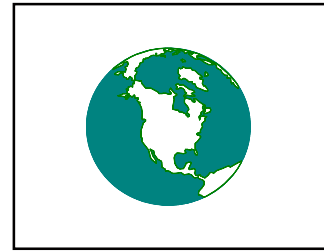


Michael P. Walsh
3105 N. Dinwiddie Street
Arlington, Virginia 22207
USA
Phone: (703) 241 1297 Fax: (703) 241 1418
E-Mail mpwalsh@igc.org
<http://walshcarlines.com>



CAR LINES

Issue 2005 - 5

October 2005

Table of Contents

1.	New EU Environmental Strategies Set For Launch	4
2.	EU Issues Air Pollution Thematic Strategy	5
3.	Swedish EPA Demands Stronger EU Air Strategy	9
4.	Commission Launches Crackdown On Fine Particles (PM_{2.5})	10
5.	Particles In Air Of Europe's Cities Cuts Year Of Life	10
6.	NGO's and Industry Differ On Tighter EU Car Emission Limits	11
A.	<i>T&E Demand Further Tightening</i>	11
B.	<i>ACEA Slams "Unnecessary" Emission Controls</i>	12
C.	<i>ICCT Calls For Tighter Euro 5 Standards</i>	13
7.	Car and Household Emissions Threaten UK's CO2 Goals	14
8.	Trittin Moots European Car Makers' Climate Fund	15
9.	France Announces Incentives, Penalties To Reduce Emissions	15
10.	Daimler Seeks Partners for "Mild" Hybrid Cars	17
11.	High Oil Prices And Katrina Change Political Climate in Europe	17
12.	Italy Re-appoints Matteoli as Minister;	18
13.	Europe Still Suffers Under Acid Rain	18
14.	Car PAH Emissions "Soon No Longer A Concern" Says CONCAWE	20
15.	Local Council Debates 'Green' Levy On Taxi Fares	20
16.	Volvo Cuts Emissions In Logistics Revamp	21
A.	<i>Full Loads</i>	21
B.	<i>Efficient handling of CKDs</i>	22
C.	<i>Cab Production</i>	22
17.	Ford and Fiat Plan to Collaborate on Small Car	23
18.	British Airways Starts Emission Offset Scheme	23
19.	German Left To Lead On Environmental Policy	25
20.	Russian Plans for Emissions Rules Would Match EU Standards by 2010	25
21.	Budgets and Taxes	26
A.	<i>Portuguese Tax Would Offer Incentives For Clean, Efficient Cars</i>	26
B.	<i>Italian Parliament Considers Tax Increase For Cars Exceeding CO₂ Limit</i>	26

C.	<i>France's Proposed 2006 Budget Increases Environmental Spending</i>	27
D.	<i>Netherlands Budget Aims Funds For Air Pollution, Renewable Energy</i>	28
E.	<i>Sweden's Proposed 2006 Budget Outlines Changes</i>	28
22.	British Plan to Control Emissions From Large Plants Wins EU Approval	29
23.	EU Commission Expects To Expand, Improve Emissions Trading	29
24.	EU Issues Proposal to Include Airlines in Carbon Trading Scheme	30
25.	Studies Review Options To Cut Ship Emissions	31
26.	Report Calls for Coherence in U.K. Climate Policies	31
27.	EU Ministers Agree on Negotiating Position For Kyoto Protocol Meeting	32
28.	Italy's Tuscany Taps Program to Upgrade Bus Fleet	32
29.	Oregon Car-Emissions Veto Draws Lawsuit	33
30.	New Jersey Moves Toward Stricter Vehicle Emission Standards	33
31.	US States Fight EPA on Greenhouse Gases	34
32.	Schwarzenegger's Air Board Chair Rejected	34
33.	Storm Stretches Refiners Past a Perilous Point	35
34.	US Eases Air Pollution Rule to Boost Fuel Supply	37
35.	Ultra Low Sulfur Diesel Still Alive After Hurricanes	37
36.	Baytown Exxon Mobil Plant Up And Running	38
37.	DOE, Automakers Say Gas Act May Jeopardize Clean Diesel Vehicles	38
38.	Key Senator Indicates Support For Tougher CAFE Rules	39
39.	Auto Makers Reportedly Want Bush to Act on Energy	40
40.	Ford to Boost Production of Hybrids Tenfold	41
41.	Canada Proposes Toxic Designation For Six Greenhouse Gases	42
42.	United States, Canada Agree to Cooperate To Reduce Freight Emissions	43
43.	Mexico Ends CFC Production Earlier Than Required Under Treaty	44
44.	State Department Seeks Ratification Of MARPOL Treaty	44
45.	Court Rejects EPA Air Pollution Revision	45
46.	Former Energy Czar Adopts Strong Goals For Cleaning Up LA Port	46
47.	Union Pacific Works To Reduce Diesel Emissions In Texas	47
48.	U.S. Climate Policy 'Robust and Flexible,' Says Administration Official	48
49.	GAO Cites Rise in Federal Funding For Climate Programs; Uncertainties	49
50.	Canada's Environmental Auditor Criticizes Government Performance	51
51.	Report Claims Large Increase in Canadian Industries' Pollution	52
52.	Ontario to Mandate Ethanol Content in Fuel	52
53.	Daihatsu To Use Toyota Hybrid Technology	52
54.	Cleaner Gasoline And Diesel On The Way in New Zealand	53
55.	Christchurch Air Quality Study Supports Tougher Rules	53
56.	Air Quality Report Rejected In Hong Kong	55
57.	Chinese Court Imposes Pollution Fines, Prison Terms	56
58.	Tokyo To Reward 'Green' Drivers	56
59.	Honda Rolls out New Civic, Hybrid Model for Japan	57
60.	Volkswagen to Make Hybrid Cars with China	58
61.	Fuji Heavy To Develop Electric Car With TEPCO	58
62.	Malaysia Urges Neighbors to Do More on Haze	59
63.	Bangladesh Introduces Five-Day Work Week To Save Fuel	60
64.	As Oil Prices Rise, Asia Pursues Alternatives	61
65.	EU-China Climate Deal Fuels Carbon Capture Hopes	62
66.	Vietnam Leaps To Euro 2 Standards	63
67.	Vietnamese Environment Ministry Seeks Broader Support	63
68.	Beijing Makes Emergency Plan Against Winter Air Pollution	63
69.	DaimlerChrysler To Sell Diesel Cars Again in Japan	64
70.	Japanese Ministers Call for National Policy To Reduce Oil Dependence	64
71.	Japan Proposes Fuel Efficiency Standards For Large Trucks, Buses	65
72.	Singapore Offers Rebates for Cleaner Vehicles	66
73.	U.N.-Backed Project Held Up as Model for China	66
74.	Environmental Spending Growing In Asia	67

75.	Australian States Move Forward With Push For GHG Emissions Trading	67
76.	Australia's Howard Renews Biofuels Push	68
77.	First Meeting of Asia-Pacific Partnership May Be Postponed	68
78.	Malaysia Proposes Incentives For Renewable Energy, Cleaner Fuels	69
79.	Peru's Congress Overrides Presidential Veto Of Environmental Law	70
80.	Officials in Amazon Frontier Meet On Smog Problem	71
81.	Spending Cuts at Brazil Environment Agency May Hurt Enforcement	72
82.	Diesel Tax To Rise 47 Percent In Israel	72
83.	Petrol And Diesel Prices Increased In U.A.E.	73
84.	South Africa Begins Process To Implement New Air Quality Act.....	73
85.	Plan To Eliminate Cape Town's Brown Haze	74
86.	Research Indicates Health Effects of Air Pollution Are Underestimated.....	75
87.	Antarctic Ozone Hole Back Near Record Size	76
88.	Warming Causes Record Arctic Ice Melt	77
89.	CO2 Reduction Efforts Save BP \$650 Million.....	78
90.	Global Warming and the Airline Industry	78
91.	World Bank Says Leverage on Greenhouse Emissions Limited	79

EUROPE

1. New EU Environmental Strategies Set For Launch

After years of preparation, the European Commission is due to launch a series of EU environmental strategies before Christmas, fulfilling a central commitment in the bloc's sixth environmental action program (6EAP).

Environment commissioner Stavros Dimas was cleared to proceed in July, after concerns over competitiveness and economic growth almost forced further delays. The exact sequence or timetable is not yet known. All the strategies except that on the urban environment will be accompanied by draft legislation. They will deal with:

- Air pollution (Clean air for Europe, or Cafe) – (see discussion below)
- Waste prevention and recycling
- Sustainable use of natural resources
- The marine environment
- Soil management and protection
- The urban environment
- Sustainable use of pesticides

Despite the 6EAP strategies' political prominence they are far from the only areas in which the Commission intends to propose new EU environmental legislation in the coming months. Items in the EU executive's latest rolling work program include the following:

- * Euro V vehicle emission standards
- * Greener public procurement for vehicles
- * Restriction on mercury in measuring devices
- * Reducing and managing flood risk
- * New controls on priority hazardous substances in water
- * Relaxation of EU rules harmonizing excise duty on diesel for professional use
- * Improved EU energy statistics
- * Separate laws on charging for use of sea port and airport infrastructure

As well as proposing new legislation, the Commission is planning to launch or advance debates in a range of key current environmental policy domains. The following communications and reports are due this year:

- Communication on aviation and climate change
- Communication on a biomass energy action plan
- Communication on economic instruments in environmental and internal market policy
- Report on agri-environmental indicators
- Working paper on additional options to curb illegal logging in support of the Flegt action plan
- Communication on transport infrastructure charging

With a vast number of EU environmental laws already in force and policies well established, an important part of the Commission's work is issuing regular progress and implementation reports. These are often the trigger for new policy or legislative initiatives. Items included to the end of this year include the following:

- * Communication on implementation of the energy security green paper 2000
- * Communication on the EU biodiversity strategy
- * Progress report on the EU Cardiff environmental policy integration strategy
- * Working paper on synergies between environmental and employment policy
- * Report on implementation of the EU renewable electricity directive
- * Mid-term review of the EU transport white paper 2001
- * Report on steps taken to ensure coexistence of GM, conventional and organic crops
- * Further measures on recovery of orphan radioactive sources
- * Mid-term review of Life environmental project funding
- * Annual report on the EU industrial carbon dioxide emission trading scheme
- * Report on 2003 rules on traceability and labeling of genetically modified organisms

2. EU Issues Air Pollution Thematic Strategy

Wide-ranging proposals to clean up Europe's polluted air won approval from the European Commission on September 21st after a debate over the package's price tag threatened to derail it. The measures, dubbed the "clean air strategy", will cap emissions of particulates in the air. It will also set tighter limits for emissions of pollutants like nitrogen oxide and ammonia from different sectors of the EU economy like transport, power, and agriculture.

Environment Commissioner Stavros Dimas said the measures, expected to cost 7.1 billion euros (\$8.7 billion) a year from 2020 when they are fully implemented, would enable Europe to have one of the most advanced air policies in the world. The strategy includes proposed legislation which will have to be approved by member states and the European Parliament, as well as other measures to change existing EU rules.

Earlier cost estimates of 12 billion euros a year were reduced by cutting the strategy's "level of ambition". Planned reductions in ozone pollution were scaled down and the target number of preventable early deaths was also reduced. The main change is a lowering of the ambition level for curbing ground-level ozone pollution. Specifically, the Commission will propose achieving only 60% of all technically feasible abatement measures by 2020, compared with 80% proposed by its environment directorate. Ambition levels for other pollution indicators have also been cut, but by smaller margins. The Commission will now propose introducing 55% of technically feasible measures to cut eutrophication and acidification and 75% for particulate matter. Plans to introduce a formula forcing member states with higher PM2.5 levels to make deeper cuts have been abandoned, but will be revisited in 2011.

In July, the Commission shelved the air quality plans along with six other initiatives on marine protection, waste, soil, pesticides, natural resources and urban environmental management to have a general debate on the environment. Though the debate ended in general support for the strategies, it also led to cuts.

The Commission estimates the health benefits of the strategy to be worth at least 42 billion euros a year from 2020 -- six times the costs -- by reducing the number of deaths, sicknesses and related medical care that polluted air causes. Air pollution can make breathing more difficult, exacerbate asthma and bronchitis, and is blamed for 370,000 premature deaths a year in the 25-nation EU. The new measures aim to reduce that figure to 230,000 by 2020.

On the environmental side, the measures aim to cut down on the number of ecosystems like forests that suffer from acidification and other damaging effects of air pollution.

The proposals include new rules that would regulate the amount of PM_{2.5} that get into people's lungs within the EU's member states. It will also include proposals to lower emissions from new cars and vans, big trucks and ships.

The Thematic Strategies represent the next generation of environment policy, taking a medium-term perspective to around 2020. As their name suggests they work with themes, rather than with specific pollutants or economic activities as has been the case in the past. The strategies set clear environmental objectives, for instance in terms of air quality, and, on this basis, seek to identify the most appropriate instruments to achieve these objectives.

Each strategy is founded on thorough research and science, and follows an in-depth review of existing policy and wide-ranging stakeholder consultation. The aim has been to create positive synergies between the seven strategies, as well as to integrate them with existing sectoral policies, the Lisbon Strategy and the Sustainable Development Strategy. Each Thematic Strategy will thus help achieve the long-term goal of environmental sustainability while contributing to the Lisbon goals of enhancing growth and employment and promoting eco-innovation.

The strategies are also an exercise in Better Regulation, simplifying and clarifying legislation where it already exists and proposing light framework legislation where new laws are deemed necessary.

Air pollution in the EU, notably from fine particulate matter and ground-level ozone, presently causes the premature death of almost 370,000 citizens every year and reduces average life expectancy by an average of 9 months. In the most polluted areas, the loss of life expectancy may be up to two years. Altogether, air pollution robs Europe's population of 3.6 million years of life annually, as well as causing increased hospital admissions and medical costs. The human health damage that air pollution causes is estimated to cost the European economy between € 427 and 790 billion per year¹.

Action taken at EU, national and international levels to reduce air pollution since the 1970s has steadily improved the general situation, but even if all current policies are fully implemented, particulate matter and ground-level ozone will still be causing 290,000 premature deaths a year in 2020.

¹ See http://europa.eu.int/comm/environment/air/cafe/general/pdf/cafe_lot1.pdf

This equates to the loss of 2.47 million life years. The monetized cost of this damage to human health is estimated at €189-609 billion per annum in 2020. Damage to ecosystems will also remain considerable.

The need for further action was recognized in the EU's Sixth Environmental Action Program (6EAP). The 6EAP sets the ambitious objective of attaining "levels of air quality that do not give rise to significant negative impacts on and risks to human health and the environment." Analysis done under the Commission's Clean Air for Europe (CAFE) stakeholder program, set up in 2001, has concluded that it will not be possible to fully reach the 6EAP's objective by 2020 of addressing all significant health and environmental impacts of air pollution, even if all measures to improve air quality that are technically possible were taken with no regard to their cost. As an important step towards achieving the 6EAP objective in the longer term, the Strategy thus sets specific interim objectives for reducing air pollution impacts by 2020. On the basis of careful analysis, these interim objectives have been chosen from a range of possible options because they offer the best balance between benefits and costs. The Strategy has a specific focus on reducing human exposure to particulate matter, which is a major health hazard.

