes. However, China does have a substantial body of legislation, in some cases comparable with OECD countries, and there is growing pressure for air quality improvements. Even allowing for lower air pollution standards in developing countries, there is no real evidence of industry relocation in response. Labor costs and access to market are much more important than environmental legislation, the study concludes.

In general, air pollution legislation costs less in practice than is predicted before it is passed. And though there is some evidence of increased costs, these are usually small in relation to wider price effects or other factors. One example given is that whereas it was predicted that EU vehicle emission controls introduced since 1993 would boost new car prices by up to 20%, in practice prices fell by 7% in real terms.

While attempting to set the historical record straight, the study suggests that the same arguments will have to be fought again over future air pollution changes. Specifically, it notes that the EU is continuing to tighten its legislation, whereas there are no such plans in Japan, and draft US policy would actually weaken controls in some respects.

Important EU laws affecting industrial emissions are not yet fully implemented, namely the integrated pollution prevention and control (IPPC) directive, the national emission ceilings directive, daughter laws to the air quality framework directive, the amended large combustion plant directive and, most recently, the EU's greenhouse gas emission trading scheme. Next year, the European Commission is due to propose a new EU strategy on air pollution growing out of the Clean Air for Europe program. Taken together, these initiatives "are likely to have very large effects on future air pollution policy and EU industrial performance," the study notes.

3. Tax Hike Coming for German Gas Guzzlers

Environment minister Jürgen Trittin has praised a decision by Germany's 16 state governments to increase the vehicle tax on sport-utility vehicles by re-classifying them as normal cars instead of trucks. Mr. Trittin said that it was incomprehensible that such fuel inefficient vehicles should enjoy a tax break. Following state approval of the measure, the federal finance and transport ministries are expected to amend Germany's vehicle tax law accordingly. State governments estimate that the change will net them an extra €40m annually in tax revenue.

4. Sea Spray Sparks Row Over Particulate Pollution

Germany's Lower Saxony state government has come in for criticism from federal environment minister Jürgen Trittin after it called for a delay in implementation of EU-derived limits on fine particulates under ten microns (PM10) due to take full effect on 1 January. In a statement Mr. Trittin defended Germany's ordinance transposing the 1999 EU air quality directive containing the PM10 limits as critical to reducing air pollution. Germany's states and municipalities are now required to ensure that the limits are achieved, he said.

Lower Saxony's environment ministry has taken the position that the state was simply invoking a provision in the EU directive that says the European Commission must be informed when PM10 levels exceed limits owing to natural sources. Lower Saxony is an agricultural and coastal state, and has unusually high levels of PM10 owing to sea spray and animal waste. The main particle pollution sources targeted by the EU directive are road vehicles. The ministry argues that if the federal government did not grant its request, Lower Saxony could introduce a resolution in the Bundesrat, Germany's upper parliamentary house, to delay implementation of the ordinance.

5. Use of Biomass Could Grow in Germany

If effectively promoted, biomass could provide a significant share of key German energy needs, according to a study published by the German environment ministry. By 2030, it forecasts contributions of 16% of electricity, over 10% of heating and 15% of motor fuel consumption. By comparison, in 2002 biomass made up only 1% of electricity consumption, 0.8% of car fuel consumption and 3.5% of heat consumption. The study was conducted by 25 researchers led by an ecological think-tank. The study also said that effective promotion of biomass could create up to 200,000 new full-time jobs, particularly in economically-depressed German industries like mechanical engineering.

The study's findings are meant to buttress the government's argument that more should be done to promote reliance on renewable energy. The government's latest renewables support law provides for slight increases in subsidies for biomass, offshore wind farms and solar power.

6. UK Company Car Tax Shift Cuts Carbon Output; Stimulates Diesels

A report issued by the UK's tax department estimates that emissions of carbon dioxide (CO₂) were reduced by up to 200,000 tons in 2003 as a result of a company car tax reform introduced in April 2002. The cut represents around 0.5% of transport-related CO₂ emissions.

Previously, the taxation system for company cars created "perverse incentives" for motorists to drive longer distances to get the maximum financial benefit from them, the report states. Under the new system, which rewards cars with lower CO₂ emissions, around 600 million fewer kilometers are being driven annually in company cars.

The report records a marked shift towards diesel-fueled cars, which now account for around 40-50% of all company cars. Vehicles using alternative fuels still make up only 1% of company cars, but more than 10% of drivers surveyed said they would consider them.

Implementing the system cost employers a one-off UK£ 55m (€82m), but annual compliance costs are now about UK£ 35m lower.

7. French Government Health Report Targets Vehicles

Air pollution directly linked to fossil fuel combustion is killing up to 9,500 people each year in France, representing 5 percent of all deaths of people over 30, according to a

report released May 5 by the French Environmental Health and Safety Agency (Agence Francaise de Securite Sanitaire Environnementale, AFSSE). The report, *Human Health Impacts of Urban Air Pollution*, suggests that vehicle use is the principal source of fine particle pollution, which is seen as the most dangerous type of pollution for human health.

To address this, the report lays out a series of recommendations for government action, including:

- Vehicle taxes and fees to encourage consumers to buy cleaner and more fuel-efficient cars;
- Require particle filters for all diesel-fueled cars and trucks;
- More extensive public transportation, particularly in city centers; and
- Slower speed limits, to reduce energy consumption and pollution.

The French minister of ecology and sustainable development said during a press conference that government actions against air pollution so far "had not sufficiently taken into account" the health impacts of fine particles, principally emitted by cars and trucks. He said that "a number of measures" for limiting fine particle emissions were under consideration including wider use of particle filters on diesel vehicles, as well as tax incentives to encourage scrapping of older, less-efficient, and dirtier vehicles.

8. Market Options to Cut Ship Emissions Explored

Advisors to the European Commission have reviewed ways of using market instruments to cut air pollution from shipping. The study was ordered last autumn. Following an EU drive to cut sulphur dioxide (SO₂) and nitrogen oxides (NO_x) from land-based sources under the national emission ceilings directive, estimates suggest shipping could be contributing half of the total EU load of these pollutants by 2020.

According to Nera, the best place to start would be voluntary introduction of differentiated port charges for greener ships. It would be less effective in cutting emissions than other approaches, but would face the least political resistance and could kick-start steps towards more ambitious initiatives, it says.

Proposals implementing the recommendations could emerge in the Commission's "CAFE" thematic strategy on air pollution scheduled for 2005. The initiative will back up EU legislation already under discussion to reduce the sulphur content of marine fuel in certain shipping zones.

In addition to differentiated port fees, the consultancy advocates "consortia benchmarking," another voluntary approach in which ship owners would band together to reduce emissions. An alternative approach would involve ships having to meeting emission targets but generating credits in the process. They could sell these credits to governments or potentially to land-based businesses facing pollutant caps.

Nera found that emission taxes, cap-and-trade schemes and distance-based charges would be far more environmentally and economically efficient but said they face enormous near-term political constraints since they would need global approval.

9. Goal of Accession to EU Driving Turkey's Environmental Agenda

Turkey is now pushing forward with legislation to upgrade its framework Environment Law and to strengthen rules on waste management, recycling, water quality, and automobile emissions all as part of the country's efforts to prepare for joining the European Union. The legislative initiatives now being worked through in the Turkish Parliament aim to bring the country's environmental standards in line with those in the EU, according to Turkey's Under Secretary for Environment and Forestry Hasan Z. Sarikaya. The EU's decision to leave Turkey out of the group of 10 countries due to join the Union May 1 has not slowed the country's bid to harmonize its environmental rules with those in the EU he said; work is now underway to transpose 65 of the most important EU directives.

Topping the list of ongoing reforms linked to EU accession is an initiative to update Turkey's framework Environment Law. The law was initially drafted in 1983 and has been modified on numerous occasions since then to include regulations on air quality, chemical safety, environmental impact assessments, hazardous waste management, noise control, and water pollution. Proposed reforms would enlarge the scope of the initial law to boost implementation and allow greater penalties for noncompliance.

The text has been debated in commission hearings of the Turkish Parliament this year, but is not slated to come up for a final vote before year-end. Other legislation to bring Turkey's regulations in line with EU standards is, however, moving forward, Sarikaya said. In January, Turkey revised its environmental impact assessment rules to bring them in line with EU norms. In addition, the country is now phasing in new standards on used oil recycling as part of a fuller system of rules for waste management that will cover materials including batteries and household waste as soon as 2005. Turkey hopes to make further progress this year on transposing an EU water quality and pollution framework, which encompasses more than 20 directives, he said.

The country is also taking steps to phase out leaded gasoline. In addition, the Turkish Parliament ratified the United Nations Framework Convention on Climate Change in late February, leading the government to launch a national climate change assessment and action plan called for in the treaty.

10. EU Parliament Approves Road Tolls, Rail Transport Revitalization

Transportation laws approved by the European Parliament April 20 and 21 include measures to reduce emissions and other forms of environmental damage caused by trucks on European Union highways and to encourage "revitalization" of EU freight railways.

One of the drafts approved by lawmakers would amend current EU rules to allow states to adjust highway tolls according to trucks' emission levels.

Other measures the Parliament approved would allow states to charge above normal toll rates in environmentally sensitive regions, such as heavily used north-south international transit routes across mountain ranges that separate Northern Europe from the

Mediterranean basin. States would be required to use the "mark-up" to finance alternative transport infrastructure, such as railways.

Toll rates could be set in accordance with EU emissions standards first established in 1992. In 2000, all new EU automobiles were required to meet Euro III standards. Some vehicles already meet Euro IV standards. Under the approved legislation, which would still have to be passed by EU ministers, toll charges could be automatically assessed in accordance with each vehicle's Euro classification.

A separate draft approved by lawmakers would introduce technical standards for electronic road toll equipment, already introduced in some states, that allows vehicles to drive through toll stations without stopping. Vehicles are identified by roadside scanners that read details from a transponder on the truck and provide data for billing. The Commission says EU-wide standards will reduce hold-ups and avoidable emissions.

A package of railway measures approved by lawmakers would establish a European Railway Agency to oversee the development of an integrated EU railway network. It calls for initiatives to develop uniform EU-wide safety systems, technical interoperability of national systems, and to liberalize access to national rail systems. Under the measure, international freight services would have to be liberalized as of Jan. 1, 2006, and national freight services as of Jan. 1, 2007.

Six states have already opened up their state-owned networks to commercial competition: Austria, Italy, Germany, the Netherlands, Sweden, and the United Kingdom.

The measures approved by the European Parliament include:

- The Directive on the charging of heavy goods vehicles for the use of certain infrastructures, Commission document COM (2003) 448;
- The Directive on the interoperability of electronic road toll systems, COM (2003) 132;
- The Directive on the development of the Community's railways, COM (2002) 25;
- The Directive on safety on the Community's railways, COM (2002) 21;
- The Directive on the interoperability of the trans-European high speed rail system and the trans-European conventional rail system, COM (2002) 22; and
- The Regulation establishing a European Railway Agency, COM (2002) 23.

The four measures on railways were signed by the EU Council of Ministers on April 26.

11. German Court Supports Government Energy Related Taxes

Germany's Constitutional Court ruled April 20 that the government is justified in configuring the energy tax to control consumption, and in giving special tax treatment to certain sectors with high energy costs. The government has levied taxes on electricity per kilowatt hour and oil per liter since 1999, with staggered increases over a period of five years. It is designed to encourage more economical use of resources and less pollution. However, firms in mining, processing industries, energy and water utilities, and construction are only subject to 20 percent of the tax.