The Strategy aims to provide the most cost-effective solution for reaching the interim objectives chosen. This would bring major benefits for human health and the environment worth tens of billions of euros in annual cost savings to the EU economy, plus potential benefits for EU competitiveness through the development of innovative cleaner technologies.

The health benefits alone of the Strategy are valued at between €42 and 135 billion per year², or between 0.30% and 1.0% of EU-25 GDP in 2020. Premature deaths due to particulate matter would be reduced by 63,000 in 2020 compared with the business as usual situation. This is equivalent to saving 560,000 life years per year. Lower income groups are expected to benefit more as they are generally exposed to higher levels of air pollution than those in higher income groups.

As noted earlier, the cost of the Strategy is estimated at €7.1 billion annually in 2020. This is equivalent to approximately 0.05% of EU-25 GDP in 2020, and is more than five times below the lowest projected value of the Strategy's health benefits alone.

The air Strategy implies a very significant improvement in air standards. The World Health Organization and the Commission's own Scientific Committee on Health and Environmental Risk have recommended on health grounds that air quality standards should not be relaxed. In addition, their latest evidence has strongly suggested that the smallest of the fine particulates (PM2.5) need to be regulated (see below). This is why the Strategy and the accompanying proposal to revise the Ambient Air Quality Directive would for the first time introduce controls on human exposure to PM2.5 to complement the existing limits on coarse particulate matter (PM10). There is strong evidence that fine particles are more hazardous to human health than larger ones.

² There are two distinct ways to calculate the damage to the economy caused by premature mortality. The lower figure is based on the median of the value of a life year lost (VOLY) while the higher figure is based on the mean value of a statistical life (VSL).

The proposed approach would establish a concentration cap for PM_{2.5} in ambient air in the most polluted areas at a level that would prevent unduly high risks to the population. This would be coupled with an obligation on Member States to reduce average human exposure to urban background levels of PM_{2.5} over the period 2010-2020. As far as possible, they would have to aim for a 20% reduction.

The proposal also envisages more comprehensive monitoring of certain pollutants, including PM_{2.5}. This will permit a greater understanding of this pollutant and make possible policy improvements in future.

A range of other actions involving various sectors will need to be taken to reach the Strategy's interim objectives:

- National Emission Ceilings Directive (NECD): The Commission intends to propose revised national emissions ceilings in line with the interim objectives of the Strategy.
- Small combustion plants: This increasingly important emissions source is at present not regulated at Community level. The Commission will examine whether the Integrated Pollution Prevention and Control (IPPC) Directive³ should be expanded to cover combustion sources below 50 MWth. Harmonized technical standards will be developed for domestic combustion appliances and their fuels. If feasible, smaller residential and commercial buildings could be included in an extended directive on energy efficiency.
- VOC emissions from fuel stations: Given the role of VOCs in the formation of ground-level ozone, the Commission will examine the scope for reducing VOC emissions from vehicle refueling at filling stations.
- Road vehicle emissions: Proposals for further tightening emission limits for new cars and vans, and separately for heavy duty vehicles, will be issued by the Commission this year.
- Aviation: Measures with potential synergies between air quality and climate change will be discussed in a forthcoming Communication on the use of economic instruments to reduce aviation's contribution to climate change.
- Shipping: Emissions to air of SO₂ and NO_x from ships are a serious concern as they are expected to exceed those of land-based sources in the EU by 2020. The Commission has developed an EU strategy on ship emissions and a directive on sulphur in marine fuel has been agreed. In the International Maritime Organization, the Commission will propose to strengthen current air emission standards. In the absence of an agreement in the IMO, the EU will consider adopting its own standards.
- Agriculture: Cattle farming, the pig and poultry sector and mineral fertilizers account for the vast majority of ammonia emissions. While recent reform of the Common Agricultural Policy (CAP) should bring about some reduction in emissions, these improvements may prove insufficient to meet the objectives of the Strategy. Priority will be given to measures and policies which reduce "excessive" nitrogen use in agriculture and which simultaneously address nitrates in water as well as ammonia and nitrous oxide emissions to air. Such policies could address the nitrogen content of animal feedstuffs and excessive use of nitrogen fertilizers

³ Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control

- International cooperation: As the regional and global background contribution to European air pollution grows, the Community must work on building an international consensus around the importance of hemispheric pollution. In cooperation with the Member States, the Commission will lead jointly with the USA a new task force on hemispheric air pollution under the UNECE Convention on Long-Range Transboundary Air Pollution (CLRTAP).

At Cafe's core are a series of targets for reducing key pollutant emissions between 2000 and 2020. Sulphur dioxide should be slashed by 82%, nitrogen oxides by 60%, volatile organic compounds (VOCs) by 51%, ammonia by 27% and ultra-fine particulates (PM2.5) by 59%.

3. Swedish EPA Demands Stronger EU Air Strategy

The Sweden EPA has decided that it should work towards increasing the level of ambition of the European Commission's proposal for reducing air pollution in Europe. There is no way of attaining the Swedish environmental objectives for reduced acidification and eutrophication under the new air strategy, according to the Swedish Environmental Protection Agency that has examined the proposal.

The Commission's Thematic Strategy on Air Pollution aims to reduce emissions of both particulates and sulphur and nitrogen pollutants by 2020. Although the Commission's proposal is a major step in the right direction, it is neither enough for reaching the air quality objectives previously stated by the EU - nor the Swedish national objectives. To attain these, further extensive measures are necessary to limit the emission of pollutants in Europe.

Under the current proposal sent to Member States, the amount of air-polluting particles will still, in 15 years time, cause health problems in Sweden reducing life-expectancy by an average of 2.4 months. It also means that 12.5 % of Swedish forests and 9 % of our lakes will suffer more acidic deposition than they can cope with, by way of sulphur dioxide and nitrogen compounds. Pollutants will still lead to eutrophication of 8 % of our soil.

"There are also economic reasons for further strengthening the proposals in the air pollution strategy. The estimated socio-economic gains, both in the Commission's proposal and in the more ambitious alternative recommended by the Swedish EPA, are significantly greater than the costs of the various measures required. This is in spite of the fact that costs are overestimated and gains underestimated", said Mats Olsson, Deputy Director-General in The Swedish EPA in a statement.

The European Commission's clean air strategy sets the political aim for measures against air pollution in Member States. The Swedish EPA's analysis will serve as supporting documentation for the Swedish government in view of the negotiations between environment ministers in the EU Council. These negotiations are planned to start by the end of October.

4. Commission Launches Crackdown On Fine Particles (PM_{2.5})

The European Commission has proposed the first ever EU-level limits on ambient concentrations of particles under 2.5 microns wide (PM_{2.5}). Its legislative proposal is the first building block in the Cafe air quality strategy. The draft law will clamp down on PM_{2.5} pollution in two stages. By 2010 all member states will have to comply with a "concentration cap" of 25 micrograms per cubic meter (ug/m³). This is derived from an existing EU limit on particles up to ten microns (PM₁₀) of 40 ug/m³ by the same date.

Member states meeting the PM₁₀ target should automatically meet the PM_{2.5} mark. Nevertheless, the Commission proposes giving states leeway to exceed the cap by up to 20% when the directive enters force, declining in steps to 0% in 2015.

In the second stage member states will have to cut PM_{2.5} concentrations by 20% by 2020, compared with the average during 2008-2010. Five years after the directive's adoption the Commission will propose further targets differentiated by member state.

As well as PM_{2.5} curbs, the draft directive consolidates the 1996 air quality framework directive and four daughter directives passed since then, cutting the volume of legal texts by half. Existing air quality limit values remain unaffected.

5. Particles In Air Of Europe's Cities Cuts Year Of Life

After the European Union placed new limits on airborne PM₁₀ particles on January 1, many cities across the Continent, from Italy to the Netherlands, found that they were unable to comply, EU officials and scientists say. Now, a new report from the World Health Organization defines the consequences of such failure: The average European city dweller can expect to die a year before the end of his or her natural life span because of particulate air pollution, the researchers calculate.

While the levels of most types of air pollution have been falling steadily in Europe, levels of PM₁₀ have remained steady in the past few years and are increasing in some places. In cities, it is largely caused by traffic.

Low levels of PM₁₀ are highly dangerous, the health agency scientists concluded after reviewing a growing body of research. Particles are conclusively linked to increased risk of a wide range of health disorders, from infant mortality to heart attacks and lung disease.

One reason that cities have trouble controlling this type of pollution, many scientists theorize, is the rising popularity in Europe of diesel-powered cars, which get better mileage than gasoline-fueled cars but produce large amounts of particulate pollution. Although particle traps can be installed to control such emissions, they are not required by current emissions standards and are offered only as an option by most carmakers.

"Now we know that these small particles are really dangerous, so we need to adapt to that new knowledge," said Dr. Roberto Bertolini, director of the World Health Organization's Special Program on Health and the Environment for the European Region,

which conducted the review. "There's a new scientific basis for a new agenda," said Bertollini, who is based in Rome.

The report found that the health toll from particulate pollution was worst in some of Europe's most environmentally aware countries. Residents of Belgium and the Netherlands lose more than a year of life on average because of this pollution, said Dr. Michael Krzyzanowski, the survey's coordinator, using figures based on data from new studies on the health effects of particulate exposure combined with statistics about PM₁₀ levels across the EU.

"Particulate matter claims an average of 8.6 months of life from every person in the European Union," the report says. The estimate is higher in Germany (10.2 months) and Italy (9 months). The WHO has initiated awareness campaigns on particulate pollution in those two countries, and plans to do the same in other major European cities.

Last year, 48.4 percent of new cars sold in Europe were powered by diesel engines.

The new focus on particulate pollution stems from a growing awareness of its health effects. Even relatively low levels of particulate pollution have now been statistically correlated with poor development of children's lungs and tied to increasing hospital admissions for problems like pneumonia and asthma. "These children don't die, but if their lungs are poorly developed it makes them more vulnerable for life," Krzyzanowski said.

In adults, even a modest increase in long-term levels of PM₁₀ correlates with a marked rise in lung disease, heart attacks and strokes, Krzyzanowski said. Infant mortality and cancer increase when particulate matter is high.

As awareness of the risk has grown, the European Union has reduced acceptable limits, dropping the ceiling to 50 micrograms per cubic meter of PM₁₀ on Jan. 1 this year. The plan was to reach 20 micrograms per cubic meter by 2020, and some expect the commission to pass measures that will improve adherence.

Based on continent-wide data from 2002, the most recent year for which comprehensive statistics are available, 52 percent of street measurements in 338 urban stations across Europe exceeded the current standard.

6. NGO's and Industry Differ On Tighter EU Car Emission Limits

A. T&E Demand Further Tightening

Future Euro V emission standards for passenger cars should be considerably tightened, according to transport green group T&E. The NGO says stricter EU emission limits for particulates (PM), nitrate oxides (NO_x) and hydrocarbons (HC) are "technically, economically and politically" possible.

NO_x emissions from diesel cars should be limited to 75 mg per kilometer (mg/km) rather than 200 mg/km as proposed in a consultation paper by the European Commission in

July. This would make exhaust after treatment necessary - something avoided by the Commission proposal - but which T&E claims to be "technically feasible".

Diesel PM emissions should be capped at 2 mg per kilometer (mg/km), rather than 5 mg/km. Emissions of NO_x and HC emissions from petrol cars meanwhile should be brought down to 20 mg/km and 25 mg/km respectively, rather than 60 mg/km and 75 mg/km.

T&E says imposing stricter limits makes sense as many EU countries are otherwise likely to struggle to meet EU urban air quality legislation. They add that the lower emission thresholds are closer to US standards and would therefore facilitate trans-Atlantic trade.

The environmental group says the Commission should bear in mind that industry cost estimates for the introduction of previous Euro standards have always been "grotesque" exaggerations. It calls for the standards to be introduced in 2008, rather than 18-36 months after the regulation's entry into force as proposed by the European Commission.

B. ACEA Slams "Unnecessary" Emission Controls

The EU car industry, on the other hand, has made a scathing critique of the European Commission draft recommendation on future emission standards for passenger cars. Industry association ACEA says the majority of draft Euro V criteria, published for consultation this summer, would place too great a burden on car manufacturers.

Bringing maximum emissions of nitrogen oxides (NO_x) for petrol cars down to 50 mg per kilometer (mg/km) as proposed by the Commission would be "unnecessary", since the vehicles affected are already acknowledged to be "clean and efficient". Cutting hydrocarbon (HC) emissions to 75 mg/km would also be "an unnecessary and unjustified extra burden on industry".

For diesel cars, ACEA says meeting the proposed 200 mg/km level for NO_x would be possible, but a "significant task". It warns, however, that existing technology could not bring NO_x emissions below 200 mg/km.

ACEA confirms that particulate (PM) emissions could be capped at 5 mg/km with the compulsory use of filters. It objects strongly however to the draft recommendation's suggestion that in the future a limit should be placed on the number as well as the mass of particles emitted, in order to avoid high emissions of ultra-fine particles.

The industry group also criticizes the Commission's proposal to remove a loophole which has allowed large sports cars, or SUVs, to escape meeting Euro V standards. Cars seating seven or more people should continue to be exempt, says ACEA, because they offer "an environmentally attractive alternative to the use of two 'normal' passenger cars".

There is "no justification" for extending the time in which pollution control devices must work from 100,000 to 160,000 km, ACEA adds.

Finally, it warns that the proposal to apply new standards from 18 months after new legislation enters into force could mean introducing them up to two years earlier than the 2010 date for which the industry has been planning.

C. ICCT Calls For Tighter Euro 5 Standards

The International Council on Clean Transportation (ICCT) applauds the European Commission for proposing a further tightening of emissions standards for both gasoline and diesel light duty vehicles, eliminating the more lenient standards for heavy passenger vehicles and doubling the durability requirements. These are all important steps toward reducing emissions from vehicles on the road and continuing to tackle Europe's air quality, public health, and environmental challenges.

However, the ICCT concluded that the proposal could be improved in a number of important respects as summarized below:

NO_x Emission Standards: The proposed Euro 5 standards would allow diesel passenger vehicles to emit more than three times the NO_x emissions of comparable gasoline vehicles. ICCT's review of the technical literature and type approval data suggests that this need not be the case. The ICCT encourages the European Commission to harmonize emission standards in a fuel neutral manner. With diesel aftertreatment technologies that are now becoming commercialized (e.g. VW diesel Jetta planned for US market by 2007), diesel passenger vehicles could easily meet the Commission's proposed gasoline NO_x standard, 60 mg/km. Other nations have reviewed these diesel aftertreatment technologies and established NO_x emission standards 60% (Japan) and 80% (US) more stringent than those proposed for Euro 5. For gasoline vehicles, the proposed Euro 5 NO_x standard is closer to US and Japanese standards and could be achieved at little to no additional cost since over 95% of current Euro 4 gasoline vehicles already meet the proposed NO_x limits **The ICCT recommends that the Commission set the Euro 5 NO_x limits to no more than 60 mg/km for both gasoline and diesel vehicles.**

HC Emissions Standard: The current proposal reduces HC from petrol vehicles by only 25%. The proposed standard of 75 mg/km is higher than either US or Japanese standards and is already met by 90% of Euro 4 models. A standard of 50 mg/km is already met by almost 50% of Euro 4 vehicles and would provide added incentive for manufacturers to use the best three way catalyst technology available. **The ICCT recommends unifying the HC emission standard for diesel and petrol vehicles at 50 mg/km.**

PM Emissions Standard: DPF-equipped light duty diesels easily meet a standard half the limit of the current proposal. Eliminating some of the gap between the level of the standard and actual emissions will remove the incentive for manufacturers to develop less effective alternatives to DPFs. We support the proposal's consideration of an additional number-based standard, as well as the adoption of a more precise and robust measurement technique. **The ICCT recommends lowering the PM limit to no more than 2.5 mg/km to more closely reflect the best available control technology on the market.**

Durability: The proposal of 160,000 km is achievable and has been demonstrated for both gasoline and diesel vehicles. **The ICCT strongly supports the proposal to double the previous in-use durability requirement which**

sends a strong signal that emission control technologies must last the full lifetime of the vehicle.

Timing for Diesel Manufacturers: Given the magnitude of the proposed change in the NOx emission standard for diesel passenger vehicles the Commission may want to consider some additional flexibilities in timing or otherwise to ensure that adequate time is provided to manufacturers and component suppliers to prevent market disruptions.

Euro 6: Given the technology advances that continue to occur in order for both gasoline and diesel vehicles to comply with the US, California and Japanese standards, and given the severity of the NOx related air pollution problems across Europe, **we recommend that the EU consider an additional tightening of the NOx limits in a future Euro 6 proposal.**

The ICCT is a nonprofit organization that provides a forum through which some of the world's leading experts in transportation policy are able to exchange technical information and discuss the direction of future policies. The ICCT provides a public voice to its participants by publishing policy relevant technical reports, papers, and other documents. A prime example is the 2001 Bellagio Memorandum that established a set of guiding principles for clean transportation policies and is available in five languages on the ICCT website.

7. Car and Household Emissions Threaten UK's CO2 Goals

Rising pollution from cars and households threatens to derail Britain's attempt to meet self-imposed targets on curbing greenhouse gas emissions, according to new recently published research. Independent analysts Cambridge Econometrics (CE) said the government must beef up policies designed to tackle climate change if it wants to meet carbon dioxide (CO2) reduction goals which Britain is on course to miss by a wide margin. The government wants to cut emissions of CO2, the main greenhouse gas blamed for global warming, by 20 percent compared to 1990 levels by 2010. CE said Britain is heading for only a 12.25 percent reduction by 2010.

"Carbon emissions from households are expected to be 18.5 percent above the 1990 level by 2010," said CE in the report. "Along with road transport, they (household emissions) continue to be the major obstacle to achieving the government's 20 carbon reduction goal," said CE.

CE said the government must launch major new policies to curb energy use by households and road transport, or set much tougher CO2 limits under the European Union's emissions trading scheme. The scheme, which launched in January, aims to curb CO2 emissions from heavy industry through a system based on traded CO2 allowances. Companies are allocated permits which dictate how much CO2 they can emit. To bust their CO2 limits firms must buy extra allowances from firms which undershoot their limits and have spare allowances. CE said the UK would need to reduce the number of allowances given out to industry under phase two scheme (2008-2012) by 20-30 percent, compared with phase one (2005-2007), to get back on track to meet its domestic CO2 reduction goals.

The government has launched a consultation on its approach to phase two and aims to publish a draft plan in December. The scheme forms the centerpiece of the EU's effort to its Kyoto Protocol targets on cutting greenhouse emissions.

Despite slippage on its domestic targets, Britain is still on track to meet its Kyoto targets, CE said.

8. Trittin Moots European Car Makers' Climate Fund

German environment minister Jürgen Trittin has put new pressure on European car makers to cut emissions of carbon dioxide (CO₂) from new cars, proposing that if they fail to do so, they should pay into a fund to finance emission reductions in developing countries. In a letter to German auto manufacturing lobby VDA, Mr. Trittin urged all European manufacturers to voluntarily cut average new car CO₂ emissions to 120 grams per kilometer (g/km). If they do not meet the target, they should pay the difference in equivalent carbon credits into the Kyoto protocol's clean development mechanism, he said.

"In terms of meeting climate goals during the second phase of Kyoto, namely 2008 to 2012, it is essential that the auto industry make a verifiable contribution in reducing emissions," the environment minister wrote. If manufacturers agreed to the target and fund, "politicians could refrain from introducing additional legal measures," he added.

Under a 1998 agreement with the EU, European, Japanese and Korean car makers have committed to cutting average new car CO₂ emissions by 25% to 140 g/km by 2008/9. Amid increasing signs that even this target will not be reached, the industry has so far refused to agree to the EU's established goal of 120 g/km by 2012.

Last year Mr. Trittin was among the first to threaten that, failing a new agreement, the EU should legislate to require the 120 g/km standard. Since then, there have also been suggestions of an emissions trading scheme for car makers similar to the EU's industrial CO₂ emission trading scheme.

9. France Announces Incentives, Penalties To Reduce Emissions

French Prime Minister Dominique de Villepin announced Sept. 1 a new "carrot and stick" plan for reducing fuel consumption and curbing greenhouse gas emissions from the transport sector. The plan calls for increased tax breaks for alternative-fuel vehicles, new government funding for research into clean vehicles, and steeper registration fees for less efficient vehicles.

Topping the list of positive incentives is a 30 percent increase in the tax credit offered to buyers of vehicles powered by electricity, natural gas, or hybrid fuels. Effective Jan. 1, 2006, the tax credit will rise from the current [Euros] 1,525 to [Euros] 2,000 (US \$1,910 to US \$2,510), de Villepin said.

France will also dedicate [Euros] 100 million for research and development of clean car technology over the coming five years, de Villepin said, expressing optimism that this funding would serve as a "strong" incentive for automobile manufacturers.

In a bid to push consumers toward more fuel-efficient vehicles today, Villepin said officials in the environment and finance ministries were working on a plan to increase vehicle registration costs for the gas-guzzling vehicles. The increased registration costs will be highest for buyers of very large cars and trucks or sport-utility vehicles, estimated to cover about 10 percent of all new car purchases.

Villepin also suggested that France may quicken the pace of an EU-mandated increase in biofuels production. EU rules require all member countries to ensure that farm-produced biofuels represent 5.75 percent of all vehicle fuels by 2010. Villepin said ongoing public tenders for new biofuel production facilities may be pushed forward for operations beginning in 2008, rather than the 2010 mandated by EU rules.

On September 7th, France detailed the plans that will increase registration taxes on less efficient cars, but omitted other proposed incentives for cleaner vehicles. Under the plan, buyers of new cars that emit 200 grams or more of carbon dioxide per kilometer will see an incremental pollution tax added to one-time vehicle registration fees, Minister of Ecology and Sustainable Development Nelly Olin said.

The measure is expected to affect about 8 percent of the 2 million cars registered each year, Olin said.

Higher polluting automobiles that date from July 2004 or after will also be assessed the pollution tax when they are resold, Olin said.

Olin estimated that the pollution tax would raise [Euros]18 million (\$22.3 million) in 2006, all of which would be earmarked for antipollution activities run by the Agency for the Environment and Energy Management, the government's leading environmental think tank.

The pollution tax targets passenger vans, sports utility vehicles, high-speed sports cars, and luxury vehicles.

Each additional gram of CO₂ emissions between 200 and 250 grams per kilometer will carry a [Euros] 2 tax, while each additional gram of CO₂ emissions beyond 250 grams will carry a [Euros] 4 tax, according to the pollution tax plan.

The average pollution tax for the 6 percent of all new vehicles emitting anywhere from 200 to 250 grams of CO₂ per kilometer will be [Euros]40 while the average tax for the 2 percent of new vehicles emitting more than 250 grams of CO₂ per kilometer will be [Euros]211, according to the new plan.

Environmental groups said they regretted that the government had backed away from initial plans to apply the pollution tax to all new vehicles that emit 140 grams or more of CO₂ per kilometer. The lower ceiling--which would have covered more than 80 percent of French new car sales, exempting only highly fuel-efficient compacts--was rejected after government officials deemed its impact was too great for low-income households, Olin said.

The government also backed away from plans to offer a tax credit at the time of registration for vehicles emitting less than 140 grams of CO2 per kilometer.

Mr. de Villepin asked the economy ministry to set up a meeting with industry representatives to find out how French companies could speed up investments in renewable energy.

Days before the announcement, the prime minister also decided to increase investments in a new generation of nuclear power stations. "Today we have enough nuclear power plants to meet our electricity needs to 2020", he said. "But we must prepare the next generation of plants now".

10. Daimler Seeks Partners for "Mild" Hybrid Cars

DaimlerChrysler is holding talks with other automakers and suppliers to find partners for "mild" hybrids that boost cars' performance and fuel efficiency, its research chief told the press. The project -- separate from its alliance with General Motors and BMW to develop full hybrids -- could lead to hybrid versions of both petrol and diesel vehicles, Thomas Weber, who is in charge of technology, said on the sidelines of The Frankfurt Auto Show.

Daimler showed two Mercedes-Benz S-class concept cars in Frankfurt that feature mild hybrids -- simpler and less expensive versions of the technology that saves fuel by yoking at least one electric motor and batteries to a standard engine. A mild hybrid can boost acceleration and make engines work more efficiently in stop-and-go traffic, but costs less than a full hybrid that can add thousands to the price of a car. A mild hybrid, however, would not offer the same fuel savings as a full hybrid, and cannot run on battery power alone.

"In the United States we think the share of hybrids in specific areas will be there, but we also believe that diesels will pass the 10 percent threshold before hybrids do," he said.

"In Europe I personally believe the mild hybrid concept has a chance because in certain circumstances they can offer something beyond the highly efficient drive trains already available today," he added. "The share of hybrid in Europe will be just a few percentage points even in the years ahead."

Weber said Mercedes was working on both petrol and diesel hybrids even though the higher cost of diesel engines and hybrid technology has held up diesel hybrids so far. Extra costs for diesel and hybrid together meant "a mild hybrid in combination with a diesel could perhaps come a bit earlier than the full hybrid with a diesel", he said. But especially in the luxury car segment interest was present for diesel hybrids as long as they offer fuel efficiency, meet emissions standards, perform well, are fun to drive and can be marketed at a reasonable price, he said.

11. High Oil Prices And Katrina Change Political Climate in Europe

Record oil prices and now the unfolding disaster of Hurricane Katrina on America's southern seaboard are producing a new political climate on energy efficiency and global warming policies. Speaking in the European parliament, EU energy commissioner Andris Piebalgs called for faster development of an EU action plan to cut Europe's energy consumption by 20% by 2020, as foreseen by a green paper launched in June.

Calling for "greater political focus" on ways to deal with soaring oil prices, Mr. Piebalgs said he intended to increase pressure on member states to implement the EU buildings directive, and agree the energy services directive before the end of the year. Mr. Piebalgs said the Commission would push for more research in green energy sources, adding that he also expected to see an increase in investment in nuclear energy.

He confirmed that the Commission will table a biomass energy action plan by the end of the year. A communication on national renewable energy support schemes should also be published this year, and a biofuels communication will follow in 2006.

Meanwhile, led by Germany's environment minister Jürgen Trittin, a number of European politicians have explicitly linked Katrina to climate change and highlighted US refusal to agree binding greenhouse gas reductions as being part of the problem. In a newspaper commentary written on the day of the storm, Mr. Trittin accused US president George Bush of "closing his eyes to the economic and human damage being inflicted on his country and the world economy by natural disasters such as Katrina". Far from relaxing global emission reduction targets they should be strengthened, Mr. Trittin wrote. "Once common sense prevails in the headquarters of the environmental polluters, the international community must be in a position to reach out to America with a detailed proposal on the future of international climate protection".

12. Italy Re-appoints Matteoli as Minister;

On August 22nd, Italian Premier Silvio Berlusconi reappointed Altero Matteoli to his former post as Minister of Environment about one month after Matteoli was removed from the job after a run-in with his party's leadership.

Matteoli had been forced out July 20, several days after he criticized the leadership style of Gianfranco Fini, Italy's deputy prime minister and the head of the National Alliance, Matteoli's party and the second largest party in the ruling coalition.

In reappointing Matteoli, Berlusconi said only that Matteoli was the best candidate for the post.

13. Europe Still Suffers Under Acid Rain

Threats to forests, fish and human health persist despite Europe's significant success in cutting harmful emissions from coal-fired power plants and smokestack industries over the past 30 years, according to scientists at an acid rain conference held recently in Prague. Several studies at the conference raised red flags about rising levels of nitrogen oxides or NOx, in some parts of Europe. Spewed by motor vehicles and power plants, NOx rises into the atmosphere and falls with rainwater, fog, mist and snow.

Levels of the two, main components of acid rain - NO_x and sulfur dioxide SO₂ - have been declining overall in Europe since the mid- 1980s. But scientists have found NO_x hotspots, and warn that government objectives for acid-rain reduction in some countries are not being met.

For example, an eight-year study by scientist Oyvind Kaste and colleagues at the Norwegian Institute for Water Research found seasonally dangerous levels of NO_x-linked nitrates in southern Norway's streams before and during spring snowmelts. The Norwegian study suggested the chemical imbalance in streams and rivers may be hurting fish including the economically important salmon. "Acid 'pulses' that occur in streams during spring are likely to affect the smolt stage of Atlantic salmon," the study said, noting that nitrate levels in the targeted streams are "steadily increasing".

A separate study of acid rain in the central Alps found high levels of NO_x polluting areas of Switzerland and the Alpine foothills of northwest Italy. The study, conducted by 10 scientists from Italy, Switzerland and France, said forests are threatened by polluted precipitation "transported with air masses from industrialized and urbanized regions, and intensive agriculture on the plains bordering the Alpine rim".

The scientists doubt that an international goal to cut NO_x in the Alps by 2010 can be reached. "The deposition of nitrogen is still well above the estimated critical loads," the study said. "Important terrestrial ecosystems in these regions of the Alps are in a critical situation regarding nitrogen inputs."

Similarly, Swedish scientists said their government's "national objective" to reduce NO_x emissions "will most probably not be achieved" without a major effort to lower emissions from motor vehicles, mobile machinery and ships. Stockholm had hoped to lower annual NO_x emissions to 150,000 tons a year by 2010 from the current level of 205,000 tons.

Despite the often bleak forecast, however, the scientists cited some victories in Europe's long battle against acid rain.

- For example, in Sweden a huge project that uses aircraft to spread acid-fighting lime has improved conditions on about 8,000 lakes. As a result, only 8 per cent of the country's lakes are listed as "acidified", down from 17 per cent in 1990.
- Lower levels of SO₂, aluminum and other acid rain components have reduced the stone-scouring damage to many of Europe's historic buildings.
- And Czech Republic scientists said cleaner air has helped forest health "improve dramatically" since 1991 in the Krusne Hory Mountains, near the Czech-German border.