The Federal Constitutional Court confirmed in its April 20 decision that the government can grant manufacturers a reduction in the eco-tax to protect them from possible

competitive disadvantages vis-à-vis foreign firms. The court said additionally that the firms that brought the case were not subject to the same energy cost burdens as certain manufacturers who bear an extra financial burden attributable to the tax on electricity and the oil tax on heating fuel.

The case was brought by five logistics firms and two refrigeration companies when the tax was introduced nearly four years ago. The Federal Association for Freight Transport, Logistics, and Disposal Services said that 20 to 25 percent of the jobs in the German transport sector were directly threatened by the fact that firms could not compete with foreign companies not subject to the tax due to lack of harmonization throughout the European Union.

12. Portugal Ratifies Gothenburg Protocol to Reduce Emissions

Portugal's Council of Ministers April 26 ratified the 1999 Gothenburg Protocol to Abate Acidification, Eutrophication and Ground-Level Ozone. The protocol, which is part of the 1979 Convention on Long-Range Transboundary Air Pollution, establishes emission ceilings to be implemented by 2010 for sulphur, nitrogen oxides (NOx), volatile organic compounds (VOCs), and ammonia. Like most other EU nations, Portugal signed the protocol on Dec. 1, 1999.

If and when the Gothenburg Protocol enters into force, Portugal will have to cut, from 1998 levels, sulphur oxide emissions by 57 percent, NOx by 32 percent, and non-methane VOCs by 63 percent.

The Council of Ministers decree will become official following its forthcoming publication in the *Diário da República*, Portugal's national register.

13. Portugal Passes Vehicle Emissions Rules To Meet EU Requirements

Portugal has brought into force two directives on vehicle emissions controls more than five months after the country was required to do so to meet European Union requirements. Portuguese Decree-Laws 109/2004 and 110/2004 were approved by the Council of Ministers March 4 and published May 12 in the *Diário da República*, Portugal's national register.

The first decree transposes into Portuguese law Commission Directive 2003/27/EC adapting to Council Directive 96/96/EC as regards the testing of exhaust emissions from motor vehicles. The second decree transposes Directive 2003/26/EC adapting to Directive 2000/30/EC as regards speed limitation devices and exhaust emissions of commercial vehicles. EU Member States were to have brought into force "the laws, regulations, and administrative provisions" necessary to comply with the directives no later than Jan. 1, 2004.

In what the government called a move to improve air quality, Decree-Law 109/2004 modifies Decree-Law 554/99 to reflect the EU's newer and stricter emissions limits for certain categories of motor vehicles, as well as the testing of speed limitation devices on heavy commercial vehicles. Decree-Law 110/2004 alters Decree-Law 92/2003 to harmonize the roadside technical inspections regime for heavy trailer trucks and other

commercial vehicles.

14. Schröder Appeals For Earlier EU Diesel Car Standards

German chancellor Gerhard Schröder has written to the European Commission asking it to bring forward by three years plans to set tougher new limits for diesel car emissions. The move follows a meeting between Mr. Schröder and European car industry representatives.

The Commission is planning to propose the new Euro-V limits in 2005. The standard, which could require as much as a 99% cut from current levels in emissions of fine particles, would likely take effect from 2010.

Mr. Schröder said that from 2005, his government wanted to provide diesel cars meeting the standard with tax breaks, but that this depended on the Commission proposing the Euro-V standards by the end of this year. His appeal was welcomed by environment minister Jürgen Trittin.

In April, Mr. Trittin proposed a law allowing a tax break for diesel cars equipped with particle filters. It is unclear if this would be pursued in the light of Mr. Schröder's letter.

15. EU Pushes Health Research Agenda

A series of initiatives to improve understanding of health impacts from environmental pollution have been unveiled by the European Commission. The plan shows that any new EU risk reduction policies arising from last year's SCALE¹ environment and health strategy are still far away. The communication is also the EU's contribution to a pan-European ministerial meeting on health and environment to be held in Budapest later this month. Proposed EU activities have been aligned with the children's environment and health action plan for Europe (Cehape) to be adopted in Budapest, the Commission says.

Scale identified respiratory diseases, cancer, neuro-developmental disorders and endocrine disrupting effects as priority areas. The plan sets out further research efforts, especially for the latter two groups, where knowledge is currently "much less advanced".

Research priorities have drawn on a series of baseline reports prepared last year by multi-stakeholder working groups. Some of these focused on the four priority diseases. Others reviewed existing monitoring of heavy metals and dioxins and PCBs.

Other priorities of the plan are to advance biomonitoring in children and to develop environment and health indicators. A third is to develop integrated monitoring of the environment and food to identify public exposure.

In a related development, EU health ministers backed a strong focus on the problem of childhood asthma in a statement adopted in early June. The council invited greater

¹ The Scale acronym stands for "Science-based, focusing on Children, raising Awareness, and relying on Legislation and Evaluation".

research into causal factors and called on the European Commission to take account of childhood asthma in all relevant policies.

16. Paris Concerned about SUVs

Bulky four-by-fours could be banned from the streets of Paris after a top official in the capital's government described them as a polluting "caricature of a car" unsuited to city life. An anti-sports utility vehicle (SUV) resolution passed by the city council could lead to a ban on the vehicles in about 18 months if it is included in an overall project to improve traffic flow in the city, Deputy Mayor Denis Baupin said.

"You have to wonder why people want to drive around in SUVs," Baupin, a Greens party member, said on Europe 1 radio. "We have no interest in having SUVs in the city. They're dangerous to others and take up too much space."

The city council voted to urge Socialist Mayor Bertrand Delanoë to consider banning SUVs, which have become popular in recent years and now make up about five percent of the French car market -- just below the Western Europe average.

Baupin said Paris, which has been setting aside more lanes for buses and bicycles since a Socialist and Greens coalition took over City Hall in 2001, could not legally ban SUVs outright. "Our idea is to limit the circulation of the most polluting vehicles," he said. "That means SUVs and lots of other vehicles that don't meet European pollution standards."

Baupin called SUVs a caricature of a car and said they were not adapted for use in a city. "It's made for a family on vacation ... and usually they only have one person in them," he said.

17. Germany Announces Grants To Develop Cleaner, Quieter Trucks

The German Environment Ministry has announced awards worth [Euros] 1.3 million (\$1.55 million) for four firms to aid them in developing trucks with lower noise and emissions. The new trucks are intended to help the country meet stricter European Union emissions standards due to take effect Jan. 1, 2005. The support comes in the form of financing aid to reduce acquisition costs by up to [Euros] 40,000 (\$47,600) per vehicle, the ministry said.

The four firms--TNT Express GmbH, Deutsche Telekom AG, Deutsche Post Express GmbH, and Wuesthof Biogas GmbH--are to bring into operation by the end of 2005 approximately 280 new delivery vehicles for inner-city use that are designed to fulfill strict environmental standards for emission and noise. Noise is an issue because, especially in highly populated areas, deliveries frequently occur at night when there is less traffic, often causing residents to complain.

The initiative is intended to create a nationwide model for meeting EU environmental standards while at the same time avoiding economic risks and improving competition, the ministry said. The tender for project proposals was announced Aug. 28, 2003.

Germany needs to introduce environmental and transportation measures for commercial

vehicles in order to comply with EU air-quality rules, particularly in inner cities and densely populated areas where emissions from diesel-powered vehicles are significant contributors to particulate pollution. In parts of Berlin, the level of diesel soot particles needs to be cut by 60 percent to meet EU requirements, the ministry said.

18. Spanish Labor Union Critical of Country's Increase in Emissions

In its second emissions policy report this year, Spain's top labor union has said that greenhouse gas emissions have risen 40 percent over 1990 levels, putting the country "dangerously" distant from compliance with the Kyoto Protocol. "Spain is the industrialized country with the highest emissions increase," stated the 19-page report, *Evolución de las Emisiones de Gases de Efecto Invernadero en España (1990-2003)* (Evolution of Greenhouse Gas Emissions in Spain, 1990-2003), released by the health and environmental division of Workers Commissions. "Under the current scenario, Spain will be seriously noncompliant with the Kyoto Protocol," the report said. "[F]or the period 2008-2012, emissions in Spain could be more than 54 percent over the base year."

In the earlier report, *El Impacto Económico del Protocolo de Kioto* (The Economic Impact of the Kyoto Protocol), Workers Commissions said government emissions planning made Kyoto compliance "mathematically impossible." Noncompliance, said the union, would be a serious drain on economic productivity, forcing Spain to buy 113 million tons of carbon dioxide emissions rights each year for the period 2008-2012. To meet its burden-sharing commitment with the European Union, Spain is allowed a 15 percent emissions increase over 1990 levels.

Workers Commissions was particularly critical of the two administrations (1996-2004) of former Primer Minister José María Aznar, under whose rule Spain saw a 32.43 percent emissions increase between 1996 and 2003. According to the report, Aznar left office without producing a National Emissions Allocation Plan, which all EU countries were required to submit to the European Commission March 31. According to the labor federation, the Aznar administrations "mortgaged" national emissions rights, "bequeathing a very limited range of movement to the new government, which will have to undertake complicated and conflictive actions to make up for eight lost years."

The union called on the new Socialist-led government immediately to approve and adequately finance the Spanish Climate Change Strategy, a plan approved by the National Climate Council but never adopted by the government. It also recommended that the administration of José Luis Rodríguez Zapatero take a new look at energy sector planning and revise the National Energy Savings and Efficiency Strategy. According to the report, the energy sector was most responsible for increased emissions, accounting for 78 percent of the 2003 total, compared to only 48 percent in 1990. Over the same period, Spain's energy consumption rose 51 percent.

In 1990, the country consumed 88 millions of tons equivalent of petroleum (Mtep). In 2003, this figure was 133 Mtep. Under current planning, consumption in 2012 could hit 165 Mtep.

19. Spain's New Administration Outlines Environmental Agenda

In her first major address before Parliament, Spain's new environment minister said the government will act immediately to comply with international emissions obligations, to develop renewable sources of energy, and to hold corporations responsible for environmental damages. Speaking to the Environmental Commission of the Congress of Deputies, Environment Minister Cristina Narbona said the Socialist-led legislature of 2004-2008 would emphasize sustainable development and would use a carrot-and-stick approach to get corporations to meet environmental objectives. She also promised a "reorientation" of national water and energy policies toward sustainability and announced more extensive monitoring and government control over public lands and natural resources.

Narbona blamed the former Popular Party government for failing to draft a national allocation plan, as required by the European Commission, outlining how the country will participate in an EU carbon dioxide emissions trading scheme due to start in January. She said that a special economic commission "in the coming months" will draft the plan, and it also will develop a national climate change strategy and transpose the EU Emissions Trading Directive into Spanish law.

"The reduction of greenhouse gas emissions, in accordance with the Kyoto Protocol, requires a reorientation of energy policy--giving real priority to energy savings and efficiency and to renewable energies--accompanied by gradual reduction in nuclear energy use," she said, specifically mentioning the promotion of biomass and solar energy to meet domestic needs.

The government said it would work with companies to promote the use of energy-saving technologies and recycled materials and seek out a common strategy for "the progressive introduction of environmental criteria in product life-cycles and in companies' own management."

While the Popular Party government in certain areas followed a policy of corporate self-regulation, the Socialist-led government will hire additional government agents to enforce its polluter pays policy, the minister said. She said that following the "unjustifiable gutting" of government staff in recent years, the new administration will "radically change this tendency." This will start with 154 new government employees charged with monitoring publicly owned lands and coordinating environmental protection issues between the central and regional governments. The government also will consider buying land for conservation purposes.