However, many forests in the so-called Black Triangle region of Czech Republic, Germany and Poland have only started to recover from the acid rain that polluted soil when the region was heavily industrialized during the Soviet era.

"Long-term acidification" from the 1960s still causes root deformities in beech and larch trees in the Black Triangle's Jizerske Hory Mountains, and the "forest health is still not satisfactory", said Marian Slodicak of the Czech Forestry and Game Management Research Institute.

The persistence of acid rain despite decades of pollution-fighting initiatives was a theme also reflected in a study by German scientists in the East German city of Leipzig. The study said NOx emissions dropped drastically when East Germany's old, communist-era factories and farms were closed 15 years ago. But it cited a "drastic increase" in Leipzig's motor vehicle traffic since the fall of communism that has "compensated" and reversed the previous decline in emissions that cause acid rain.

14. Car PAH Emissions "Soon No Longer A Concern" Says CONCAWE

Advanced petrol and diesel vehicles produce such low levels of polycyclic aromatic hydrocarbons (PAHs) that "PAH emissions from road transport should soon no longer be a concern", according to a report from EU oil industry research body Concawe.

Older diesel vehicles can emit significant levels of PAH. Concawe started its study two years ago, a spokesman said, because it feared that a review of the EU's 1998 fuel quality directive due this year might seek to curb polyaromatic content as a way to limit PAH emissions.

In fact this now looks unlikely, the spokesman added. In any case, Concawe's study concludes that, with modern diesels equipped with exhaust after-treatment, polyaromatic content no longer makes a difference to PAH emissions. The study also confirms that modern catalyst-equipped petrol cars' PAH emissions are similarly tiny.

One implication of Concawe's research is that the road transport sector will face little or no new regulatory pressure as governments start preparing for an EU target value for PAH in air set in the bloc's fourth air quality daughter directive, effective from the end of 2012.

15. Local Council Debates 'Green' Levy On Taxi Fares

Plans for a possible 50p 'green' levy on Sheffield, England taxi fares have moved a step closer – with the issue to go before the city's licensing board next month. Labor councilors believe a surcharge would help taxi drivers buy new taxis which meet the latest European rules on vehicle emissions, due to come into force by 2010.

The proposals are being strongly opposed by the LibDems, who say an across the board charge on all fares would be 'crude' and would amount to a new 'stealth tax' on public transport.

But council leader Jan Wilson told a cabinet meeting that there should be no dispute over a need for greener transport which would cut air pollution, especially in the city centre.

"We need to know how this can be done and how quickly," Coun Wilson said. "Tougher restrictions will also mean old London cabs which have failed their city's emissions tests cannot then be shipped up here."

The size of the levy has not been decided, but a councilor at an earlier meeting suggested 50p per fare would be appropriate.

Coun Ray Satur, who led an investigation into the taxi service, said licenses should only be granted to taxis that met green guidelines.

"We need to consult the licensing committee to see what is possible, and we also need to ask the views of all three main taxi organizations."

LibDems argue such a levy is not necessary because two thirds of cabs already meet the regulations and the city has plenty of time to comply with the new regulations.

They also believe the move will not be popular with cabbies, who will expect resentment from the public.

16. Volvo Cuts Emissions In Logistics Revamp

A green logistics project at Volvo Trucks has helped reduce the number of transport movements by up to 20%, cutting emissions of carbon dioxide and air pollution, the company has announced. It is expanding the program to all its European suppliers and plants.

For obvious reasons, a major international company like Volvo Trucks, together with its suppliers, generates large volumes of transport to and from its plants around the world. These flows are being monitored regularly by the Group's logistics experts, who are implementing a range of activities on a continuous basis to achieve a major reduction in the number of transport movements and reduce their environmental impact significantly.

Volvo Trucks has three major plants in Europe – at Göteborg (Tuve) and Umeå in Sweden, and in Ghent, Belgium. Materials and finished products are transported between these plants in a continuous flow. In addition, the plants receive continuous deliveries of materials from the company's many hundreds of suppliers.

Products are also transported from these three locations to and from Volvo's other plants, for example in Brazil and Australia, as well as the truck assembly plant in Iran. In some cases, these flows have grown without the necessary coordination, leading to 'unnecessary' transport movements.

Together with their colleagues at Volvo Logistics, the Volvo Trucks logistics experts have completed two major projects to improve transport coordination and are currently engaged in a third, every bigger project. Measures implemented to date have yielded a significant reduction in adverse environmental impact, accompanied by a substantial reduction in costs. In most cases, action to improve the environment has also been accompanied by cost savings or straightforward profit gains.

A. Full Loads

In the 'Full loads' project, Volvo Trucks collaborated with Volvo Logistics to maximize truck loads and ship the goods directly to the various plants without intermediate stops

or transshipment. Some parts go directly to the production line while other materials are placed in Volvo's efficient storage facilities until required.

This project has enabled the number of truck deliveries to be reduced. In the case of each supplier included in the project, the number of transport movements was reduced by approximately 15-20%, and a number of stops and transshipments eliminated. Last year, five new suppliers were added to the Tuve plant project, and similar work is under way in both Umeå and Ghent.

B. Efficient handling of CKDs

Almost half of the materials handled at the Volvo Trucks plant in Tuve, near Göteborg, is earmarked for CKD (Completely Knocked Down) kits destined for truck assembly operations in plants outside Europe.

Approximately 10,000 of the 15,000 CKDs in question go to the Iranian plant. Since some of the trucks assembled there are NH models developed and built mainly in Brazil, many containers of materials were previously consigned to Brazil by European suppliers to be 'topped up' with Brazilian parts before being shipped to Iran – a huge detour. Following study by the logistics experts, it was found that about 100 truck parts and assemblies could be repackaged for export in the Göteborg plant itself, since Tuve is supplied with the same components for European production, eliminating some of the transatlantic traffic.

"We have now eliminated the shipment of about 460 forty-foot containers back and forth across the Atlantic, and ship the parts directly to Iran from Europe," says Stefan Karlsson, who is responsible for materials supply as part of European production. "This represents a volume of 28,000 cubic meters, equivalent to a voyage by a fully-loaded Ro-Ro vessel between Europe and Brazil. This saves a great deal of fuel and money."

Volvo Logistics agrees and has estimated that the environmental gain is about 4,300 tons of carbon dioxide. The new system also results in lower emissions of nitrogen oxides, sulphur dioxide and particulates.

C. Cab Production

Stefan Karlsson has now been given the job of undertaking a third, much bigger project on the same lines. The focus in this case is on Volvo's cab production plant in Umeå, in the far north of Sweden, which ships and receives materials by sea, rail and road alike, although mainly the latter.

"The project relates to the packaging of the cabs for the 15,000 trucks shipped to the CKD assembly plants around the world," he continues. "In Umeå, we package cab components, which are then sent to Tuve, where the chassis materials are added and the complete kit is shipped – in two out of three cases – to the plant in Iran."

Every year, suppliers – mainly in southern and central Europe – ship 84,000 cubic meters of goods to Umeå, while 70,000 cubic meters are shipped from the plant just to supply the CKD flow. This involves a significant number of empty transport runs. At present, almost all of the parts concerned are shipped by suppliers in Europe to Umeå, where they are merely repackaged and shipped south again to the Göteborg plant.

The goal is to make transport utilization more efficient and more economical by enlisting the aid of Volvo Logistics experts with all of the purchasing activities and optimizing the supplier orders. The goods will then be routed directly to the Tuve plant in Göteborg to achieve the above goal. In particular, the overall transport-kilometer figure will be reduced significantly.

17. Ford and Fiat Plan to Collaborate on Small Car

Italy's Fiat and US automaker Ford Motor Co are in advanced talks to cooperate on developing a small car according to press reports. German newspaper Handelsblatt cited sources close to the negotiations as saying the two were holding discussions, with one source quoted as saying: "The talks are already far along." Italy's leading auto magazine, Quattroruote, said they would collaborate on the new version of Fiat's Cinquecento and Ford's Ka.

Earlier, the head of the Fiat brand Luca De Meo said the new Cinquecento, due out in 2007, would probably be made on the same platform as the Fiat Panda mini. It is due to be built in Fiat's Polish plant, where labor costs less than in Italy -- a vital saving in a segment of the market where margins are already razor thin and carmakers are teaming up to save on development costs. The Polish plant already makes the Panda and 600 models.

Fiat has long said it wants to work with other carmakers on specific projects to reduce risks and cut costs, part of a plan to return to profit by 2007 from 2002's record loss. The 106-year-old carmaker argued it had not been able to strike competitive deals when it was tied up in a partnership with General Motors. But that was dissolved in February and Fiat CEO Sergio Marchionne now says he hopes to strike a new industrial alliance by the end of the year. Marchionne said the new partner would not be Asian and that the alliance would not include financial stake swaps, but he declined to specify further.

Fiat already has a joint venture with France's PSA Peugeot Citroen to make vans and together the two have a deal to make the vehicles in Turkey with carmaker Tofas. Fiat has also co-developed an SUV with Suzuki, due out at the end of the year or in early 2006.

Sub-compacts are still very popular in Europe and may gain more customers as fuel costs run to record highs. They have the added advantage of letting automakers bring down fleet emissions of carbon dioxide. But, competition is fierce. PSA and Japan's Toyota make small cars together in the Czech Republic, Volkswagen imports its Fox model from Brazil and GM sells South Korean-made Chevrolets to serve the small end of the market.

18. British Airways Starts Emission Offset Scheme

British Airways has launched a new scheme, backed by the government, where its customers can volunteer to help to offset the carbon dioxide emissions from their flights by making a contribution to an environmental trust. The money raised will be used by an

organization called Climate Care to invest in sustainable energy projects that tackle global warming by reducing carbon dioxide levels.

Air travelers can choose to make a donation from September 12 via a link from the airline's website, ba.com, for the cost of the emissions created by their journey. For example, the donation on a return flight from London Heathrow to Madrid will cost £5 and a return flight from London Heathrow to Johannesburg will cost £13.30.

Dr Andrew Sentance, British Airways' chief economist and head of environmental affairs, said: "We are committed to addressing our impact on climate change and our own carbon emissions from aircraft are down by eight per cent since 2000. However, some customers are keen to go beyond this and totally offset the emissions created by their flights. To help them, we are delighted to offer this facility."

Climate Care's projects include a scheme in South Africa that has distributed 50,000 energy efficient lamps this year via school groups as part of an environmental awareness campaign. In India, Climate Care's support means schools are able to use stoves that run on renewable energy briquettes made from crop waste rather than liquid petroleum gas.

Tom Morton, director of Climate Care, said: "British Airways has long been a leader in the aviation industry in terms of the environment and we are very pleased that it has taken the step of enabling its customers to offset their carbon dioxide emissions. At a time when some airlines are burying their heads in the sand over global warming, British Airways is tackling the issue full on with a range of measures - of which this is just one."

Elliot Morley MP, Government minister for climate change and environment, who has urged all travelers to consider offsetting their flights, said: "While offsets are not a substitute for international action on reducing emission levels, I welcome warmly this move from British Airways which will help its customers offset some of the environmental impacts of air travel and I urge strongly other airlines to follow this lead.

"People are becoming increasingly concerned about climate change and are keen to play an active role in tackling it. Large organizations have a responsibility to show them how they can do this.

"The government is committed to bringing aviation within the emissions trading scheme, which will provide carriers with a further incentive to reduce their carbon emissions, and is using its presidency of the European Union to take this work forward."

Evaluating carbon offset initiatives for air travelers by the end of 2006 was one of the commitments made by the UK aviation industry as part of the Sustainable Aviation coalition which was launched in June this year.

British Airways has improved its global fuel efficiency by 27 per cent since 1990. It is the only airline participating in the UK government's trial emissions trading scheme and its domestic flight and property carbon dioxide emissions are down 23 per cent compared to the scheme's 1998-2000 baseline.

The airline believes that emissions trading is the best long term mechanism for limiting aviation carbon dioxide emissions and supports aviation's inclusion in the European Union emissions trading scheme from 2008.

19. German Left To Lead On Environmental Policy

Germany's centre-left SPD will take over the environment ministry in a government led by Conservative chancellor Angela Merkel, the two sides have agreed. The ministry will also continue to lead on renewable energy, strengthening the likelihood that existing policies will be continued.

The SPD has picked Sigmar Gabriel, a former premier of Lower Saxony and a high-ranking SPD official, to be environment minister. The nomination of Mr. Gabriel, who has virtually no experience in environmental policy, came as a surprise. The German media had speculated that Michael Müller, the SPD's environmental policy spokesman in parliament, would be picked for the job.

Edmund Stoiber, leader of the centre-right CSU party will head the economics ministry, also charged with energy policy apart from renewable energy.

Overall, the SPD and CDU/CSU coalition partners will control eight ministries each. Among these, transport will be headed by an SPD minister while the CSU takes over at agriculture.

During a Berlin news conference, SPD chairman Franz Müntefering said it was crucial to the party to name ministers who had experience in government. Mr. Gabriel led Lower Saxony between 1999 and 2003.

German environmental NGO Bund welcomed Mr. Gabriel's nomination. The group feels that he has what it takes to resist pressure from the economics ministry for more industry-friendly environmental policies. Very early indications are that Bund could be right as Mr. Gabriel was quoted as saying that he would oppose any attempts to resurrect nuclear power. The CDU/CSU backs the idea of delaying the phase-out of nuclear power.

20. Russian Plans for Emissions Rules Would Match EU Standards by 2010

On October 6th, Russia's government unveiled plans to impose progressively stricter automobile emissions standards with a view to matching current European Union standards by 2010. The emissions rules will cover a range of pollutants and will be modeled on the EU's "Euro" series of standards. Under the plan, Russia will match Euro 2 standards next year, Euro 3 in 2008, Euro 4 in 2010, and Euro 5 in 2014. The European Union implemented Euro 2 in 1996, Euro 3 in 2000, and Euro 4 this year.

The standards will apply to new vehicles only.

The plan is in line with a series of technical agreements signed with the European Union in 1997 to harmonize environmental standards, according to Industry and Energy

Ministry spokeswoman Yulia Golosvkier. "Those agreements were part of the first phase of this project," she said. "With the new Euro 2 plan, we are starting the second phase."

Guidelines for fuel standards are also planned, Golosvkier said. "We are working on it now. This month we will send the project to the Duma (Parliament's lower house), and we expect it will come into force in half a year's time."

Deputy Foreign Minister Alexander Yakovenko said the emission standards would help open European car markets to Russian manufacturers. He added that they would speed up Russia's accession to the World Trade Organization and boost cooperation with the Organization for Economic Cooperation and Development.

According to the Industry and Energy Ministry, the stricter emission standards will also save the country 243.6 billion rubles (\$8.5 billion) in reduced environmental protection costs and savings to the health system.

21. Budgets and Taxes

A. Portuguese Tax Would Offer Incentives For Clean, Efficient Cars

On September 22nd, Portugal's Council of Ministers announced that it will alter the national passenger car tax to discourage the use of less efficient vehicles and to help "fight climate change." The Council resolution would alter the existing tax, which is based on cylinder capacity, to take into account carbon dioxide emissions.

"This begins the progressive reform of the automotive vehicle tax model, placing it in the service of the fight against pollution and in respect for the polluter-pays principle, and aiming for the purchase of cars that are more environment-friendly and more energy-efficient," the Council said in a statement announcing the resolution.

Legislation to make the changes must be included in the 2006 national budget and is not expected to take effect until July 1, 2006. The government said this waiting time would give car dealers and the market time to adjust.

There is no binding EU rule on the issue, although the European Commission July 5 presented a proposed directive on automobile taxes that calls for "the introduction of a CO₂ element into the tax base of both annual circulation taxes and registration taxes".

According to the Commission, transport accounts for 28 percent of total EU carbon dioxide emissions. Road transport accounts for 84 percent, half coming from passenger vehicles.

In a related move, the Portuguese government Sept. 23 approved a law transposing EU Directive 2003/73/EC, which revises existing requirements for displaying consumer information regarding fuel economy and CO₂ emissions of new passenger cars. The decree-law will go into force following its publication in Portugal's national register, the *Diário de República*.

B. Italian Parliament Considers Tax Increase For Cars Exceeding CO₂ Limit

A bill introduced in Italy's Parliament on September 22nd would increase taxes on cars that do not meet stricter standards for carbon dioxide emissions. The tax, which would raise an estimated [Euros] 10.5 million (\$12.5 million) per year, is intended to add incentives for drivers to trade in older cars for newer and more efficient models.

That increased tax would be targeted to cover about 120,000 cars, or 6 percent of all those registered in Italy. It would be levied on all private and commercial cars and small trucks emitting more than 220 grams of carbon dioxide per kilometer.

The threshold would be lowered to 170 grams of CO₂ per km in 2008 and to 120 grams per km in 2010 in line with a European Union strategy on carbon dioxide emissions from passenger cars.

The fee would vary depending on the degree to which a vehicle exceeds the standard but the average fee would be [Euros] 88 euros per vehicle.

Ministry officials said the cash raised from the fees would be used to fund environmental protection initiatives.

C. France's Proposed 2006 Budget Increases Environmental Spending

France's proposed 2006 budget would expand funding for the Ministry of Ecology and Sustainable Development by 8.6 percent but this would do little more than keep up with inflation and wage increases to maintain support for existing programs, officials told a press conference on October 3rd.

Under the draft budget, which was released Sept. 28 and is slated for parliamentary debate in mid-October, funding for the environment ministry will rise from [Euros]825 million this year to [Euros]896 million (from \$983 million to \$1,067 million), Minister of Ecology and Sustainable Development Nelly Olin told reporters. This would amount to 0.3 percent of the total.

Olin said there were few new programs in her budget, but added that overall government environmental spending, including that in local budgets, would top [Euros] 3.2 billion in 2006.

The proposed budget would cut subsidies to nongovernmental environmental organizations by 20 percent, following a 10 percent cut from 2004 to 2005.

The budget is divided into two principal categories, environmental protection and research. The draft would allocate [Euros] 616 million for protection activities and [Euros] 280 million for research, nearly all of which would be in the nuclear power sector.

The budget bill leaves intact [Euros]63 million in direct funding for the French Agency for the Environment and Energy Management (Agence de l'Environnement et de la Maitrise de l'Energie, ADEME), a government think tank jointly managed by the environment, industry, and research ministries.

The environment ministry budget also specifically earmarks for ADEME [Euros]15 million in projected revenues from a new registration tax on high-pollution vehicles unveiled in early-September, as well as [Euros]170 million in natural gas taxes (Taxe Interieure sur

les Consommations de Gaz Naturel, CICGN) previously included in the general finance ministry budget.

Olin also outlined ministry plans to refocus efforts on five priority areas: climate change; national water policy, particularly in the context of France's ongoing drought; participation in ongoing European Union efforts to better regulate chemicals; pollution control; and biodiversity protection.

The minister also promised France would comply with all obligations linked to the ongoing creation of the EU's Natura 2000, a conservation network, which she said would cost upwards of [Euros] 90 million through year-end 2007.

D. Netherlands Budget Aims Funds For Air Pollution, Renewable Energy

On September 20th, the Dutch government proposed a [Euros]3.5 billion (US\$ 4.2 billion) budget for the Ministry for Housing, Spatial Planning, and Environment that included appropriations for measures to help meet EU air quality standards and to cut greenhouses gas emissions. The proposed budget also earmarked [Euros]1 billion for a Ministry of Economic Affairs program to develop renewable energy sources, focusing in particular on offshore wind energy. The government's total proposed budget for 2006 amounted to [Euros] 146.7 billion.

The document said investment in renewable energy is necessary to lower the Netherlands' dependence on fossil fuels and to reduce greenhouse gas emissions.

The proposed budget included [Euros]70 million for an Environment Ministry incentive program for biofuels and 250 million for programs to boost energy savings, develop carbon sequestration, and develop renewable energy sources. The latter amount, however, is contingent on allowing the Netherlands' only nuclear plant, Borssele, to continue operating past 2012. If the plant is to be shut down by that date, the government would have to compensate the owners by an equivalent amount.

The proposal also calls for allocating [Euros] 900 million over the period 2005-2015 to the Environment Ministry and the Transportation Ministry for programs to reduce emissions of particulate matter and nitrogen oxides in order to help the Netherlands meet EU air quality standards. In February, the Netherlands issued a National Air Quality Plan that outlined measures that will take effect in 2006 to encourage the use of cleaner vehicles and the installation of emissions filters.

E. Sweden's Proposed 2006 Budget Outlines Changes

On September 20th, Sweden's Finance Minister Par Nuder released a draft 2006 budget that would provide more than 1 billion kronor (\$128 million) in environmental spending and would restructure a range of environmental taxes.

The draft budget calls for tax increases on electricity, nuclear energy, trucks, buses, landfill, waste incineration, and air travel. The proposed changes in taxes intended to lessen environmental impacts are expected to increase revenue by SEK 3.6 billion.

However, the proposal would also lower and eliminate some environmental taxes. Notably, it would end an existing tax on carbon dioxide emissions from industrial plants

that are participating fully in the European Union emissions trading scheme. The EU trading system renders the old carbon dioxide tax superfluous, according to Maja Fjaestad, a political analyst at the Swedish Ministry of Sustainable Development and hurts the competitiveness of Swedish industry since other EU member states do not have such a tax.

The proposed budget also includes new appropriations for energy research. In addition, it would extend support for wind power pilot projects for five years, and would continue appropriations for replanting storm-felled forests.

The plan also includes incentives for consumers to switch from electric or oil heat to more environmentally friendly energy sources. It offers tax breaks and investment support valued at SEK 400 million per year for five years.

22. British Plan to Control Emissions From Large Plants Wins EU Approval

The European Commission has largely agreed to U.K. plans for transposing the EU Large Combustion Plant Directive (2001/80/EC), but questions remain regarding some details, according to an official with the U.K. Department of Environment, Food, and Rural Affairs (DEFRA). The LCP Directive sets standards for emissions of sulfur dioxide, nitrogen oxides, and particulate matter from combustion plants with thermal output greater than 50 megawatts, although it does not come into force until January 2008.

The EU Commission had urged member states to take one of two approaches for implementing the directive: either to adopt a national plan, which could involve emissions trading; or to impose caps on individual plants. Nevertheless, the Commission has apparently accepted the U.K. proposals to allow a combination of both approaches.

Under the British plan, manufacturing and refineries will be regulated under a "National Emissions Reduction Plan" but individual caps will be used to regulate emissions from power plants.

23. EU Commission Expects To Expand, Improve Emissions Trading

The second phase of the European Union Greenhouse Gas Emission Trading Scheme will see greater transparency in the assessment of National Allocation Plans and fewer administrative rules and will include more sectors and emissions, Catherine Day, director general of the European Commission's Environment Directorate, told a conference on October 7. In addition, she said, other countries or even states within countries could participate in future phases of the carbon dioxide emissions trading scheme. The current phase began in January and runs to the end of 2007.

Speaking at the Climate Change--Business Forecasts conference, Day said future phases of the emissions trading scheme would bring smaller installations into the program, including possibly the household and road transport sectors, and that the system would be expanded to include more gases. She also said the Commission "would like to see more transparency and better guidance" so that "different countries and sectors can see that they're being treated the same way."

The director general also told the conference that the Commission was engaged in "calm, well-informed [internal] debate" about the impact of carbon prices on European electricity prices. But, she said, the scheme remained the "core of long-term climate change policy."

Day said the Commission was still hopeful that the success of the emissions trading scheme eventually will re-engage the United States with the notion of carbon trading, and she described the European scheme as a "prototype" for an international carbon trading program. She added that the only "significant barriers" to regions or nations outside the European Union linking with the emissions trading scheme are "fundamentally political, not technical" and said the Commission is engaged in discussions with Norway, Canada, and some U.S. and Australian states, about how they could develop compatible schemes.

For the moment, she said, joining the scheme is restricted to "other Kyoto Protocol partners."

Speaking at the same conference, Paula Diperna, vice president of the Chicago Climate Exchange, said the creation of a price for carbon emissions had become a "major strategic driver" for U.S. business despite the fact that the United States has not ratified the Kyoto Protocol.

24. EU Issues Proposal to Include Airlines in Carbon Trading Scheme

On September 27th, the European Commission issued a proposal to include the aviation industry in the EU's greenhouse gas emissions trading system. Extending emissions trading to the aviation sector will limit these emissions and ensure that aviation, like all other sectors, contributes to reducing the harmful greenhouse gases," EU Environment Commissioner Stavros Dimas said in a statement. "Through emissions trading, airlines will be able to do so at the least possible costs."

The statement also quoted Commissioner for Transport Jacques Barrot as saying, "There is a growing consensus in the aviation sector that emissions' trading represents the best way forward to cut greenhouse gas emissions."

The proposal calls for including all cargo and passenger flights that touch down inside the 25-country European Union. Aviation accounts only for 3 percent of EU greenhouse gas emissions, but its share is growing rapidly, according to the Commission.

The Commission announced in July that it would draft the proposal.

According to the statement, the Commission has asked the EU Parliament and the Council of Ministers to give "detailed responses" to its proposal. Separately, it said, the Commission will set up "an expert working group of member states and stakeholders under the European Climate Change Program to consider certain issues in more detail and report back next year."

"Subsequently the Commission will present a legislative proposal to revise the ETS," the statement continued, referring to the emissions trading scheme. "This will be fully coordinated with the general review of the ETS due in mid-2006. The timing of aviation's entry into the ETS will depend on how quickly the legislation is adopted and implemented."

The first phase of the emissions trading scheme covers the period 2005 to 2007. The second phase will coincide with the Kyoto Protocol's first compliance period, which extends from 2008 to 2012.

25. Studies Review Options To Cut Ship Emissions

The European Commission has released two consultancy studies examining the technical potential for reducing air pollution emissions from ships in EU waters and how market-based instruments could be used to achieve these cuts. The research was ordered following an EU strategy on shipping emissions launched in 2002.

The first report concludes that emission abatement techniques can yield large reductions in sulphur dioxide and nitrogen oxides. These techniques can be "very cost-effective" compared with reducing emissions from land-based industry, it added.

Of four economic instruments tested in the second study, it appears that a benchmark-based emission trading scheme could provide the highest cuts in SO₂ with low abatement costs. On the other hand, a credit-based emission trading scheme would be best for reducing NO_x.

The two other instruments, differentiated port dues and environmental subsidies, would provide the lowest cuts, according to the study.

Nevertheless, it concludes that, overall, the four instruments "do appear to offer the potential for significant emissions reductions at lower cost than simple regulatory alternatives".

26. Report Calls for Coherence in U.K. Climate Policies

The United Kingdom urgently needs a "coherent climate change policy" across all government departments to meet the government's goal of reducing carbon dioxide emissions 60 percent by 2050, according to a report issued Sept. 21 by the Tyndall Center for Climate Change Studies, an independent think-tank. The report, Decarbonising the United Kingdom: Energy for a Climate Conscious Future, warns that efforts to reduce emissions are undermined by U.K. transportation policies and that the government's failure to account for emissions from international aviation and shipping has led to "a serious underestimation of the actions necessary to achieve a true 60 percent reduction."

The report explores a number of possible scenarios considering different rates of economic growth, energy supply characteristics, emissions forecasts, and industrial

activities. The report argues that the government can and should take stronger action to reduce carbon emissions.

It states that "best available equipment and appliances on the market are often twice as efficient as the typical product sold," but that the government "must supplement customer goodwill with binding and absolute efficiency standards."

27. EU Ministers Agree on Negotiating Position For Kyoto Protocol Meeting

On October 7th, EU environment ministers approved a negotiating position for the European Union to take to the first meeting of the parties to the Kyoto Protocol, to be held Nov. 28-Dec. 9 in Montreal. The position does not include a call for precise targets for reducing greenhouse gas emissions beyond 2012, as some environmental advocates had hoped for. Currently, the Kyoto Protocol's mandatory targets for reducing greenhouse gas emissions extend only from 2008 to 2012.

British Environment Minister Margaret Beckett and EU Environment Commissioner Stavros Dimas told a press conference that a "less prescriptive" approach would be more helpful at the meetings, which will also serve as the 11th Conference of the Parties to the U.N. Framework Convention on Climate Change (UNFCCC COP-11).

"It's not a sign of the European Union diminishing its pursuit of strong cuts," said Beckett, whose country holds the EU's rotating presidency through December. "But it's a recognition that we have to engage with other players. It was made clear that the Council of Ministers wants to see as many of our global partners as possible engaged in this dialogue because of course we are talking very much about something that is a global problem."

At an informal UNFCCC meeting in May, the EU delegation proposed setting a target for reducing greenhouse gas emissions by 15 to 30 percent by 2020.

Environmental advocates criticized the final EU position paper as vague and lacking ambition. The EU ministers did agree, however, that a follow-up regime to the Kyoto Protocol extending beyond 2012 should include mechanisms to allow carbon dioxide trading, to transfer technology that reduces carbon dioxide emissions, and to help countries adapt to the effects of climate change.

28. Italy's Tuscany Taps Program to Upgrade Bus Fleet

On September 20th, Tuscany said it would become the first region in Italy to take advantage of central government incentives to encourage cleaner vehicles. The regional government said it would spend [Euros] 145 million (US\$ 175 million) to upgrade its public transportation fleet. The central government program will reimburse [Euros] 18.5 million this year and an additional [Euros] 5 million in 2006. The Tuscan plan calls for buying 994 new buses. Most will be powered by more efficient combustion engines, but 218 will be equipped with hybrid engines. The central government has earmarked [Euros] 100 million to be spent by the end of 2010 to encourage the use of

environmentally friendly public vehicles. The program is part of Italy's strategy to improve urban air quality and to reduce greenhouse gas emissions.

NORTH AMERICA

29. Oregon Car-Emissions Veto Draws Lawsuit

Republican legislators and automobile dealers have filed a lawsuit to try to stop Oregon Gov. Ted Kulongoski from adopting tougher vehicle emissions standards. The complaint, filed Friday in Marion County Circuit Court, contends the governor lacked the authority to make a "line-item veto of a clause in a budget bill for the Department of Environmental Quality. The clause prohibited the agency from spending money to adopt California's stricter smog-cutting standards.