20. Dutch Environmental Conditions Still Inadequate

Although the Dutch air, water, and soil have become cleaner, current environmental policies will not be enough to meet national and European Union environmental goals by 2010, according to *Environmental Balance 2004*, a yearly review of the Dutch environment and related policies. The report, compiled by the Dutch National Institute of Public Health and the Environment (RIVM), warns that failure to meet environmental standards could result in EU legal proceedings and fines.

The report was submitted to Dutch Secretary of State for the Environment Pieter van Geel. According to the report, under current policies the Netherlands will meet EU requirements for ammonia by 2010 but not for other substances including sulfur dioxide,

nitrogen oxides, and volatile organic compounds. Standards for these substances are contained in EU Directive 2001/81/EC on National Emission Ceilings for Certain Atmospheric Pollutants. Secretary van Geel said that additional measures would be necessary to reduce air pollution from automobiles. Possible steps include an 80 kilometer-per-hour speed limit and mandatory filters on diesel-powered cars, van Geel said.

The report said the Netherlands is expected to meet its greenhouse gas reduction targets under the Kyoto climate change protocol. Under the EU burden sharing agreement for implementing the protocol, the Netherlands is required to cut its carbon dioxide emissions by 6 percent from 1990 levels by the period 2008-2012. Agreements about reduction targets after 2012 will be made at the 10th Conference of the Parties (COP-10) to the United Nations Framework on Climate Change in Buenos Aires. Because the Netherlands will hold the EU presidency in the last half of 2004, van Geel will lead the European delegation there.

21. Russia Will Ratify The Kyoto Protocol

Russian president Vladimir Putin has given the clearest indication yet his country will ratify the Kyoto protocol and thus trigger its entry into force. "We are for the Kyoto process...we shall be speeding up our movement towards ratification," he said after an EU-Russia summit in Moscow. Russia's ratification would provide a powerful political boost for the EU, which has championed the Kyoto protocol internationally and aligned its domestic climate change policies closely to the treaty, to the extent of committing to meet Kyoto gas reduction targets even if the protocol doesn't enter force.

Mr. Putin's comments followed the successful conclusion of bilateral talks on the terms of Russia's entry into the World Trade Organization. Though EU negotiators had consistently denied a diplomatic trade-off between the two issues was on the cards, the president said they had "overlapped". "The fact that the EU has met us halfway in negotiations on the WTO could not but have helped Moscow's positive attitude to the question of ratifying the Kyoto Protocol," he said.

They are likely to ratify the Kyoto protocol this year the head of the U.N. Environment Program said. Putin set no deadlines but UNEP head Klaus Toepfer said he expected Russia would ratify by the next meeting of Kyoto signatories, scheduled for December in Buenos Aires. "I hope they will do it before the next conference of the parties, and I believe that there is quite good information backing this," he said on the eve of World Environment day. "There are clear signals...coming from Moscow that they now take it very seriously and they will do it."

Kyoto cannot come into force unless it is ratified by countries responsible for 55 percent of rich nations' "greenhouse gas" emissions. It has reached 44 percent and Russia's 17 percent will tip the balance. Kyoto's entry into force will trigger a flow of aid to help the developing world tackle its emissions problems, according to U.N. officials. And the example of legal obligations on richer countries could also make it easier to bring big developing-world polluters India and China into the fold, Toepfer said.

22. French Parliament Backs Environmental Charter

A charter for the environment which makes a healthy environment a constitutional right for French citizens has passed a key hurdle with approval by the parliament (328 votes to 10). The bill, which will fulfill a promise made by President Jacques Chirac during the presidential election campaign of 2002, has divided the French scientific community and also the major political parties. Opponents fear it could lead to increased litigation against companies and restrict innovation and economic development. The main sticking point has been the inclusion of the precautionary principle. In the final formulation, government authorities will be required to take action to prevent "grave and irreversible" environmental damage, even if there is scientific uncertainty about the danger.

The bill will now go to the Senate. President Jacques Chirac will then send it either to a joint sitting of both houses of parliament, where a three-fifths majority vote is required, or a referendum.

During the same session, the parliament also approved, by 358 votes to 157, a new energy bill which commits to a 75% reduction in greenhouse gases by 2050, the most ambitious outlined by a European government. It also approved the construction of a new prototype nuclear reactor.

23. Czechs And Slovaks Move Toward Tolls on Trucks

Heavy goods vehicles using the Czech Republic's main roads will have to pay electronically calculated tolls from 2006, the government has decided. Only vehicles over 12 tons will pay tolls initially, but these will quickly be extended to all vehicles over 3.5 tons to stay in line with current proposals to further harmonize the existing EU framework on lorry charges, the so-called eurovignette.

Currently, 3.5-12 ton and over-12 ton vehicles pay an annual charge of EKr7,000 (€450) and EKr14,000 respectively to use Czech motorways. This is a symbolic payment that takes no account of the true cost of damage, maintenance costs and the burden of building new roads, according to the transport ministry. The ministry estimates heavy vehicles will pay around EKr3-4 extra per kilometer when the new toll system is introduced on 3,000 kilometers of motorways and main trunk roads.

The Slovak government is also considering the introduction of electronic tolls by 2006 on heavy vehicles. There are signs that a similar system could be introduced in the Visegrad Four countries (the Czech and Slovak Republics, Poland and Hungary).

NORTH AMERICA

24. EPA Finalizes Nonroad Diesel Pollution Rules

The Nonroad Diesel Rule will cut emission levels from construction, agricultural and industrial diesel-powered equipment by more than 90 percent. The new rule will also remove 99 percent of the sulfur in diesel fuel by 2010, resulting in dramatic reductions in soot from all diesel engines.

When the full inventory of older nonroad engines has been replaced, the nonroad diesel program will annually prevent up to 12,000 premature deaths, one million lost work days, 15,000 heart attacks and 6,000 children's asthma-related emergency room visits. The anticipated costs vary with the size and complexity of the equipment but are in the range of one to three percent of the total purchase price for most equipment categories. While the estimated added cost for low-sulfur fuel is about seven cents per gallon, the net cost is projected to average about four cents per gallon because the use of ultra-low sulfur fuel could significantly reduce engine maintenance expenses. The overall benefits of the nonroad diesel program are estimated to significantly outweigh the costs by a ratio of 40 to 1.

The Nonroad Diesel Rule is the latest round in EPA's decade-long effort to make diesel engines and fuels cleaner. This new rule complements the Truck and Bus Rule (announced December 21, 2000), which will put clean heavy-duty trucks and buses on America's roads, building a fleet that will be 95 percent cleaner than today's trucks and buses. On-highway compliance requirements take effect with the 2007 model year.

EPA also took the first step toward proposing new emission standards for diesel engines used in locomotives and marine vessels by issuing an advance notice of proposed rulemaking. Standards being considered would apply to new marine diesels and both new and existing diesel locomotives. Without new standards, the Agency projects that railroad and marine diesels will cause some 27 and 45 percent respectively of total nitrogen oxides (NOx) and particulate matter (PM) pollution coming from mobile sources.

The Agency's Clean Diesel Program accentuates the benefit of these historic rulemakings through a suite of voluntary programs that focus on vehicles and equipment in use today. These include the Clean School Bus USA Program, the Voluntary Diesel Retrofit Program and SmartWay Transport Partnership.

The Rule is expected to result in the widespread introduction of advanced emission control systems, a move comparable to the advent of catalytic converters for cars in the 1970s. The new standards, to be phased in over the next several years, will result in reductions of pollution equivalent to having some two million fewer trucks on the road. Standards for new engines will be phased in starting with the smallest engines in 2008 until all but the very largest diesel engines meet both NOx and PM standards in 2014. Some of the largest engines, 750+ horsepower, will have one additional year to meet the emissions standards.

Nonroad diesel fuel currently contains about 3,000 parts per million (ppm) sulfur. The new rule will cut that to 500 ppm in 2007 and 15 ppm by 2010. The lower sulfur fuel will provide immediate public health benefits by reducing PM from engines in existing nonroad equipment.

Over 650,000 pieces of nonroad diesel equipment sold in the United States each year will be covered by this rulemaking. Currently about six million pieces of nonroad diesel equipment are in use in the United States. Based on average expected equipment lifetime, this entire inventory should be upgraded by 2030.

Environmental benefits when the full inventory of older nonroad engines has been replaced include:

- NOx will be reduced by 738,000 tons annually

- PM will be reduced by 129,000 tons annually

25. Gas Prices Undercutting Big SUV Sales

The recent rise in U.S. gasoline prices to record levels has Americans shopping for more fuel-efficient cars, and has at least dampened their love for SUVs. For example, CarMax Group Inc., which operates 51 used car and 12 new car dealerships across the United States, cited gasoline prices as one possible reason for weaker sales over the past few weeks. CarMax cut its earnings outlook, sending its shares down more than 13 percent, and the stock of its competitors down between 2 and 4 percent.

The average price at the pump hit a record high, unadjusted for inflation, of \$1.95 per gallon for regular gasoline, up about 45 cents from a year ago, according to AAA. In California, the average price was \$2.27 a gallon for regular, the motorist group said. To top it off, gasoline prices have yet to hit their highest for the year, with the traditional peak summer driving season not set to start until Memorial Day weekend later this month, the U.S. Energy Information Administration has said.

Detroit's automakers last week added new incentives on SUVs to cut inventories of unsold models, despite already generous offers, after sales in April were weaker than many had expected.

The higher prices could shift demand toward more fuel-efficient models, which had been poor sellers in the past, said Ford Motor Co. Chairman and Chief Executive Bill Ford Jr. Gas prices could "help drive customer behavior the way you'd like to see it," Ford said, when asked what the company was doing to improve the fuel economy of its vehicles, at the company's annual meeting.

Hefty incentives, including General Motors Corp.'s "Truckfest" promotion, contributed to a 1.5 percent drop in the average price of large SUVs in April from March, according to Edmunds.com. Prices for compact cars rose 2.4 percent in April from March, Edmunds.com said.

Diesel costs about 15 to 20 cents per gallon cheaper than gasoline. But diesel cars are not sold in several states, including California, due to higher emissions of smog-forming nitrogen oxide. Volkswagen had the U.S. market for diesels cornered, but Mercedes recently launched a diesel version of its E-Class luxury sedan, and Jeep plans to launch a diesel Liberty SUV this autumn.

26. Mexico to Expand Air Quality Monitoring Networks

Mexico will roll out a system for monitoring and reporting urban air quality in 11 cities by the end of the year, government officials announced April 16. The National System of Air Quality Information (known by its acronym, SINAICA), will post daily air quality updates on the Internet. The system was launched in Mexico City, Toluca, and Puebla last December and in Guadalajara this January.

It is operated by the National Ecology Institute (INE) and aims to enhance cooperation on air quality between the states and the federal government. Pollutants covered by the

system include ozone, carbon monoxide, sulfur dioxide, and suspended particulate matter (PM-10). Some networks also will include meteorological data such as wind speed, temperature, and relative humidity to facilitate analysis of pollution levels.

The other cities to be incorporated in the system by end of year are Monterrey, Ciudad Juárez, Mexicali, Celaya, Irapuato, León, and Salamanca. There are also tentative plans to incorporate eight more cities by the end of 2006.