The lawsuit was filed by Senate Minority Leader Ted Ferrioli, R-John Day, and House Majority Leader Wayne Scott, R-Canby. It contends the governor can veto specific spending items but may not veto spending that is not in the state budget.

Kulongoski has stated the Legislature exceeded its constitutional boundaries by including the clause in a spending bill.

Automakers and dealers complain the new standards would increase costs. Advocates argue consumers probably would save money in the end because cars would be cleaner and get better fuel mileage.

30. New Jersey Moves Toward Stricter Vehicle Emission Standards

New Jersey is moving forward with plans to adopt stricter motor vehicle emissions standards. Acting Gov. Richard J. Codey has announced that the state will soon adopt tough regulations modeled on California's standards. The rules implement state legislation signed into law in January 2004.

"We can no longer ignore the dangerous effects of air pollution," Codey said in a news release. "These new rules will help save lives, clean our air and improve quality of life for New Jerseyans."

By adopting the California rules, New Jersey expects to reduce emissions of smog-forming substances, such as oxides of nitrogen and volatile organic compounds, by 6.8 tons per day by 2017. The standards also require that 11 percent of automobiles and light trucks delivered for sale in New Jersey be zero emission vehicles, such as electric cars, by 2009. Automobile companies will be able to earn credits by selling electric cars, hybrid-electric vehicles or conventional vehicles with ultra-low emissions. The manufacturers will be able to use the credits toward requirements to produce zero emission vehicles.

The New Jersey Department of Environmental Protection has scheduled hearings on the proposed standards, with plans to publish the final regulations in coming months.

31. US States Fight EPA on Greenhouse Gases

A group of US states have challenged a July court ruling upholding the Environmental Protection Agency's refusal to regulate greenhouse gas emissions. The five states and the District of Columbia filed a petition asking the full US Court of Appeals for the District of Columbia to review the July decision by a panel of the court, which "allowed (the EPA) to continue on its path of inaction."

The group, which includes the attorneys general of Maine, New Mexico, Oregon, Rhode Island and the District of Columbia, said the EPA could not refuse to regulate greenhouse gases "simply because it opposes such regulation on policy grounds."

Last month, however, two judges on a panel of three upheld the EPA's refusal to do so, ruling the agency did not abuse its discretion.

In 1999, environmental groups filed a petition asking the agency to set emission standards for greenhouse gases including carbon dioxide but the EPA denied the petition four years later. President Bush, who had made campaign promises to regulate greenhouse gas emissions, in 2001 said they were not air pollutants that could be regulated under the Clean Air Act. He also eschewed the Kyoto Protocol, the greenhouse gas reduction plan adopted by more than 150 countries.

Massachusetts, Maine and Rhode Island are three of nine Northeastern states currently working on a plan to reduce the level of greenhouse gas emissions from power plants by capping carbon dioxide emissions.

32. Schwarzenegger's Air Board Chair Rejected

The California Senate rejected Gov. Arnold Schwarzenegger's choice to head the state Air Resources Board, saying her close ties to the energy industry rendered her a poor choice for an agency that wields wide influence on the nation's clean-air laws.

The party-line 24-14 vote in the Democrat-dominated Senate means Cindy Tuck must step down as chairwoman of the board within 60 days. The Republican governor named her to the post over opposition from environmental groups.

The air board's sweeping regulations on vehicle emissions and other pollution controls have set precedents for other states and forced industries to adapt.

"California is the No. 1 state in the country with an air pollution problem," said Senate President Pro Tem Don Perata, D-Oakland, who pushed for Tuck's removal. The agency's leader, he said, "needs to be a clean air champion."

Tuck had wide support from business groups she represented for 20 years, mostly in leadership roles with the California Council for Economic and Environmental Balance. The group represents industry and organized labor in trying to minimize the costs to business of environmental regulations.

With Tuck's defeat, Schwarzenegger will name a new leader for the agency "as soon as possible," said his spokeswoman, Julie Soderlund.

The board, part of the California Environmental Protection Agency, is charged with reducing air pollution and toxic contaminants. It is supposed to take into account the effects on the state's economy when considering regulations, the area Tuck's former employer tried to stress.

The governor has tried to build a green agenda since taking office in California's 2003 recall election. He has made several appointments that have been lauded by environmental groups and has opposed Bush administration policies on road building in national forests. He also has his own ambitious plans to address global warming and coastal protection and to create a "hydrogen highway" for pollution-free vehicles.

In testimony before a Senate committee, Tuck swore she would push Schwarzenegger's clean air and greenhouse gas reduction goals. "I did not pursue this position to represent the business community," Tuck said, pledging to be "a leader for clean air."

That wasn't enough for Democratic senators who said her background representing groups that have opposed clean air regulations damaged her credibility. Both sides agreed Tuck was otherwise well-qualified.

"I see a person who has opposed every major piece of legislation to improve air quality in California," said Sen. Sheila Kuehl, D-Santa Monica. "If that's her record, I'm not impressed."

Schwarzenegger and business groups, joined by Republican senators, said Tuck's career as a licensed environmental engineer and attorney who helped craft environmental legislation made her a solid choice to head the agency.

"Regrettably, the Senate today has denied California the service of a valuable public servant," Schwarzenegger said in a statement. "With more than 20 years dedicated to developing our state's air and water quality laws and regulations, Cindy Tuck was the right person to lead California's efforts to improve our air quality."

33. Storm Stretches Refiners Past a Perilous Point

For the nation's oil refiners, Hurricane Katrina was a disaster long in the making. Analysts and industry executives had for years feared the consequences of a storm ramming into the country's largest energy hub - a complex infrastructure that spans most of the coastline between Texas and Alabama, where nearly half of the nation's refineries are located. Hurricane Katrina confirmed the worst predictions. Wreaking havoc along the coastal states, drowning New Orleans and leaving many dead, the storm shut down nearly all the gulf's offshore oil and gas production for over a week. Racing to restore operations, the industry quickly brought about 60 percent of that back.

But even more crucially, it knocked off a dozen refineries at the peak of summer demand, sending oil prices higher and gasoline prices to inflation-adjusted records.

The events have demonstrated how close to the edge the country's refining system had been operating, even before the storm. Because the last American refinery was built nearly 30 years ago - with only a single new one now in the works - the problem is unlikely to disappear quickly. As a consequence, even though crude oil prices have fallen back to pre-Katrina levels, prices for gasoline, heating oil, diesel and jet fuel are expected to remain higher than they were before the storm for a much longer period of time.

The rapid run-up in oil prices over the last two years has translated into a boon for refiners after many years of meager returns. This year, the refining margin - the difference between the cost of buying crude oil and selling refined end products - has exceeded \$20 a barrel, far above the long-term average of \$6. That has meant record profits for oil companies and refiners and above-average stock performance on Wall Street.

Four major refineries, owned by Chevron, Exxon Mobil, ConocoPhillips and Murphy Oil, were either flooded or without power, as a result of the storm and some may be out of commission for several weeks, perhaps months. Together, these refine 880,000 barrels a day, or 5 percent of domestic capacity.

As many as 15 other refineries, also affected by the storm, are resuming production, but some are still operating at limited capacity. Many parts of the industry are recovering rapidly. The most damage offshore was sustained by Royal Dutch Shell, which said that its production, usually about 450,000 barrels a day, would be down by 40 percent through the end of the year.

But even as oil and gas production returns in the gulf, the time that it will take refineries to get back to full speed will be a key factor in determining how long product prices will remain elevated.

Most Americans now pay more than \$3 a gallon for gasoline - matching inflation-adjusted highs reached after the Iranian revolution in the late 1970's and early 1980's and the equivalent, on a per-barrel basis, to \$126. Oil prices, which touched a high of \$70.85 a barrel, now trade around \$64 a barrel, still about \$20 short of the record set in 1981.

The refining outages prompted an international response from industrialized nations to send emergency stocks of oil and gasoline to the United States to plug the shortfall. But that is only a temporary solution to a crisis that has been waiting to erupt for years. Since the 1980's, the number of refiners in the United States has been cut in half. From a peak of 324 in 1981, the industry has shrunk to 149 as the smaller, less efficient and less profitable operators once protected by price controls closed, leaving mostly larger companies in place.

Refining capacity has fallen about 10 percent, to 17 million barrels a day, while oil consumption rose by 33 percent over the same 24-year period, to 20.8 million barrels a day. Meanwhile, refiners have been increasing their skill in turning crude into useful products; efficiency improved by 27 percent between 1981 and 2004. Still, the difference must be made up by direct imports of refined products, with gasoline imports now at 1 million barrels a day.

As their numbers dwindled, most remaining refiners expanded their plants and added equipment to process more oil. Many refiners now typically run at 95 percent of capacity, a level that is dangerously high and that has led to a growing number of accidents in recent years. In March, for example, a blast at BP's Texas City refinery, the country's third-largest, killed 15 and injured 170 people. The company was blamed by investigators with the Chemical Safety and Hazard Investigation Board for "systemic lapses." Following the agency's recommendation, BP appointed an independent panel last month to review the "safety culture" of its American refining operations.

34. US Eases Air Pollution Rule to Boost Fuel Supply

To make more fuel available in the wake of Hurricane Katrina, the Bush administration waived certain air pollution regulations for gasoline and diesel in all 50 states. The temporary easing of regulations was scheduled to end on Sept. 15, said Stephen Johnson, head of the Environmental Protection Agency. The waivers allowed gasoline with higher evaporation rates and diesel fuel with a higher sulfur content to be sold.

The EPA said it would temporarily permit refineries in Florida, Alabama, Mississippi and Tennessee to supply gasoline meeting a Reid Vapor Pressure standard of 9.0 and diesel with sulfur content higher than 500 parts per million. Subsequently, the waiver was extended to the remaining 46 US states.

The policy change will allow more imports of high-sulfur diesel into the US market.

Refiners will also be able immediately to sell gasoline intended for use in the autumn and winter, when pollution caused by hotter weather is normally not a problem.

Retail gasoline prices have shot up across the country due to the fuel supply disruptions caused by Katrina. However, Rep. Joe Barton of Texas, the chairman of the House Energy and Commerce Committee, said he believed some service stations were gouging consumers at the pump.

35. Ultra Low Sulfur Diesel Still Alive After Hurricanes

According to the National Petrochemical and Refiners Assn. (NPRA) despite the energy supply concerns raised by the Gulf Coast hurricanes, there are no moves afoot to delay next June's mandatory switch to ultra low sulfur diesel fuel (ULSD) for on-highway trucks.

On October 4th, the Environmental Protection Agency issued an emergency waiver of the low-sulfur highway diesel fuel requirement (500 parts per million), through Oct. 25, for Virginia, North Carolina, South Carolina, Georgia, Florida, Tennessee and Kentucky, New Mexico, Texas, Oklahoma, Louisiana, Arkansas, Mississippi, and Alabama. The waiver was granted to free up more fuel supplies and to encourage foreign imports.

"We have not asked for any extension of the ULSD rule," Charlie Dresna, NPRA's director of technical advocacy activities told FleetOwner. "The industry is still pointing toward a June 2006 compliance date, and if that becomes problematic, we'll readjust

and confer with other stakeholders on an approach that's necessary. Meanwhile, we're working with the waivers we have right now.

"One thing that happened with the hurricane is that a hydrogen production plant was knocked out, and you need hydrogen to get sulfur out of the diesel," Dresna added.

"Even without Rita and Katrina we had concerns about ULSD supplies," Dresna said.

In late May, the Environmental Protection Agency (EPA) announced it had provided a "transitional period" that extends the deadline for retail diesel outlets to provide ULSD until Oct. 15, 2006. The American Trucking Assns.(ATA) had expressed concern that engine and truck manufacturers might not honor warranty obligations if ULSD supply lags the release of EPA 2007-compliant diesel engines.

36. Baytown Exxon Mobil Plant Up And Running

The Exxon Mobil Baytown Refinery and Chemical Operations Plant, which can produce 557,000 barrels of crude oil into gas and petroleum products per day, has returned back to normal operations after being shut down as a precautionary measure before Hurricane Rita. Hurricane Rita, a Category 3 hurricane, made landfall early Sept. 24 at Sabine Pass, bringing sustained winds of 70 to 80 mph to Baytown.

Exxon Mobil, the city largest employer, initiated start up last week and a spokeswoman for Exxon Mobil said the restart went smoothly. "This is the first time ever that we have shut down the entire complex and started it up," Exxon Mobil Corp. Public Affairs Manager for the Baytown area. "While there were some unknowns, I can say that the talented people (who work here) made it successful."

The crew of Exxon Mobil workers and contractors went step by step through the startup procedures for days in what was an unprecedented event at the Baytown complex.

To ensure the flow of fuel coming out of the Exxon plant was not interrupted, the EPA passed a temporary waiver allowing Exxon Mobil to produce and ship conventional gasoline with higher sulfur content than is normally allowed.

37. DOE, Automakers Say Gas Act May Jeopardize Clean Diesel Vehicles

Auto industry and energy department officials are concerned sweeping presidential authority to waive fuel specifications contained in the House-passed refinery bill could lead to failure of advanced light-duty diesel vehicles because ultra-clean diesel fuel is critical to vehicle operation. Automakers are looking to cleaner burning, advanced diesel technologies to help meet future fuel economy standards for their light-duty fleets. At the same time, emissions regulations will force diesel-fueled vehicles to meet the same emissions standards as vehicles running on gasoline. To meet the increasingly stricter emissions standards, automakers are relying on a combination of advanced emissions control technologies and the cleanest of diesel fuel.

Ultra-low sulfur diesel (ULSD), with a maximum sulfur content of 15 parts per million (ppm), is essential for advanced emissions after-treatment technologies to function

properly, they say. The “Gasoline for America’s Security Act” (GAS Act), H.R. 3893, gives the president broad authority to suspend clean fuel provisions of the Clean Air Act in the event of natural disasters as a way of increasing fuel supply. The waiver is based on the premise that refining cleaner fuels inevitably reduces a refinery’s output and can complicate deliveries, as regions have different fuel specifications.

A diesel fuel waiver could permanently damage emissions control devices on clean diesel vehicles, auto industry and government officials warn, however. An EPA official with an expertise in emissions technologies asserts that diesel fuels with higher sulfur content can “irreparably damage emissions control systems.” The official went on to warn “emissions control systems can fail and vehicles could stop running.” This could lead to “companies being killed by warranty claims [for damaged or inoperable vehicles] or owner/operators [of commercial diesel vehicles] being stuck without warranty coverage,” because the use of a higher sulfur diesel invalidated them.

There is a provision in the GAS Act that seeks to guard against a waiver that “prevents the normal functioning of the vehicle, engine component, system, or equipment ... or would materially degrade such functioning over the useful life of the vehicle, component, system or equipment.” But an auto industry official calls this “a bit of a wishy-washy provision” because it does not specifically protect vehicles that require USLD. Currently some states have been given waivers that allow 3,000-ppm diesel, usually limited to off-road use, to be used for on-road vehicles in an effort to bolster diesel supply in the wake of Hurricane Katrina-related refinery outages.

"These proposals have us very concerned," says Dan Brouillette, Ford vice president of governmental affairs. Automakers have made substantial investments in technology designed to work with low-sulfur gasoline, in an effort to improve vehicle performance, durability, and emissions. The new bill could allow more high-sulfur blends to stay on the market. "Sulfur is like a poison to catalytic converters," warns Brouillette. "Part of the strategy that has helped us reduce smog-forming emissions was based on cleaning up the fuel going into vehicles. Dirty fuels deteriorate catalysts and sensitive electronic sensors, making it very difficult to produce clean emissions."

Carmakers have been planning a big rollout of diesel vehicles in the United States over the coming years, and some diesels, like the Jeep Liberty SUV, have already arrived. Diesels were popular in the 1970s but virtually disappeared over the following decades, due largely to a noisy, dirty reputation. But new "clean" diesels have remained popular in Europe, partly because diesel engines are more fuel efficient than most engines that run on gasoline. Diesel also historically has been cheaper than gasoline, though it's now more expensive due to the shortage in U.S. refinery capacity—a problem the House bill is intended to solve.

38. Key Senator Indicates Support For Tougher CAFE Rules

Faced with red-hot US gasoline prices above \$3 a gallon, a senior Republican senator made the surprising announcement that it was time for Congress to consider stricter US mileage standards for gas-guzzling vehicles.

Several Democrats and environmental groups have long called for Congress to require better fuel economy for new vehicles as the single most effective way to slow US oil demand growth. However, most Republicans and the White House oppose significantly higher mileage requirements because of the potential impact on US automakers.

Recently, the US government reported that the average US weekly retail gasoline price rocketed to \$3.07 cents per gallon, up nearly 46 cents from the previous week, because of Katrina's damage to refineries and pipelines. The new weekly record is close to the inflation-adjusted high of \$3.12 a gallon hit in March 1981.

Republican Sen. Pete Domenici, chairman of the Senate Energy Committee, said lawmakers need to look at a variety of options to address the nation's energy problems. "I believe we must take another look at CAFE (Corporate Average Fuel Economy) standards," Domenici, a New Mexico Republican, said at his committee's hearing on Katrina's impact on energy prices. The United States should also open more offshore areas to oil and drilling, he said.

"Some of these are hard steps to take," Domenici acknowledged. "Hurricane Katrina has reminded us that we cannot escape these decisions."

Gasoline demand accounts for about two of every five barrels of oil consumed in the United States.

Domenici was the chief author of a new \$14.5 billion energy policy signed into law barely one month ago that aims to boost output of crude, natural gas, coal, nuclear and other energy. In June, the Senate voted, 67 to 28, to reject a Democratic amendment to the energy bill to require better mileage for new vehicles. Domenici did not cast a vote.

Illinois Sen. Dick Durbin had proposed boosting the fuel economy of passenger cars to 40 miles per gallon (mpg) by 2016, and sport utility vehicles to 27.5 mpg.

Last month, the Bush administration proposed a modest increase for sport utility vehicles and mini-vans to 22.2 miles per gallon (mpg), from 20.7 mpg required in the 2005-7 model years. The plan was criticized by environmental groups and many Democrats for not going far enough to rein in oil consumption.

39. Auto Makers Reportedly Want Bush to Act on Energy

Ford Motor Co., Toyota Motor Corp. and other auto makers say they want the Bush administration to take more aggressive action to cut US dependence on petroleum, the Wall Street Journal has reported. As Hurricane Rita bore down on US Gulf Coast oil refineries, Ford Chairman and Chief Executive William Clay Ford Jr. sent a letter to President George W. Bush asking for an energy summit involving auto makers, suppliers, fuel providers, consumers and government officials, the newspaper said.

It quoted Ford as saying a summit would focus on what the auto industry can do to find solutions for alternative fuel resources and that the recently signed \$17 billion energy bill "is only the beginning."

Last week, Ford announced plans to increase production of gas-electric hybrid models to as many as 250,000 vehicles a year by the end of 2010. Ford also plans to produce more cars and trucks that run on ethanol.

Separately, the Journal reported that Jim Press, head of Toyota's US operations, said he planned to go to Washington next month to lobby lawmakers to make energy independence an issue in the election campaign of 2008.

"We recognize the responsibility we have to come up with a solution to this economic problem," Press was quoted as saying. "As an industry, we should leave our individual companies' bags outside the door to work together on this issue."

General Motors Corp.'s Washington spokesman, Chris Preuss, told the newspaper GM welcomes calls by other auto makers for more action on energy independence.

"We believe the US needs to begin aggressive energy policy moves away from petroleum toward hydrogen," Preuss was quoted as saying. "We should diversify our energy stocks away from foreign sources."

The newspaper said Ford's call for an energy summit is another sign that the recent run-up in oil prices, and the post-Hurricane Katrina price spike that sent gasoline prices above \$3 a gallon, are forcing a rethink of energy strategy, particularly at GM and Ford.

The big Detroit car makers have long resisted proposals to increase government fuel-economy mandates for sport utility vehicles, pickup trucks and other light trucks, arguing that consumers would not want lighter, smaller, less powerful vehicles.

40. Ford to Boost Production of Hybrids Tenfold

Ford Motor Co., the No. 2 US automaker, will boost global production of gasoline-electric hybrid vehicles tenfold by 2010, Chief Executive Bill Ford has announced. By then, more than half of the company's Ford, Lincoln and Mercury cars and light trucks will have hybrid capability, Bill Ford said during a meeting at a research lab with company scientists and engineers.

The push into the hybrid segment comes as Ford struggles with strong competition, soaring health care and raw materials costs, and a slide in US market share. Ford's North American auto operations swung to a pretax loss of \$1.21 billion, including charges, in the second quarter.

The CEO said that, by 2010, the automaker will have the capability to build about 250,000 hybrid vehicles, with the ability to boost capacity based on demand. Ford, which is considering expanding the hybrid lineup across its European luxury brands, currently makes about 24,000 hybrid vehicles annually. "We know that our customers are concerned about energy," the CEO said. "Our job is to alleviate some of their concerns with viable options in their choice of transportation."

Bill Ford expects the company will make money on hybrid vehicles by 2010. "As we get into the second and third generation (of vehicles), as volume ramps up, costs will come

down," he told reporters at a briefing following his speech. Ford builds the Escape hybrid sport utility vehicle and will begin production this year of the Mariner hybrid, its Mercury version of the Escape.

By 2008, the company said it will have five hybrid vehicles on the road, including the Escape, Mariner and Mazda Tribute SUVs.

In another push to produce vehicles with alternative fuel systems, Ford plans to launch four vehicles in 2006 that will run largely on ethanol. That will raise production of vehicles that can operate with more than just gasoline in 2006 to as many as 280,000 units. The automaker will offer the ethanol-fueled option in its best-selling F-150 pickup truck and the Crown Victoria, Mercury Grand Marquis and Lincoln Town Car sedans.

Bill Ford also said the company will begin a pilot program that will offset greenhouse gasses such as carbon dioxide, emitted in the production of hybrid vehicles. Through the plan, Ford will pay for projects around the world that reduce carbon dioxide emissions.

41. Canada Proposes Toxic Designation For Six Greenhouse Gases

On September 3rd, Environment Canada issued a proposal for public comment to designate as toxic the six greenhouse gases targeted in the Kyoto Protocol as part of Canada's efforts to meet its obligations under the treaty. The proposed designation of carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride as toxic under the Canadian Environmental Protection Act would permit the federal government to implement preventive or control actions, the department said in a regulatory impact analysis statement published with the proposed order in the Sept. 3, 2005, issue of the Canada Gazette, Part I.

The draft order is open to 60 days of public comment.

Canada is committed under the Kyoto Protocol to reduce its greenhouse gas emissions by 6 percent from 1990 levels by the period 2008-2012. The toxic designations would underpin regulations to require major industrial polluters to meet the 45-megatons-per-year reduction target established in Canada's national Climate Change Plan, Environment Minister Stephane Dion said Sept. 2.

"The government of Canada is taking an important step to reduce greenhouse gas emissions in an effective way, including for the industries involved," Dion said in a statement. "There is overwhelming scientific evidence to conclude that climate change is the greatest ecological danger facing the planet."

The toxic designations are necessary for the federal government to implement its proposed approach to reducing greenhouse gas emissions by large final emitters, Environment Canada said in the impact analysis statement.

The large final emitters plan, published for public comment July 16, 2005, would require emissions reductions by about 700 companies, of which 80-90 account for about 85 percent of total emissions by large polluters.

The Canadian Environmental Protection Act provides two routes for the management of substances designated in Schedule 1 of the Canadian Environmental Protection Act, the department said. Substances deemed persistent and bio-accumulative must be virtually eliminated, but because the greenhouse gases are not bio-accumulative, they may be controlled through appropriate instruments for prevention and control, it said.

The toxic designations will not impose incremental costs on the public, industry, or governments, but costs and benefits of controlling the substances would be assessed during the risk management phase that follows designation, it said.

"The government will undertake an appropriate assessment of the potential impacts of a suite of instruments," it said. "These measures and technologies are expected to be considered in consultation with various federal government departments, provincial and territorial governments, and other stakeholders."

42. United States, Canada Agree to Cooperate To Reduce Freight Emissions

Natural Resources Canada and the U.S. Environmental Protection Agency have agreed to work jointly on efforts to persuade the North American freight and shipping industries to voluntarily reduce their emissions of greenhouse gases and other pollutants.

The agencies signed an agreement Sept. 14 to cooperate and share information on research and development and projects to promote reduced fuel consumption and emissions from the commercial transportation sector, Natural Resources Minister John Efford said in a joint statement with Bill Wehrum, acting EPA assistant administrator for air and radiation.

"This agreement allows our two countries and the North American freight and shipping industries to address the problem of greenhouse gas emissions and climate change much more effectively than we can individually," he said. "This kind of cooperation will bring real energy, economic, and environmental benefits."

Wehrum said joint efforts will better leverage public resources and provide the North American freight industry with a unified emissions reduction program.

"We'll get even more impressive environmental and public health benefits, while helping the freight industry save on fuel costs. It's a 'win' any way you look at it," Wehrum said in a statement.

Initial cooperation will focus on cross-border emissions projects, including programs to reduce engine idling by trucks at border crossings between Canada and the United States, EPA said in a statement.

The agencies also will offer joint clean technology promotion and demonstration programs, as well as training for truck drivers on fuel-efficient driving techniques and industry awareness programs, according to EPA.

"The two organizations have unique, but complementary, approaches to saving fuel and reducing emissions," Natural Resources Canada said. "Natural Resources Canada's

FleetSmart program is an educational and training-based initiative that focuses on fuel-efficient driver behavior. EPA's SmartWay Transport Partnership emphasizes the use of innovative technology by rail and heavy duty fleets."

43. Mexico Ends CFC Production Earlier Than Required Under Treaty

On September 9th, Mexico's Environment Ministry announced the country had ceased manufacturing chlorofluorocarbons (CFCs) nearly four years earlier than required under the Montreal Protocol on Substances That Deplete the Ozone Layer.

Environment Minister Jose Luege told a ceremony at the Quimobásicos plant that the closure of the plant's CFC production line reduced Latin America CFC production capacity by 60 percent and world capacity by 12 percent. The Grupo Cydsa plant had produced CFC-based coolants for refrigerators, aerosols, and propellants for 42 years.

Ricardo Sánchez, regional director for the United Nations Environment Program, said "the case of Mexico, which has been complying and complying in advance with the Montreal Protocol, shows that we in developing nations know how to be responsible."

The protocol calls on developing countries to phase out the use and production of most ozone-depleting substances by 2010.

Luege said Mexico had reduced consumption of CFCs by 90 percent during the past 14 years thanks largely to technical assistance from the World Bank and UNEP, which offered US \$75 million in funding for more than 100 programs. He added that Mexico was carrying out a plan to "definitively eliminate" the consumption of CFCs in refrigerators through technical training programs and the establishment of collection centers for the recycling and replacement of refrigerators that use CFCs. In addition, he noted that the ministry had also developed a program with customs authorities to monitor the exportation or importation of CFCs.

Sánchez said the government is also carrying out a program to reduce the consumption of methyl bromide by 20 percent this year. Methyl bromide is an agricultural fumigant used in pest control. The Montreal Protocol calls for developing nations to phase out its use by 2015.

44. State Department Seeks Ratification Of MARPOL Treaty

On September 29th, the U.S. Department of State called for Senate ratification of a treaty to establish international controls on emissions of air pollutants from ships. Deputy assistant secretary of state for oceans and fisheries David A. Balton, testifying at a hearing of the Senate Foreign Relations Committee, said the treaty establishes design standards on marine diesel engines that will reduce nitrogen oxide emissions and limit the sulfur content of marine diesel fuel.

The treaty, a protocol on maritime air pollution attached to the International Convention for the Prevention of Pollution from Ships (MARPOL Convention), was agreed to in 1997.

The protocol, called MARPOL Annex VI, entered into force internationally on May 19. The United States signed the protocol in 1997 but has yet to ratify it.

The annex establishes standards for nitrogen oxide emissions from marine diesel engines and for sulfur content in marine diesel fuel to limit sulfur dioxide emissions.

Bryan Wood-Thomas of the U.S. Environmental Protection Agency said marine diesel fuel commonly contains sulfur levels of 27,000 parts per million, well below the 45,000 ppm limit in the treaty. The United States is already entering discussions with other parties to further reduce the sulfur content, Wood-Thomas said.

EPA is implementing regulations that will limit the sulfur content of diesel fuel for trucks and nonroad equipment to 15 ppm.

Annex VI includes provisions that would allow countries to establish sulfur emissions control areas, or SECAs, in which they would be able to require more sulfur dioxide emissions reductions. Assistant secretary Balton said the United States is considering establishing several SECAs.

Balton said President Bush supports an amendment that would implement further nitrogen oxide reductions.

45. Court Rejects EPA Air Pollution Revision

A federal appeals court has rejected what it called a Bush administration attempt to "pull a surprise switcheroo" by weakening the government's authority to monitor air pollution from power plants, refineries and factories. The U.S. Court of Appeals for the District of Columbia annulled the Environmental Protection Agency's revisions of air pollution monitoring requirements last year. The court's action returns for the time-being a stricter, Clinton-era standard that allows EPA and states to require more monitoring from plants when they renew their operating permits every five years.

Writing for a three-judge panel, Judge David Sentelle said an EPA settlement last year with the utility and other industry groups on monitoring requirements contradicted the agency's 2002 interpretation of the Clean Air Act. "The upshot of EPA's final interpretation ... is that state permitting authorities are now prohibited from adding new monitoring requirements," wrote Sentelle, who was appointed to the court by President Ronald Reagan. "This flip-flop complies with the (law) only if preceded by adequate notice and opportunity for public comment."

EPA spokeswoman Eryn Witcher said the agency was "pleased that the court is allowing EPA to address the procedural flaw in the rule, by providing an opportunity for additional public comment on the agency's approach to monitoring requirements."