27. Mexico's Fox Announces Moratorium on New Federal Regulations

Mexican President Vicente Fox signed a decree on April 22 imposing a one-year moratorium on new federal regulations in a bid to increase employment and the competitiveness of the Mexican economy. In a speech to Mexican business leaders and Mexico's Federal Regulatory Improvement Council (COFEMER), Fox said that all changes to federal regulations will be put on hold except in "extraordinary cases" where new regulations are needed for protecting public health or the environment, or when they are required by Mexico's international obligations. He said that the one-year moratorium on new federal regulations would help to "contain the impulse to increase regulation" of the Mexican economy.

Fox said that during the one-year moratorium on new federal government regulations, authorities will seek to streamline procedures for creating new regulations. Fox also "invited" local, state, and municipal governments in Mexico to join the federal government's effort to help businesses by limiting new regulations. Fox said 63 bureaucratic procedures that have been identified by business as "high impact" or burdensome are currently under review and that most will be reformed in the first half of 2004.

28. U.S. EPA Reports Rise in Greenhouse Gases

Emissions of greenhouse gases in the United States rose 13 percent during the years 1990-2002, according to a report from the U.S. Environmental Protection Agency to the United Nations. In *U.S. Greenhouse Gas Emissions and Sinks: 1990-2002*, EPA said the U.S. gross domestic product increased by 42 percent during the same period.

From 2001 to 2002, emissions rose by 0.7 percent primarily due to the "moderate economic growth in 2002, leading to increased demand for electricity and fossil fuels, and much hotter summer conditions in 2002, causing an increase in electricity use for air-conditioning."

The final report, submitted to the United Nations April 15, serves as the latest in a series of annual submissions to the Secretariat of the U.N. Framework Convention on Climate Change, to which the United States is a party. The 1992 treaty requires signatories to stabilize "greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system."

29. Rhode Island to Adopt California Vehicle Standards

The Governor of Rhode Island has announced that he will bring California's cleaner cars

to Rhode Island. The program is expected to reduce air toxics by an additional 25 percent more than the federal emission standards, hydrocarbon emissions an additional 16% and greenhouse gas emissions an additional 2% by 2020. Neighboring states including Massachusetts and New York have already adopted the stricter emissions control program designed by California, known as the Low Emission Vehicle program, Phase II (LEV II). The Connecticut Legislature passed the Clean Cars Bill out of the General Assembly recently and the bill is currently waiting for the Governor's signature.

Governor Carcieri's support for this standard comes two weeks after the EPA announced that the entire state of Rhode Island fails to meet health based air quality standards for ozone levels. In addition, the American Lung Association of Rhode Island, for the second year in a row, gave Kent, Washington and Providence Counties F's for ozone levels (there are no monitoring stations in either Bristol or Newport Counties). Since 2000, Rhode Island has had at least 50 days when the air was deemed unhealthy to breathe. On these unhealthy air days, children, the elderly, and people with respiratory problems are encouraged to stay indoors.

30. UC Riverside Study Indicates High Pollution Exposures Inside Buses

A new study being carried out by the Center for Environmental Research and Technology is reinforcing the concerns associated with pollution inside buses. Results to date are summarized below.

| Average Exposure Factors (air concentration * time) in three microenvironments | | | |
|--|-------------------|-----------|----------------|
| | Loading/Unloading | Bus Stops | Urban Commutes |
| Black Carbon ($\mu\text{g}/\text{m}^3 * \text{min}$) | 5 | 20 | 600 |
| Particle Bound PAH ($\text{ng}/\text{m}^3 * \text{min}$) | 45 | 230 | 10,000 |
| NO ₂ (ppb * min) | 105 | 270 | 5,500 |
| Particle Counts ($\#/ \text{cm}^3 * \text{min}$) | 25 | 310 | 10,000 |
| PM _{2.5} ($\mu\text{g}/\text{m}^3 * \text{min}$) | N/A | 130 | 3,500 |

It is striking how much higher the levels of all pollutants that were monitored were inside the buses than they were even at bus stops.

| Concentration Means and Range of Means By Route and by Window Position | | | | | | |
|--|----------------|----------------|--------------|----------------|----------------------|----------------|
| Pollutant | Urban Route | | | | Rural/Suburban Route | |
| | Windows Closed | | Windows Open | | Windows Open | |
| | Mean (a.m.) | Range of Means | Mean (p.m.) | Range of Means | Mean (p.m.) | Range of Means |
| Black Carbon ($\mu\text{g}/\text{m}^3$) | 10 | 2.5-19 | 5.2 | 2.9-9.1 | 2.7 | 0.9-4.8 |
| Particle Bound PAH (ng/m^3) | 198 | 64-400 | 96 | 33-147 | 36 | 14-66 |
| NO ₂ (ppb) | 64 | 34-110 | 73 | 39-120 | 45 | 23-68 |
| Formaldehyde ($\mu\text{g}/\text{m}^3$) | 2.1 | 0.89-4.8 | 1.1 | 0.55-2.1 | 0.93 | 0.34-2.0 |
| Particle Counts ($\#/ \text{cm}^3$) | 113 | 51-235 | 96 | 19-276 | 159 | 29-253 |

| | | | | | | |
|-----------------------|-----|---------|-----|---------|----|----|
| Carbon Monoxide (ppm) | 5.1 | 3.7-6.4 | 2.4 | 1.9-2.9 | na | na |
|-----------------------|-----|---------|-----|---------|----|----|

Of some surprise is the higher mean particle counts on the rural suburban routes than on the urban route. Not surprisingly, levels are usually higher when windows are closed than when they are open.

31. Report Criticizes Canada's Climate Policy

The Canadian government's short-term approach to implementing its Kyoto Protocol commitments will not be effective in reducing greenhouse gas emissions and will harm Canada's efforts to attract business investment, according to a new study released by the Toronto-based C.D. Howe Institute. The government's Kyoto implementation plan is poorly designed because it extends only to the end of the first Kyoto period in 2012, said the study for the economic think-tank, which was headed by Joseph Doucet of the University of Alberta. Canada's implementation plan also improperly protects large emitters by focusing on efforts to convince Canadians to reduce their individual emissions, said the report, titled *The Kyoto Conundrum: Why Abandoning the Protocol's Targets in Favor of a More Sustainable Plan May Be Best for Canada and the World*.

Real progress in reducing greenhouse gas emissions will require long-range policies that enable large emitters to evaluate their costs and implement effective emissions reduction strategies, it said.

32. Johnson Matthey CRT® Particulate Filter Reinstated By California ARB

Johnson Matthey's Environmental Catalysts and Technologies (ECT) group announced that its CRT(r) (Continuously Regenerating Technology) particulate filter was reinstated as a Level 3-verified diesel emission control device by the California Air Resources Board (ARB) on May 21, 2004. Although the CRT filter has always satisfied the Level 3 performance requirements, the ARB revoked its verification in January 2004 due to Johnson Matthey's opposition to newly enacted warranty terms that extended filter manufacturer liability. The ARB announced these new terms in May of 2003, and put them into effect on January 2004.

Through on-going discussions, the two organizations have worked together to resolve the warranty dispute. The ARB has affirmed that Johnson Matthey accepted the warranty statement and fulfilled the requirements for reinstatement. The CRT particulate filter warranty now covers retrofitted engine damage as a direct result of a failed filter.

In addition to the reinstatement of its CRT particulate filter, Johnson Matthey anticipates additional technology verifications in the near future. To control NOx, a major contributor to ground-level ozone and smog, JM's EGRT-- (Exhaust Gas Recirculation Technology) system delivers NOx reductions greater than 40 percent, and CO, HC and PM reductions greater than 90 percent, and is expected to receive ARB verification this summer. Its CCRT-- (Catalyzed-CRT) filter -- Johnson Matthey's second-generation diesel particulate filter for more difficult low-temperature applications -- is expected to receive US EPA verification this month and ARB verification this summer.

33. Four States Challenge Allegheny Energy

A new skirmish over powerplant emissions regulation began recently when four eastern states - New York, New Jersey, Connecticut and Pennsylvania - located downwind of coal-fired power plants, served notice they will sue Allegheny Energy, claiming the company's five plants in West Virginia violate the federal Clean Air Act. They also pointed the finger at Bush and the Environmental Protection Agency (EPA) for what they called lax enforcement of anti-pollution rules.

The EPA dropped its investigation of power plants last year, but New York Attorney General Spitzer obtained the files on Allegheny's West Virginia plants at Albright, Maidsville and Haywood, plus two at Willow Island. According to Spitzer, the EPA investigation revealed the Allegheny plants made major improvements without installing legally required air pollution controls. Allegheny, the fifth-largest emitter of sulfur dioxide in the United States, and 10th largest emitter of nitrogen oxide, denied the allegations.

The states' notice to sue comes as one major environmental group, the Natural Resources Defense Council (NRDC), launched a campaign to cut levels of mercury, another emission of coal-fired power plants. The NRDC had sued the EPA to force stricter enforcement of mercury limits. But the environmental group ultimately agreed to extend the deadline for those target levels to March 15 next year, to give the EPA more time, in the hopes that EPA will use that time to develop a stronger program.

34. Power Plants Top Canada - US Air Polluters, Watchdog Says

Coal and oil-fired power plants are the top air polluters in the United States and Canada according to the Commission for Environmental Cooperation. In its 8th annual survey, the Montreal-based agency, created 10 years ago under the North American Free Trade Agreement, said power plants accounted for almost half of all industrial air emissions in 2001. In addition, 46 of the top 50 polluters were coal and oil-fired power plants. The survey did not include gas or hydro-electric power plants.

The survey of chemical pollution from industrial facilities shows that power plants burning coal and oil produced 45 percent of the 755,502 tons of toxic air releases in 2001. Hydrochloric and sulfuric acids were the most common chemicals released as coal and oil was burned to make electricity.

Power plants, mainly those using coal, were also responsible for 64 percent of all mercury air emissions. Mercury occurs naturally in coal and is released when the fossil fuel is burned to produce electricity. Mercury can build up in a highly toxic form as it moves up the food chain. Those exposed, especially children, can suffer neurological and developmental damage. Total releases of mercury fell 48 percent in 2001 from 2000.

In the United States, three coal-fired power plants reported the largest toxic air releases. They were: Progress Energy's CP&L Roxboro in Semora, North Carolina, Reliant Energy's ' Keystone in Shelocta, Pennsylvania, and Georgia Power's Bowen in Cartersville, Georgia, the commission said.

In Canada, Ontario Power Generation's Nanticoke Generating Station was responsible

for the 10 percent increase in air emission of all toxics in the country from 1998 to 2001, the commission said. Nanticoke followed TransAlta Corp.'s Sundance Thermal Generating plant in Alberta in largest on-site air releases of mercury, the agency said.

Overall, Texas was the top polluter in 2001, followed by Ohio, Michigan and Ontario, the commission said. Together, the four reported 28 percent of total releases and transfers of toxic chemicals for the year.

35. Transport Canada Unveils New Program To Reduce Freight Emissions

Transport Canada has released details of a four-year program to encourage Canada's freight transportation industry to reduce greenhouse gas emissions. The program would offer financial incentives to encourage the use of more fuel efficient technologies, equipment, and practices.

The C\$11 million (\$8.4 million) Freight Efficiency Program is part of the C\$32.3 million (\$24.5 million) Commercial Transportation Energy Efficiency and Fuels Initiative first announced in August 2003, according to a Transport Canada background document. Reducing emissions from the transport sector is a key element of Canada's effort to meet its obligation under the Kyoto Protocol, which calls on Canada to reduce carbon dioxide emissions 6 percent from 1990 levels by 2012, the statement said.

The transportation program will offer financial incentives to encourage the use of emission-reduction technologies in the air, rail, and marine transport sectors, it said. Transport Canada will give preference to technologies previously demonstrated under the five-year Freight Efficiency and Technology Initiative, such as anti-idling devices for rail locomotives, it said.

The department began accepting proposals for funding in May 2004, and it will fund the purchase and installation of equipment to a maximum of 50 percent of total eligible costs, C\$500,000 (\$380,000) over a two-year period, and 50 units or 75 percent of a company fleet, whichever is lowest, it said. Funding from all federal government sources for any project will be limited to 50 percent of total eligible costs, and total government assistance from all levels of government cannot exceed 100 percent of eligible costs.

The Freight Efficiency Program also will support development of new awareness programs to help those who purchase transportation services, either for themselves or for clients, to base their purchasing decisions on environmental considerations, it said. "Where possible, the programs will also be used to identify barriers to the adoption of environmentally friendly alternative methods of shipping, and develop recommendations to overcome them," it said.

The program also will fund up to three marine shore pilot projects, which are to demonstrate options for vessels to use shore-based, low-emissions power supplies rather than on-board generators, the background document said. Potential locations will be identified by March 2005 through a competitive process based on a facility's activities, the potential for emissions reductions, and cost-effectiveness, it said.

36. US Court Rejects Need For Mexico Trucks Environmental Study

The Bush administration can allow tens of thousands of Mexican trucks on U.S. highways without conducting an extensive study of the environmental effects, the U.S. Supreme Court has ruled. The justices unanimously overturned a U.S. appeals court ruling that federal environmental law required the U.S. Department of Transportation to study the impact from the trucks on air quality.

President Bush said in November 2002 that Mexican trucks should be allowed on roads throughout the country, which would bring the United States in compliance with a key provision of the North American Free Trade Agreement. The move was designed to end a 1982 moratorium under which Mexican trucks have been able to operate only in certain narrow commercial border zones, where goods must be transferred to U.S. trucks for transport across the nation. Environmental, labor, consumer and trucking groups sued. They said the Transportation Department had underestimated the impact older diesel Mexican trucks would have on air quality in border states, especially in cities like Houston and Los Angeles that have struggled to reduce pollution to comply with the federal clean air law.

The Transportation Department did an initial environmental review and decided an extensive study was not required. Mexican trucks make about 4.5 million border crossings each year, according to the U.S. government. Mexico has said it has suffered billions of dollars in economic damages from the moratorium.

The U.S. government argued the appeals court ruling had prolonged a significant trade dispute with Mexico, which Bush sought to resolve under the trade agreement that took effect in 1994. Government lawyers said a president's foreign affairs and foreign trade actions were exempt from environmental review requirements.

The groups that brought the lawsuit estimated that 34,000 trucks from Mexico would be on U.S. highways in the first year alone. By 2010, trucks from Mexico would likely emit twice as much of certain pollutants as U.S. trucks, they said.

Justice Clarence Thomas wrote in the court's opinion that the Transportation Department did not violate the law or environmental regulations and that it did not have to do a full environmental review.

37. EPA Still Mulling California, NY Gasoline Waivers

The Environmental Protection Agency is still reviewing exemption requests to its clean air rules from New York and California for making gasoline and would not commit that a decision on the matter will be made this month. California and New York have asked for the waivers from clean air regulations, arguing the stricter requirements make gasoline more expensive and limit supplies.

"It would be inappropriate for me to comment at this point on either the timing or the likely outcome" of the states' requests, EPA Administrator Mike Leavitt told reporters.

The federal government requires that during hot, summer months, the two states sell gasoline blended with ethanol or another additive that raises its oxygen content, making

the fuel burn more cleanly with fewer polluting exhaust fumes.

Leavitt said the waiver requests were "actively being considered." He said the states' requests raise "complex issues" and "require a great deal of analysis." If California and New York were given the exemptions, gasoline produced in nearby states could be trucked in to boost supplies and more fuel imports would also be allowed.

U.S. motorists have seen gasoline prices hit record highs, topping \$2 per gallon. NYMEX crude oil futures surged recently to a new record of \$42.00 per barrel amid fears of a Middle East supply disruption.

38. Exxon Mobil Says US Can't Kick Oil Habit; Skeptical About Alternatives

The United States will have to depend on the volatile Middle East for much its oil over the next several decades, but energy companies still need drilling access to more U.S. areas closed to exploration, the head of Exxon Mobil said in a recent speech. "We (Americans) do not have the resource base to be energy independent. ... We simply cannot avoid significant reliance on oil and gas from the Middle East," said Exxon Mobil chairman Lee Raymond.

In a speech to the Woodrow Wilson International Center, Raymond cited industry estimates that show 50 percent of global proven oil and gas reserves are in the Middle East, and Saudi Arabia alone holds about one in five of the world's oil barrels.

Raymond said to hedge America's energy risks, the United States needs to broaden its base of energy suppliers to include Russia and other countries in Sub-Saharan Africa and the Caspian Sea region that have large petroleum reserves.

He also said the United States should develop its own energy resources, and oil companies must be able to drill on federal areas closed to development, such as offshore California and Florida, the Rocky Mountains and in the Arctic National Wildlife Refuge in Alaska.

"If we do not, as a nation, explore and develop energy from prospective areas in the U.S., and remain committed to use energy more efficiently, the consequence will be even greater dependence on energy from areas such as the Middle East," Raymond said.

Raymond downplayed the hopes that many believe alternative and renewable energy sources will have in helping to solve America's energy problems. In particular, he said corn-based ethanol is "neither an economic or energy-efficient choice, as it can require more energy to produce than it generates in the end." Some U.S. lawmakers and the Bush administration are pushing a broad energy bill to double the use of ethanol as a gasoline fuel additive during the next decade. Raymond said ethanol relies on too much land that would otherwise go to grow food crops or forests. He said if the United States tried to replace just 10 percent of the gasoline it expects to use in 2020 with ethanol, corn would have to be planted in an area equal to Illinois, Indiana and Ohio - which is about one-sixth the size of the land currently used to grow all the crops in the United States

As for wind and solar power, Raymond said it is much more expensive to produce than oil and natural gas. Because the United States and industrialized world will depend on oil and gas for economic growth, Raymond said there is no choice but for carbon dioxide emissions to rise in the decades ahead. "This reality is one that many people recoil for accepting, but the United States and other industrial nations will continue to increase carbon emissions for some time," he said.

39. Study Ranks Bush Plan to Cut Air Pollution as Weakest of 3 Options

A research firm that the Bush administration has previously commissioned to analyze its plan to lower emissions from coal-fired power plants compared the plan with two competing legislative alternative proposals and concluded in a just released report that the administration's plan was the weakest. At the invitation of the environmental coalition Clear the Air, the international research firm Abt Associates used the same methodology in assessing all three. It found that the administration's plan, called the Clear Skies Act, would save as many as 14,000 lives but that the other bills would save more - 16,000 in one case and 22,000 in the other.

The findings, included in a report, "Dirty Air, Dirty Power," were immediately attacked by the administration's chief environmental policy adviser. "You can't just look at power plants alone to understand the program," said James L. Connaughton, chairman of the White House Council on Environmental Quality. "You could say Clear Skies doesn't go as far as the other bills, but Clear Skies combined with our new standards on diesel goes further than both."

The report said that under current policies, nearly 24,000 people died each year as a result of power plant emissions, with the largest numbers in three states, Pennsylvania, Ohio and Florida.

Officials from Clear the Air said the Abt analysis was the first to offer a direct comparison of the plans, making projections on the number of lives saved, illnesses prevented and health care benefits. In general, it found that the administration's plan would provide the fewest benefits, eliminating 58 percent of deaths related to power plant emissions by 2020, the first year all the plans would be fully implemented, and the Jeffords bill the most, eliminating nearly 90 percent.

ASIA-PACIFIC

40. Japan Greenhouse Emissions Study Sees Sharp Increases

Japan's aggregate greenhouse gas emissions in 2001 were as much as 11.2 percent greater than 1990 levels, and even with planned reduction efforts they will overshoot the country's Kyoto Protocol commitment by as much as 10 percent, according to a report from a Ministry of Environment advisory panel released April 16. The report is Japan's first comprehensive projection of 2010 greenhouse gas emissions. It will be used for drafting the next phase of the country's emission reduction program, which is to be completed by early next year.

Japan has pledged to reduce its greenhouse gas emissions by 6 percent from 1990

levels over the period 2008-2012 under the Kyoto Protocol.

Causes for the rise in emissions include greater-than-projected energy consumption in the household, office, and transport sectors, according to the MOE's Global Environment Bureau. Computers and automobiles were the largest contributors to the growth. The industrial sector's emissions in 2001 fell 5.1 percent from 1990, but the sector's emissions are forecast to increase to only 4.4 percent below 1990 levels in 2010. Compared with 1990 levels, emissions from the transport sector were up 22.8 percent in 2001 and are forecast to be up 19.2 percent in 2010; household, up 19.4 percent and 21.2 percent; and office, up 30.9 percent and 28.3 percent, respectively.

41. China's Sulfur Dioxide Emissions Increase; New Measures Introduced

China is losing control over its sulfur dioxide emissions, the State Environmental Protection Administration (SEPA) concluded recently. According to SEPA, from 2000 to 2002, sulfur dioxide emissions were successfully reduced to 19.27 million tons a year, down from 19.95 million tons. However, during 2003, instead of decreasing still further, the emission volume climbed to 22.2 million tons, 2.93 million tons or 15.2% higher than 2002. "As a result, the pollution control plan made for the 'Tenth Five-Year Plan' [from 2001 to 2005] will not be met," SEPA stated in an announcement.

In the announcement, the environmental authority claimed that the significantly increase in the consumption of coal throughout the nation last year, when China turned on more coal-fueled generators in an attempt to reduce the prevailing power shortages, directly led to the surge in sulfur dioxide pollution. China's coal consumption rose by 15.33% to 1.58 billion tons in 2003.

SEPA believes that China's deteriorating environmental conditions came mainly as a result of weak pollution control policies governing thermopower plants. "Thermopower plants generate over half of the nation's total sulfur dioxide each year, and some of them are not equipped with effective facilities to reduce emission, or leave those facilities unused," it noted. "The reluctance of power plants to reduce emissions arises because at present, the fines levied on those plants that emit excessive amounts of sulfur dioxide, which is set at RMB 400 (USD 48.33) per ton on average, are far less than the actual cost of processing the sulfur dioxide, which is more than RMB 1,000 (USD 120.82) per ton," according to SEPA.

"Furthermore, the power prices imposed on the power plants by the authorities, which do not take environmental protection into account, are almost the same regardless, which discourages the power plants from boosting environmental protection."

Out of 279 key desulfurization projects nationwide, less than a half were completed as required. "Certain plants only switch on the completed [desulfurization] equipment when the inspection teams come to check."

"Although the pollution charge for sulfur dioxide emissions has been doubled since 2002, and will be raised to RMB 600 (USD 72.49) per ton in the next year, the level is still far from a level capable of forcing power plants to stop polluting," SEPA noted.

To deal with this problem, SEPA is to put through six new measures to reduce sulfur

dioxide emissions throughout the nation:

- First, according to *Zhongguo Dianli Bao*, the China's national power newspaper, SEPA will continue pushing forward the construction of desulfurization facilities at coal-fired power plants. The authority hopes that by the end of 2005, thermopower generating units totaling 30 million kW will be installed with desulfurization facilities, accounting for 80% of the national total, which will help cut sulfur dioxide emissions to 23 million tons.
- Second, in the heavily polluting sectors of thermopower, iron and steel, electrolytic aluminum and cement, a pollution licensing system will be set up in order to enhance control over the total amount of sulfur dioxide emission.
- Third, local governments are requested to help promote the utilization of "clean fuels" by residents. Both urban and rural residents will be encouraged to consume energy produced through wind power mills, solar panels and natural gas pipelines. In the meantime, coal-fueled stoves or boilers will be restricted.
- Fourth, regulations helping decrease sulfur dioxide pollutions will be drafted and implemented. Those polluters meeting environmental protection requirements will be awarded preferential policies, like tax rebates.
- Fifth, outdated power plants and other industries emitting excessive waste will be shut down. It is said that by 2020, closedowns of polluters will limit the sulfur dioxide emission nationwide to less than 7.84 million tons.
- Finally, fines imposed on polluters will be gradually raised to a level higher than the costs of desulfurization, giving enterprises a financial incentive to install the equipment. Currently, certain factories rather pay fines than build desulfurization facilities because the pollution charges are relatively low.

42. Largest Refinery Zhenhai Begins Shipping High-Grade 98# Gasoline

China's largest refinery Zhenhai Refining & Chemical Co. Ltd. (Zhenhai) said it had made the first shipment of the 98# gasoline, the highest-grade gasoline in China, in late April. The refinery, with an annual processing capacity of 16 million tons, also claimed the April oil throughput had reached 1.3 million tons. The amount marked a nearly 6% drop from March, but was still 2.4% more than the company's original refining plan for the month standing at 1.27 million tons. For May, Zhenhai plans to process 1.4 million tons of crude oil.

Besides quantity, the refinery also leads in the quality of refined products made, including gasoline and diesel, and claims one of the highest diesel/gasoline production ratio among domestic plants. The 98# gasoline produced by it largely observes the EURO III emission standard for vehicles and will see demand grow as better quality cars are sold in China, the refinery said.

Zhenhai plans to gradually bring up the output of the 98# gasoline in future. Previously the best gasoline produced by the refinery had been the 97# clean gas, which is still the highest-grade gas in China except for Shanghai and Shenzhen. (The numeric grade of

gasoline, such as 90, 93, and 97, indicates the oil's octane number, or antiknock properties.)

Currently, the 98# gasoline is only provided in Shanghai and Shenzhen in China. The oil sold in the two cities is produced in Sinopec's Gaoqiao and Guangzhou refinery respectively.

43. Pakistan Considering Euro Standards

Availability of lead free petrol in Pakistan can now allow the adaptation of ECE (Euro) standards as well as a medium to long term approach to standard setting. The Pakistan EPA has undertaken a study for the purpose of drafting vehicular emission standards for new petrol and diesel vehicles, and, in-use petrol and diesel vehicles along with a time frame for implementation. The Study would provide a road map for auto fuel specifications to be implemented throughout the country taking into account the suggested schedule of adoption of Euro standards.

44. China Wants Strong Domestic Car Industry

China has issued a policy paper aimed at consolidating the fragmented car production sector into a strong, domestic industry that can also expand into overseas markets. "Before 2010, our country will become an important vehicle making nation, locally made products will basically satisfy domestic demand, and we will enter the international market in a big way," the State Development and Reform Commission said in the new document. But it stopped short of stipulating Chinese auto makers should control half the market by 2010 - a draft clause that analysts said had spooked big foreign firms such as Volkswagen and General Motors. A draft clause requiring Chinese car makers to export 40 percent of their output was also dropped.

Foreign car makers have pumped billions of dollars into new plants across the country, hoping to sell cars to a ballooning affluent middle class riding rapid economic growth.

Beijing will also decree a minimum investment in new plants of two billion Yuan (\$241.7 million). This effectively bars smaller firms hoping to cash in on a car market that nearly doubled last year to about two million sedans, as Beijing clamps down on over-investment in the auto, steel and other sectors.

Most domestic players such as Shanghai Automotive Industry Corp (SAIC) make cars with foreign partners. Only a handful, such as Brilliance China Automotive Holdings have developed their own makes. Of more than 120 firms, just two - SAIC and First Automotive Works - make more than half a million vehicles a year.

"The goal of this strategic restructuring is to help auto makers develop into large-scale conglomerates," the state planners said in the policy document.

Beijing has encouraged home-grown firms to beef up expertise in car-making, worried its increasingly open vehicle market could be swamped by imports of cars and parts. The government will also proffer tax breaks to companies to develop their own products as China tries to wean local firms off relying on foreign technology.

The document also drops a clause forcing foreign car makers to use separate sales channels for locally made and imported models.

But multinationals can still only own half a joint venture. In practice, however, the government has been letting the likes of Honda Motor Co control plants that mainly export.

Out of concern for energy conservation and environmental protection, the new policy encourages the development of automobiles with low emissions and fuel consumption. It requires that the "average fuel consumption for newly assembled passenger vehicles by the year 2010 will be reduced by at least 15 percent compared to the level of 2003."

China has pledged to slash tariffs on imported vehicles to 25 percent by July 2006 from 40-50 percent now, and abolish all quotas by 2005. Imported cars made up less than 10 percent of national sales of about two million units last year.

45. GM to Invest Over \$3 Billion in China

General Motors Corp. plans to invest more than \$3 billion in China over the next three years with the introduction of new vehicles and powertrains, the building of new facilities and expansion of manufacturing and a new financing joint venture, the automaker has announced. The new investment will be funded by profits from GM's China joint ventures, and the company said it is expected to open up jobs and business opportunities in North America and China.

The world's No. 1 automaker and its Chinese partners plan to introduce nearly 20 new and upgraded products, including luxury vehicles, in the next three years, most made in China. Among those will be several Cadillac models, which will be made at Shanghai GM and imported from North America.

The company said it also will more than double its vehicle assembly capacity in China, to 1.3 million units by 2007.

The company's announcement on Sunday came after first-quarter earnings released in April showed it was improving in Asia and strong in its financing arm. GM's automotive operations reported a 12 percent increase in earnings in the first quarter of 2004, from \$546 million last year to \$611 million, despite lower production levels in North America and Europe. GM Asia Pacific earned \$275 million, up from \$75 million a year ago. Its market share grew from 4.3 percent last year to 4.7 percent in the first quarter, led by gains in China and India.

In the first quarter, GM and its partners sold roughly 178,000 vehicles in mainland China, a 56 percent jump from the same time in 2003.

46. China Raises Diesel Price To Curb Refinery Losses

China's top government planning body, the National Development and Reform

Commission (NDRC) has announced that it would push up the government guidance retail price for the benchmark 0# diesel by RMB 280 (USD 33.8) per ton nationwide, representing an increase of around 8% from last December when the price was last changed. Immediately following the announcement, the 0# diesel price at the pump in Beijing jumped from RMB 3.02 (USD 0.36) to RMB 3.28 (USD 0.40) per liter. The -10# diesel price rose from RMB 3.24 (USD 0.39) to RMB 3.51 (USD 0.42) per liter. The -20# diesel price rose from RMB 3.38 (USD 0.41) to RMB 3.66 (USD 0.44) per liter, with that of -35# diesel from RMB 3.54 (USD 0.43) to RMB 3.84 (USD 0.46) per liter.

China's two largest oil companies, CNPC and Sinopec Group, controlling more than half of the gas stations in the country, are permitted to increase the government guidance price by a maximum of 8% at their gas stations and usually do precisely that when the government acts.

NDRC named the recent surge in the crude oil price on the international market as the main reason for the move. The Chinese government makes irregular changes to its retail guidance prices for domestic gasoline, diesel and jet fuel, based on the average fluctuations in New York, Rotterdam and Singapore.

China imported 30.14 million tons of crude oil in the first quarter of this year, representing a year-on-year growth of 35.7%. It is estimated that the whole-year imports could well exceed 100 million tons, as domestic demand continues expanding in proportion with overall economic growth.

As NDRC declared in its official statement, the price hike is also intended to restore balance to the ratio between the gasoline and diesel price, in order to rekindle local refineries' enthusiasm for diesel over the coming summer, when consumption is expected to reach another peak.

Responding to the volatility on the world crude oil market early this year, the NDRC raised the guidance price for gasoline and jet fuel retail at the end of March this year, but left the diesel price unchanged in fear of tampering with the government policy to encourage more rural grain production in spring. The policy's point of departure is to reverse the shortfall in the domestic grain stockpile. "The current ratio of gasoline and diesel prices has been severely twisted out of shape. It is obvious that the diesel price has been excessively low, undermining to a degree the enthusiasm of refineries to produce diesel," said the NDRC in the statement. "The diesel price markup will restrict unreasonable consumption and relieve the domestic burden regarding diesel supply."

47. Fuel Cell Auto Fleet Debuts In Beijing

A fleet of fuel cell vehicles recently passed by Tiananmen Square, the 500-year-old gate of the Chinese imperial residence in downtown Beijing. The high-tech fleet included a Volkswagen-like car and a bus, both of which were designed and produced by Chinese scientists. Experts from Tongji University put a fuel cell-powered engine and other systems into the Volkswagen body while those at Tsinghua University named the bus Line No. 863 after the state high-tech development program, code-named Project 863, which finances their research.

While the first fuel cell fleet was traveling Beijing's streets, the Chinese government

signed a contract with the Global Environment Facility and the United Nations Development Program on purchasing fuel cell buses via global bidding.

The demonstration project agreed by the three sides on clean energy transport for the 2008 Beijing Olympics costs 32.36 million US dollars, 45 percent of which is from the Chinese government.

One successful bidder, DaimlerChrysler, will sell three Mercedes-Benz Citaro fuel cell buses to Beijing, the same as the 30 Citaros running in ten European cities. Commuters in Beijing might run into one of the three Citaros from September 2005 on. About ten such vehicles are expected to serve the Beijing Olympics and the World Expo 2010 in Shanghai.

Mao Zongqiang, a scientist for China's hydrogen energy program, said China produces eight million tons of hydrogen yearly, ranking the second in the world. Large-scale manufacturing of hydrogen makes the development of fuel cell vehicles possible, Mao said.

DaimlerChrysler's SIM Technology research and development center in Shanghai is helping the Chinese government with the electronic components of the first Chinese fuel-cell vehicle. The auto giant has produced 20 fuel-cell research vehicles and prototypes since the early 1990s, and will deliver 60 hydrogen fuel-cell vehicles to the U.S., Europe, Japan and Singapore this year. It expects to have more than 100 fuel-cell vehicles on the road worldwide by the end of the year.

48. Serious Challenges To China's Sustainable Development In Next Decade

The next ten years will pose serious challenges to China's sustainable development, as many key problems remain unsolved even though China is witnessing rapid economic growth, according to Zuo Xin, the vice director general of the Beijing branch of the China Council for the Promotion of International Trade, speaking at the China-EU Sustainable Business CEO Forum in Beijing. Zuo listed a series of problems that need to be solved by China in the next ten years. "Among these problems are the increasing aging of the population, the relative shortage of resources, the huge consumption of oil and gas, low production efficiency coupled with high energy consumption, the deterioration of the environment and water supply, as well as atmosphere pollution and desertification."

Another government official, Sun Hong, the vice director of the Department of Rural and Social Development under China's Ministry of Science and Technology (MOST), echoed Zuo's view. "China has become the largest exporter of electronic and textile products and its economy has maintained rapid growth in the last twenty years, but that was at the price of a more rapid consumption of natural resources. China has a vast population and faces a relative shortage of resources. China is making efforts to change its 'world factory' position and strengthen technological innovation," said Sun.

According to a circular distributed by the EU-China Environmental Management Cooperation Program at the forum, China will finish the process of industrialization by around 2020, and in the next 40-50 years, 400 to 500 million more people will move from the countryside and into the towns and cities. Industrialization and urbanization will pose unprecedented challenges to China's resources, its environment, and its social and

economic development.

49. Chinese Scientist Suggests Setting Up National Policy On Climate Change

One of China's leading meteorologists has suggested that the country needs to set up a uniform policy on climate change, in order to coordinate diplomatic, economic and social measures for ensuring the country's sustained development. Qin Dahe, chief of the China Meteorological Administration, who attended the 12th conference of the Chinese Academy of Sciences (CAS) academicians, said that the global warming brought about unbearable, irreversible and sustained effects to the Chinese economic and social development. However, he said, there is still no plan to draft any strategy or policy fighting the global warming trends.

"We need to comprehensively study the effects from climate change and take appropriated measures accordingly," said Qin, who is also a CAS academician, adding that a national policy is desperately required. He appealed the country to invest more funds into long term research on climate change. Meanwhile, he said a nationwide observation network on climate system would be useful.

"It's very sensitive and complex for every country to respond multilateral negotiation for climate change," Qin said. "Thus," he said, "it's vitally important to set up a uniform policy."

50. Conservation Plan Launched in Shanghai To Save Power

The Shanghai Economic Commission and seven other government departments launched a weeklong energy conservation promotion in an effort to prevent severe power shortages this summer, according to Shanghai Daily. In order to limit power usage in the city during peak hours this summer, factories will be encouraged to shift production schedules to overnight and the city will put a halt on preferential electricity charges previously offered to some industries. The city will also educate residents and office building managers about ways to save energy.

"Insufficient energy supply and power shortages have become a bottleneck for the city's rapid development," city Vice Mayor Hu Yanzhao said. "The economical and efficient use of energy is urgent not only to battle the current shortages, but also to achieve a sustainable economic and social development eventually, as well as to enhance the city's industries' international competitiveness."

Thousands of companies were forced to shift their production to weekends or night hours to avoid peak hours last summer. Intentional cutoffs of power supply were also enforced at times to relieve the overloaded grid and avoid blackouts. The demand for power this summer is expected to rise by 10 to 15 percent from last year. The city could face a shortage of up to 4 million kilowatts this summer in the event of a prolonged heat wave, power authorities estimated.

To raise local residents' awareness of energy conservation, 300 posters on energy conservation will be posted on downtown telephone booths. The city's major TV channels will run energy conservation advertisements for free starting this week. A hot

line has been set up to offer advice on energy saving methods and receive reports on wasteful use of energy. Government offices, shopping malls, office buildings, hotels and high-grade entertainment venues have been told to set their air conditioners above 26 degrees this summer.

Enterprises and factories will shift their working schedule to get more days off when the mercury tops 35 degrees, and have one extra day of work when temperatures are cooler, officials said.

As the big power consumers, local industries are also advised to find various ways to contribute to a more efficient use of energy. Officials from the Shanghai Economic Commission have worked out criteria on energy consumption in different industries as a guide to judge whether a factory or an industry in the city wastes resources.

LATIN AMERICA

51. Uruguay Eliminates Lead in Gasoline

Lead was finally phased out of gasoline last month. It appears that MTBE will be used as an octane substitute.

AFRICA

52. Dakar+2 Conference For Clean Fuels In Africa A Big Success

The Dakar+2 conference was held during May 5-7 and by all accounts was very successful. It was very well attended: the Technical Session had over 150 representatives (from all but 4 Sub-Saharan (SS) Africa countries). The Ministers' Session had about 100 participants with 30 Ministers of Environment and Energy. Most SS African countries were represented. This allowed a real Ministerial Session on the Friday afternoon.

During the Technical Session, the five working groups covering the entire Sub Saharan Africa region prepared output sheets detailing progress made thus far by individual countries within their sub-region in phasing out leaded gasoline. The output sheets also detailed the necessary actions and organizational responsibilities for ensuring that countries and sub-regions phase out leaded gasoline by December 2005. (It is important to note that countries that had not previously been reached in the phase-out program such as Somalia, Liberia and Djibouti, participated in the Conference for the first time and committed themselves to "join the family"). The Ministers and heads of delegations reviewed the recommendations for their respective countries and sub-regions carefully and many took them for actions to be implemented when they would return home.

Klaus Töpfer promised, replying to questions from Ministers, that it will be a UNEP/PCFV priority to finish the sulfur document and ensure that it will contain concrete recommendations to developing countries on the options they have to address the sulfur issue in their countries.

At the Ministerial Session, it was interesting to see how little the ministers were aware of

the issues. In the morning there were presentations, which gave a good overview of the key issues. Some of the Ministers were still concerned with issues of valve seat recession, price of unleaded gasoline vis-à-vis leaded gasoline and cost of switching over to unleaded gasoline especially for countries with refineries. Logistical constraints in supplying landlocked countries were identified as a major limitation to phasing out leaded gasoline especially in the East African region due to reliance on the pipeline system.

The outcome of the Ministerial Session was very positive with Ministers recommitting to the phase out date of December 2005. Public awareness was singled out by most countries as the number one priority in leaded gasoline phase out. Countries also reached a consensus that the ultimate objective in leaded gasoline phase out was to improve urban air quality and that the region lacked technical and financial capabilities to manage air quality thus there was need for assistance. The need for a sub-regional approach in phasing out leaded gasoline was emphasized especially in regard to preparation of gasoline specification and standards and in light of increased movement within the sub-regions.

GENERAL

53. OECD Summit Calls for More Environmental Taxes, Full Study of China

Environment ministers from the world's industrialized countries concluded a two-day summit April 21 with calls for greater use of taxation to protect biodiversity, for annual meetings on sustainable development, for more engagement with developing countries, and for an in-depth environmental review of China. The 30 ministers, gathered for a triennial meeting at the Organization for Economic Cooperation and Development, also generally acknowledged that the world's industrialized countries had failed to meet a series of environmental performance targets adopted in 2001, particularly with regard to greenhouse gas emissions. Ministers said these goals would remain unmet in 2010 unless countries invested more political will in meeting them.

A closing statement from the meeting's chair, Irish environment minister Martin Cullen, said "further action is needed urgently" to reduce greenhouse gas emissions, address the impact of climate change, limit biodiversity loss, and allow economic growth without seriously harming the environment. Cullen told a post-meeting press conference that countries must take "a more ambitious approach," particularly on the issue of climate change, which he said would remain "at the core" of the environment debate for years to come. "The Kyoto Protocol is not going to go away," Cullen said, noting that 120 countries had ratified the treaty, making it "a central concern" for the business community. He said "ministers stressed the need to ensure sufficient ratification of the Kyoto Protocol for its entry into force," but added that the U.S. delegation at the meeting maintained its opposition to mandatory greenhouse gas emissions cuts called for in the climate change treaty.

That delegation, led by U.S. Environmental Protection Agency Administrator Mike Leavitt, said the U.S. government had not budged from its opposition to the Kyoto Protocol. While most ministers disagreed with the U.S. climate change approach, they expressed unanimous agreement for several new OECD initiatives during the April 20-

21 meeting.

Ministers agreed to hold annual meetings of sustainable development experts from the 30 OECD member countries, and suggested the need for a future summit between environment, finance, and development ministers.

Ministers also endorsed a non-binding "Recommendation on the Use of Economic Instruments in Promoting the Conservation and Sustainable Use of Biodiversity" that calls on governments to increase the use of fees and taxes to control access to and consumption of natural resources. The "recommendation," which was approved April 21 by the OECD Council--the highest decision making body for the 30-country group--provides numerous examples of market-based mechanisms that countries could employ to better protect natural resources and biodiversity.

Ministers also adopted policy recommendations calling for better tracking of material flows through the economy, from extraction through manufacturing and waste management.

China, one of seven non-member countries that participated in the ministerial meeting, requested that the OECD Secretariat and member countries conduct a comprehensive survey on how its rapidly expanding economy is affecting the environment.

54. Air Pollution Linked To Cot Deaths

Air pollution may be to blame for up to a sixth of cot deaths, according to a new study.² Scientists have uncovered powerful new evidence that poor air quality is responsible for unexplained infant deaths.

They believe fumes from traffic and power stations could cause as many as one in six cot deaths, and be responsible for almost a quarter of the total mortality rate among babies under the age of one.

The ground-breaking study claims even low measures of pollution can cause tragedy.

The experts called for a radical reduction in the level of emissions considered "acceptable" - warning that failure to tackle pollution could have devastating implications for infant health. Cot death - also known as Sudden Infant Death Syndrome, is the leading cause of death among babies under the age of one in Britain, affecting about 200 infants a year.

Most cases remain a mystery, although the baby's sleeping position, temperature and exposure to cigarette smoke are the most widely discussed risk factors.

The findings are based on medical records of more than 700,000 babies from 25 areas. The locations were selected to reflect the widest possible range of air quality.

² Air Pollution Attributable Postneonatal Infant Mortality in U.S. Metropolitan Areas: A Risk Assessment Study, **Reinhard Kaiser, Isabelle Romieu, Sylvia Medina, Joel Schwartz, Michal Krzyzanowski and Nino Kunzli**, *Environmental Health: A Global Access Science Source* 2004, 3:4 (published 5 May 2004)

Researchers found that on average, 115 of every 100,000 babies died before reaching the age of one. The international research team focused on infants known to have died from respiratory illnesses or suffered cot death. They obtained government data on the level of soot, dirt and dust in the atmosphere in each area. They calculated that 16 per cent of the cot deaths were caused by pollution.

Based on exposure-response functions from a U.S. cohort study, the authors assessed the attributable risk of postneonatal infant mortality in 23 U.S. metropolitan areas related to particulate matter <10 µm in diameter (PM10) as a surrogate of total air pollution. The estimated proportion of all cause mortality, sudden infant death syndrome (normal birth weight infants only) and respiratory disease mortality (normal birth weight) attributable to PM10 above a chosen reference value of 12.0 µg/m³ PM10 was 6% (95% confidence interval 3-11%), 16% (95% confidence interval 9-23%) and 24% (95% confidence interval 7-44%), respectively. The expected number of infant deaths per year in the selected areas was 106 (95% confidence interval 53-185), 79 (95% confidence interval 46-111) and 15 (95% confidence interval 5-27), respectively. Approximately 75% of cases were from areas where the current levels are at or below the new U.S. PM2.5 standard of 15 µg/m³ (equivalent to 25 µg/m³ PM10). The authors concluded that in a country where infant mortality rates and air pollution levels are relatively low, ambient air pollution as measured by particulate matter contributes to a substantial fraction of infant death, especially for those due to sudden infant death syndrome and respiratory disease. Even if all counties would comply to the new PM2.5 standard, the majority of the estimated burden would remain, according to the researchers.

55. Pollution Could Affect Unborn Children

Soot and other types of air pollution can not only affect animals and people, but their unborn children, too, researchers have reported. They found that genetic mutations known to be caused by some pollutants can be passed through sperm to baby mice. Presumably, the same thing could happen to human beings, they report in the journal *Science*.³

The researchers put caged mice downwind of steel mills in Hamilton, Ontario. Some got filtered air and some got what the wind brought. Mice that breathed the polluted air were much more likely to father offspring with clear genetic mutations than mice that breathed filtered air, the team found. "Mice exposed to HEPA-filtered air at the urban-industrial site had paternal mutation rates that were 52 percent lower," they wrote.

"Our study identifies airborne particulate matter as a contributor to heritable mutation induction in mice; however, a direct link between ... mutations and health effects has not yet been established," they wrote. "Nonetheless, structural changes in DNA have been detected in human sperm after air pollution exposure."

Air pollution has also been linked to heart disease, lung cancer and birth defects, they noted, citing many studies.

³"Reduction of Particulate Air Pollution Lowers the Risk of Heritable Mutations in Mice", Somers, McCarry, Malek and Quinn, *Science*, 14 May 2004, Vol. 304

How the inhaled pollutants cause mutations is not yet clear, they said.

Commenting on the study in the same issue of Science, Samet, DeMarini and Malling noted that, "Confirmation of the Somers et al findings would extend the adverse health effects of air pollution beyond effects on somatic cells in the exposed generation to germ cells – with the attendant implications for health risks to future generations."

56. Wetter World Counters Greenhouse Gases Say Scientists

Australian scientists have found the Earth may be more resilient to global warming than first thought, and they say a warmer world means a wetter planet, encouraging more plants to grow and soak up greenhouse gases. "The global water cycle has changed in response to greenhouse emissions," almost 100 Australian greenhouse scientists said in an annual statement on their research. "As the world warms it is, on average, getting wetter," said the scientists, who met recently under the banner of Australia's Cooperative Research Center for Greenhouse Accounting.

A wetter and cloudier world would see more plants and more photosynthesis to counter greenhouse gases and also mean less evaporation as less solar radiation reaches the Earth.

"Contrary to widespread expectations, potential evaporation from the soil and land-based water bodies like lakes is decreasing in most places," the scientists said. An increase in trees and shrubs in the world's grasslands in recent decades was a major counter to greenhouse gases, they said.

"Forests, farms and grasslands across the world absorb significant volumes of greenhouse gases. They have the potential to absorb more, ameliorating climate change.

"Properly managed, they could buy time for the world's people to make the major reductions in greenhouse emissions from power generation, industry and transport that will be required to reduce the damage from climate change."

57. World's Hydrogen Fuel Stations Up By 33 Pct To 87

Hydrogen fuelling stations for fuel cell vehicles increased by a third in the past year to a total of 87 worldwide, according to a survey by industry website Fuel Cell Today. "Probably the most ambitious efforts in creating an infrastructure are currently taking place in California, said the report's author Stefan Geiger. "Many government bodies and organizations have increased their work on hydrogen infrastructure issues and started deploying vehicles for tests."

California's governor Arnold Schwarzenegger aims to make the U.S. state the leader in introducing hydrogen-powered cars by building 200 fuel stations this decade. U.S. President George W. Bush has also sought a 43 percent increase in federal spending to develop fuel cells cars and service stations, which cost around \$500,000.

But it will be still be a long time before the average motorist fills up their tank with

hydrogen instead of gasoline. The costs of manufacturing fuel cell engines as well as storing and distributing the hydrogen are still major hurdles, the report said.

The European Union is trying to cut carbon dioxide emissions as part of its commitments to the United Nations Kyoto Protocol, and has introduced DaimlerChrysler fuel cell buses in 10 cities, but its funding still lags well behind the United States and Japan.

The survey found more industrial gas suppliers and equipment manufacturers are now working on cheaper small-scale refueling facilities, capable of supplying enough hydrogen for just a couple of vehicles per day.

58. Air Pollution a Serious Threat to Heart Health

Exposure to air pollution not only creates breathing problems but also poses a serious threat to cardiovascular health and overall health, the American Heart Association (AHA) warns in its medical journal *Circulation*.⁴ An AHA panel led by Dr. Robert D. Brook of the University of Michigan in Ann Arbor conducted a comprehensive review of the medical literature on air pollution and cardiovascular disease. "The existing body of evidence is adequately consistent, coherent, and plausible enough to draw several conclusions," they write.

- One conclusion is that short-term exposure to elevated levels of particulate matter (PM) "significantly contributes to increased acute cardiovascular mortality, particularly in certain at-risk subsets of the population."
- Also, hospital admissions for several cardiovascular and pulmonary diseases increase acutely in response to higher levels of PM exposure.
- The evidence also implicates prolonged exposure to elevated levels of PM in reducing overall life expectancy by a few years, according to the panel.

"The increase in relative risk for heart disease due to air pollution for an individual is small compared with the impact of established cardiovascular risk factors," Dr. Brook said in a statement. "However, this is a serious public health problem due to the enormous number of people affected and because exposure to air pollution occurs over an entire lifetime."

The panel is particularly concerned that "a number of the studies" have shown associations between particulate air pollution and harmful cardiovascular effects even when levels of PM were within the current standards. This suggests that "even more stringent standards for PM should be strongly considered" by the Environmental Protection Agency, they write.

No single study was responsible, said Dr. Robert D. Brook, an assistant professor of medicine at the University of Michigan who headed the committee that drew up the statement, just "a sense among those responsible that the level of evidence had risen to "a point where for the first time, the American Heart Association [AHA] should recognize air pollution as a public health problem."

⁴ *Circulation*, June 1, 2004.

One study cited by the committee, done by the American Cancer Society, reported a numerical relationship between risk and exposure, with the risk of death from a cardiovascular event increasing by 12 percent for every increase of 10 micrograms per cubic meter of air of fine particle pollutants. Levels of fine particulate pollution can vary by 30 milligrams or 40 milligrams per cubic meter of air day by day, Brook said.

Most of those deaths triggered by air pollution are due to heart attacks and other events that cause blockage of arteries, but deaths from other causes such as heart failure and heart rhythm abnormalities also rise as pollutant levels increase, Brook said.

It's especially important for people at high risk -- those older persons or those with diabetes, for example -- to be aware of day-to-day levels of air pollution, Brook said. When pollution levels go up, they can take simple protective measures such as restricting activity or staying indoors in a less-polluted environment, he said.

59. Global Airline Boom Hurting The Environment

Environmentalists say airlines rate as one of the most polluting forms of transport, with 16,000 commercial jets producing over 600 million tons of carbon dioxide every year. The United Nations Intergovernmental Panel on Climate Change estimates aviation causes 3.5 percent of man-made global warming and that figure could rise to 15 percent by 2050. NASA scientists say condensation trails from jet exhausts create cirrus clouds that may trap heat rising from the Earth's surface. This could account for nearly all the warming over the United States between 1975 and 1994. And air travel is booming.

Despite the industry's heavy environmental toll, guidelines on international aircraft emissions were excluded from the Kyoto protocol on climate change and aviation fuel is tax exempt.

Aerospace firms have made huge leaps forward, with commercial jets now 70 percent more fuel efficient per passenger mile than they were 40 years ago, thanks to better engines, lighter materials and aerodynamic designs. And cost-obsessed carriers are continuously searching for ways to use capacity better, find more direct flight paths and cut congestion in order to trim the hefty fuel bills which make up 25 percent of airline operating costs. Most discount airlines have young, more fuel-efficient fleets and newer airlines in regions such as Asia have leap-frogged older technologies to buy new planes.

Dirt cheap airfares due to the runaway success of low-cost carriers mean thousands more people are now taking to the skies for short hops around Europe or the United States, and air travel is set to rocket in the fast-growing economies of Asia.

Links between aviation and climate change have attracted widespread attention in Europe where environmental groups are calling for measures to curb the impact of airline emissions. Environmental taxes, airline emissions trading or increased investment in high-speed rail networks are the most commonly touted methods to wean passengers from air travel. But in North America, which makes up 40 percent of world air travel, the issue has yet to make a big public impact and the environment remains low on the agenda in developing countries as they race for economic growth.

Air travel in China alone, which has the largest number of domestic and international scheduled passengers in the Asia-Pacific region, is forecast to leap over 200 percent from nearly 67 million in 1999 to around 215 million in 2014.

The aviation industry opposes any new green taxes, saying many airlines are still in recovery mode. The world's carriers lost some \$30 billion in the years since the Sept. 11, 2001, attacks on the United States. Instead of curbing damaging emissions, new levies would only bump up fares and damage low-cost carriers in particular, say aviation groups.

But green initiatives such as global emissions trading schemes for airlines, under review in Europe, are gaining favor. British Airways already participates in emissions trading and budget airline EasyJet said it would support any government moves toward an aviation emissions trading scheme.

60. Platinum Stockpiles Rise As New Emission Era Nears

Automotive purchases of platinum rose 23 percent in 2003 as U.S. car makers replenished inventories before tough tailpipe pollution rules take effect this year, according to a new study. Rising sales of diesel cars in Europe, the retrofitting of catalysts to heavy duty vehicles in Japan, and changes to overall ratios of platinum and palladium used in catalytic converters were also factors, refining company Johnson Matthey said in its Platinum Survey 2004.

Platinum autocatalyst purchases rose 600,000 ounces to 3.19 million ounces, leading to a small rise in overall platinum sales last year by offsetting a drop in jewelry demand for the costly precious metal, it said. U.S. auto companies returned to the market for almost all their metal requirements, having run down stocks in 2002, according to Johnson Matthey. "By 2003 stocks had been largely depleted and purchases of platinum climbed to more closely reflect its underlying use." The U.S. car industry bought 880,000 ounces, up from 570,000 in 2002, helped by rising sales of sport utility vehicles. "Light trucks now account for almost 54 percent of all light vehicle sales in the USA," the report said. "Because of their larger engine sizes, light trucks generally require catalysts with larger volumes of higher PGM loadings than do cars."

Europe's auto sector took 1.34 million ounces in 2003, 11 percent more than the previous year as sales of diesel cars rose strongly. Only platinum is used in diesel vehicles, which are much more popular in Europe than the United States, although one refining and chemical company recently developed a palladium diesel technology.

Japan is forcing a reduction in the emission of particulate matter from heavy duty diesel trucks and buses around Tokyo.

In the United States, the phase-in of Tier 2 federal and California's LEV 2 (low emission vehicle) regulations start this year. These require a reduction in NOx emissions of around 75 percent from existing limits as well as cuts in hydrocarbon emissions. "In some instances, this led to an increase in catalyst platinum loadings in 2003 as car companies launched Tier 2 compliant vehicle models ahead of the regulations," the report stated.

Palladium demand for catalytic converters rose 13 percent to 3.46 million ounces, again because car companies used up stockpiles in 2002. In Europe, the shift away from gasoline powered cars led to a 12 percent drop in automotive palladium use. In North America, car makers bought 1.21 million ounces of palladium to build up inventories. But underlying palladium use in catalysts dropped more than 20 percent.

"The decline was a result of the intensive thrifting of palladium loading that was achieved by catalyst manufacturers, prompted by pressure from U.S. auto makers following the palladium price spike in 2000 and 2001," Johnson Matthey said.

Platinum prices hit 24-year highs early this year at \$930 an ounce, while palladium was traded on either side of \$200 an ounce. Palladium hit a lifetime high in January 2001 near \$1,100 an ounce. "Naturally, given the reversal in the price relationship between the two metals, U.S. auto makers are now seeking to migrate an increasing proportion of their future vehicle models to palladium-based catalysts," the report said.

Recovery of platinum from recycled catalysts increased by 14 percent to 645,000 ounces in 2003. Palladium scrap use climbed by 11 percent to 410,000 ounces.

The global car industry purchased 665,000 ounces of rhodium in 2003, up 11 percent from 2002.