The court's ruling was in a suit brought by three environmental groups - the Environmental Integrity Project, the Natural Resources Defense Council and Earthjustice - challenging EPA's new interpretation.

Eric Schaeffer, a former EPA civil enforcement chief who heads the Environmental Integrity Project, said the Bush administration had "abandoned the authority" that federal and state agencies had to require improved monitoring to find pollution that often escapes detection. He said the court restores citizens' right to demand constant monitoring of pollution from local power plants, refineries and factories "that allows you to know whether they're complying with the law."

"If you can't tell whether someone's violating the Clean Air Act, then what good is the law?" Schaeffer said. "It's as if you put a cop on the road every 5 years to see if people are speeding - it's that big of a problem."

Sentelle said the court can't allow EPA to justify limited public input by claiming its final regulations merely were a "logical outgrowth" of an earlier rulemaking process. "Thus, we have refused to allow agencies to use the rulemaking process to pull a surprise switcheroo on regulated entities," he wrote.

46. Former Energy Czar Adopts Strong Goals For Cleaning Up LA Port

David Freeman has never been one to think small. When he ran the Tennessee Valley Authority under President Jimmy Carter, he halved the sulfur oxide emissions from the country's largest utility, and later, as Gov. Gray Davis' energy czar, helped extricate California from the fallout of the energy crisis by renegotiating punishingly expensive power contracts. But at 79, Freeman may have now taken on his most ambitious mission yet: slashing pollution from one of the dirtiest industrial sites in the country -- the Port of Los Angeles -- by perhaps 80 percent or more, and soon.

Tough as that may sound, Freeman insists with matter-of-fact confidence, it is just the start. His real goal, he said, is to show how cutting-edge technologies, which he intends to employ aggressively and pioneer at the port, can bring about a radical shift away from fossil fuels by industrial users nationwide.

Other California port officials are watching Freeman's efforts closely, and agree that if Freeman can push shippers, truckers and the railroads to adopt new technologies that drastically reduce emissions, it will help their efforts.

Los Angeles may be better known for Hollywood, but in reality no industry looms larger in the city's economy than its thriving port operations. Growing rapidly on the back of soaring trade with Asia, the port is one of the largest sources of jobs in the state -- more than 260,000 in Los Angeles County alone, and hundreds of thousands more throughout the region. These range from truckers and stevedores to railroad and warehousing workers, along with thousands of executive positions.

But the port has also become an enormous source of health-threatening emissions, which recent studies by experts at the University of Southern California and UCLA suggest may be getting close to emergency levels. As the air elsewhere in the Los Angeles basin is generally getting cleaner, at the port and the connecting transportation corridor it is getting worse.

Of special concern, according to researchers, are toxic particulates, produced in heavy volumes by diesel engines, which, the researchers say, are causing hundreds of cancer cases every year. The threat is likely to worsen; container traffic, which has doubled since 1998, is projected to grow perhaps fourfold by 2025.

According to Peter Greenwald, a senior policy adviser to the South Coast Air Quality Management District, which regulates air quality for more than 16 million people in the Los Angeles region, the port emits 25 percent of the diesel particulates in the region, and diesel particulates account for 71 percent of the region's cancer-related emissions.

When Antonio Villaraigosa became Los Angeles' mayor in July, he pledged to make the city a leader in adopting green policies. He quickly followed up with the appointment of Freeman, a colorful character rarely without his white cowboy hat, as chairman of the harbor commission.

The Port of Los Angeles shares the enormous harbor here -- the busiest in the country -- with the adjacent Port of Long Beach, which has its own administration. Long Beach officials said they share Freeman's desires, and that they, too, will be watching his actions closely. But as they tick off their own more limited initiatives, allowing companies to buy and sell pollution credits, for instance, it is clear that Freeman is taking a more ambitious approach.

Freeman said he realizes he has several constituencies he has to persuade, notably the maritime and industrial companies that use the port. Oceangoing container ships, whose engines burn a particularly dirty form of diesel called bunker fuel, produce 55 percent of the particulates from the port, according to the Air Quality Management District. Company representatives say they share Freeman's basic goals, but technology is not readily available for radical improvements.

Freeman readily concedes that it is not clear how all the reductions will be achieved, or who will pay for them, although a number of technologies are already being used to reduce diesel emissions, by using fuels with lower sulfur content and by employing catalytic converters, for instance. One change already being implemented involves supplying electricity to the piers so the ships, when they dock, can shut down their diesel engines. The ports of Oakland and Long Beach are also employing some of these ideas.

Industrial companies and the port itself have already faced barriers to growth because of litigation, and they understand the potentially ruinous costs of endless court fights.

47. Union Pacific Works To Reduce Diesel Emissions In Texas

Union Pacific Railroad has announced that the company has initiated a plan to reduce diesel emissions from its Texas rail yards by as much as 80 percent over the next 10 years. Omaha, Neb.-based Union Pacific will install low-emission, fuel-efficient locomotives for the company's yard operations in Houston, Galveston, Dallas-Fort Worth and San Antonio. The railroad operator will purchase 111 new locomotives in 2006 and 2007. Company officials say the locomotives will reduce nitrogen oxide emissions up to 80 percent, while using 40 percent less fuel.

"Our new low-emission yard locomotives are the next chapter in Union Pacific's voluntary efforts to reduce emissions," says Bob Grimaila, Union Pacific's vice president-environment and safety. "We have worked hard to build the most environmentally-friendly locomotive fleet in North America, and we are committed to preserving our environment by reducing pollution."

By mid-2007, Union Pacific will have 46 locomotives in Dallas-Fort Worth, 56 in Houston, and nine in San Antonio.

Since 2000, the railroad has purchased more than 2,000 new fuel-efficient locomotives, retrofitted more than 1,000 older locomotives and retired 1,300 locomotives from its fleet.

Union Pacific Railroad, a subsidiary of Union Pacific Corp., serves 23 states in the Western United States.

48. U.S. Climate Policy 'Robust and Flexible,' Says Administration Official

U.S. climate change policy is "robust and flexible," the State Department's chief climate negotiator told the Senate Environment and Public Works Committee on October 5. Harlan Watson, the special representative to international talks on climate change, said in testimony that U.S. policy is centered on four elements:

- voluntary incentive-based initiatives to encourage reduction of greenhouse gas emissions;
- understanding the science behind greenhouse gases and climate change;
- accelerating the development of climate change technology; and
- promoting international collaboration.

Watson said that despite U.S. rejection of the Kyoto Protocol on climate change, which sets targets for developed countries to reduce greenhouse gas emissions, the United States has a better record in controlling greenhouse gases than many countries that had ratified the treaty. In fact, Watson said, U.S. emissions of carbon dioxide and other greenhouse gases declined by 0.8 percent between 2000 and 2003. This is despite faster U.S. population and economic growth, Watson said.

During that time, most European Union countries, all of which have ratified the protocol, saw their emissions grow, he said.

According to the Environmental Protection Agency, though, emissions increased by 13 percent from 1990 to 2003. In addition, the short-term decline in U.S. emissions occurred in 2001, when the nation was in an economic recession.

President Bush's commitment in 2002 to reduce the "greenhouse gas intensity" of the U.S. economy--the amount of greenhouse gases produced per unit of economic output--will result in cumulative emissions reductions of 1.8 billion tons in 2012 from what they would have been in a business-as-usual scenario, Watson said.

Watson said only two EU nations anticipate meeting their 2010 greenhouse gas emissions targets under Kyoto. This statement was apparently contradicted on October

4th when John Bruton, EU ambassador to the United States, wrote Environment Committee Chairman James Inhofe saying that annual emissions by 25 European nations declined by 350 million metric tons, or 5.5 percent, between 1990 and 2003. Some of this is attributable to industrial restructuring in Central and Eastern Europe, Bruton said. These nations saw economic contraction after the fall of communism.

Bruton did not testify at the hearing, but in his letter he said that in 2003 the 15 EU member states that existed prior to enlargement of the union in 2004 had reduced greenhouse gas emissions by 1.7 percent from 1990, the Kyoto Protocol's baseline year. Average emissions over the most recent five-year period are 2.9 percent below the 1990 level, Bruton said.

Watson reiterated the U.S. position that participation in the Kyoto Protocol would impose tremendous costs on the U.S. economy. However, Watson said he could not endorse an estimate, proposed by Inhofe, that U.S. participation would cost \$2,715 per family per year.

Inhofe reiterated his position that there is no scientific certainty that rising levels of greenhouse gases in the atmosphere are increasing worldwide temperatures.

Asked by Sen. Barack Obama (D-Ill.) whether the Bush administration believes climate change is happening, Watson said Bush made his position clear at the G-8 summit of world leaders in July. Watson said that temperatures are increasing, and that there is no doubt greenhouse gas levels are increasing. Humans are contributing to rising greenhouse gas levels, Watson said, but some uncertainties remain about how climate change is happening.

Also testifying at the hearing was Lord Nigel Lawson of Blaby, a member of the United Kingdom House of Lords, who criticized the science used by the International Panel on Climate Change to say that rising greenhouse gas levels are leading to climate change.

Margo Thorning of the American Council for Capital Formation testified that economic growth should not be sacrificed for greenhouse gas emissions reductions.

However, Michael Grubb of the U.K. Carbon Trust, a government-backed corporation designed to implement projects to reduce carbon dioxide emissions, testified that the Kyoto Protocol is flexible and is achieving greenhouse gas reductions cost-effectively.

49. GAO Cites Rise in Federal Funding For Climate Programs; Uncertainties

U.S. federal funding for climate change programs rose 55 percent in inflation-adjusted dollars between 1993 and 2004, the Government Accountability Office said on September 26, but the agency warned that it could not be certain the figure was accurate because of the way the government has changed its reporting methodology over time. Citing data from the White House Office of Management and Budget and a federal climate change coordinating group, GAO said federal funding for climate change programs increased from \$3.28 billion to \$5.09 billion after adjusting for inflation.

Regarding specific categories, funding on technology-related programs showed the largest gain, rising from \$1.18 billion to \$2.87 billion after inflation, an increase of 143 percent in real terms, according to GAO.

Funding for science programs rose a more modest 9 percent over the decade, from \$1.82 billion to \$1.98 billion, while funding on international assistance programs fell in real terms. Funding for foreign assistance declined 10 percent, from \$280 million to \$252 million.

At the request of Senators John Kerry and John McCain, GAO examined how climate change funding changed and the extent to which data on funding are comparable over time. GAO also looked at how climate-change related funding for various agencies rose or fell.

GAO's findings were contained in the report, *Federal Reports on Climate Change Funding Should Be Clearer and More Complete*.

In addition to examining reports on funding prepared by the White House budget office, GAO looked at data from the Climate Change Science Program (CCSP), a multi-agency coordinating group that is responsible for preparing climate change science reports.

Congress requires that the administration report annually on federal spending on climate change.

As an example of the uncertainty surrounding funding levels, GAO said it identified several ways in which technology funding in OMB's recent reports may not be comparable to previously reported technology funding levels. For example, OMB added accounts to the technology category recently that were not reported before or that were presented in different categories. However, the budget office did not explain whether the accounts reflected the creation of new programs or a decision to count existing programs for the first time, GAO said.

"From year to year, there were numerous changes in the format and content of OMB and CCSP reports, but the reasons for such changes have generally not been well explained," GAO said. "Consequently, these reports--taken collectively--do not provide a fully comparable picture of funding or spending trends, and the Congress and public cannot consistently track federal climate change funding or spending over time."

GAO also said that OMB provided information on budget authority for climate change programs provided by Congress, as opposed to actual expenditure and obligation levels, as lawmakers had directed the budget office to do.

The accountability office recommended that OMB and CCSP use the same format for presenting data to the extent possible and to explain changes in the content or format of the reports when they occur. GAO also recommended that OMB ask Congress whether its reports should be presented in terms of expenditures and obligations or in terms of budget authority and that if OMB continues to report on budget authority, it should clearly identify the data in its reports as such.

GAO said OMB generally agreed with the recommendations in oral comments to GAO investigators. CCSP also generally agreed with the recommendations and said in a letter

responding to the report that the coordinating group intends "to enhance our communications with OMB to ensure that Congress and the public can consistently track federal climate change spending over time."

50. Canada's Environmental Auditor Criticizes Government Performance

On September 29th, Canada's environmental auditor criticized the federal government for its "chronic inability" to follow through on its environmental initiatives. On key issues including drinking water safety, protection of the ocean environment, and biological diversity, the federal government is quick to develop appropriate initiatives but is rarely able to carry them through to completion, Environment and Sustainable Development Commissioner Johanne Gelinas said in her annual report to the Canadian Parliament.

Reasons for this cited by Gelinas include a tendency to make commitments without establishing the necessary structure or resources to deliver on promises; a lack of accountability by senior public servants for their departments' performance; and organizational "silos" and "turf protection" that block integration efforts.

"Because of these problems, isolated pockets of good effort and success are often outweighed by backsliding in other areas," she said. "The government continues to talk a good line about sustainable development and sometimes commits financial resources, but often fails to adequately implement its own commitments."

"The government's current promises, if fulfilled, would improve Canada's environmental position. But further new thinking is required to truly achieve sustainable development," she said. "Achieving sustainability within a generation will require that we Canadians significantly transform our society. The federal government should be leading this sustainability revolution."

In response, Federal Environment Minister Stephane Dion said September 29 that the government values the commissioner's advice. "We are listening and taking action," Dion said in a statement. "In fact, work has already started on some of the recommendations that she has just made."

The government has made "significant" progress over the past 12 months, he said, citing the creation of an ad hoc cabinet committee on sustainability and the environment; implementation of Project Green to improve energy efficiency, waste management, biodiversity, water protection, contaminated sites, and emissions reduction; and an update of the government's Climate Change Plan.

"Through the enhanced coordination now taking place within Project Green, our action plans for clean air, water, nature, contaminated sites, and climate change will provide enormous benefits for Canadians," Dion said. "They will also be linked by an improved decision-making process--a new framework for competitiveness and environmental sustainability. We are moving forward, and I am confident that future reports will chart the progress we are making."

51. Report Claims Large Increase in Canadian Industries' Pollution

Canadian industries emitted more than 4.1 billion kilograms of air pollutants in 2003, evidence that Canadian environmental regulations are ineffective, the nongovernmental organization PollutionWatch said in a report issued on October 12th. According to the report, emissions of "core pollutants" rose 59 percent from 1995 to 2003.

PollutionWatch is a collaborative effort between the Canadian Environmental Law Association and the U.S.-based Environmental Defense. The information was drawn from data reported to Environment Canada through the National Pollutant Release Inventory, it said.

The environmental groups called on the federal government to use its upcoming five-year review of the Canadian Environmental Protection Act to strengthen its approach to reducing pollution. It called for steps to eliminate air and water releases of carcinogens by 2008, to increase the number of facilities required to prepare and implement pollution prevention plans and to ensure adequate resources to enhance and expand the National Pollutant Release Inventory program.

The report highlighted the 12 Canadian corporations with the largest air releases of pollutants, which it said were responsible for 46 percent of combined air pollution reported in 2003. Named on the list are: Inco Ltd., 368 million tons; Alcan Inc., 288 million tons; Ontario Power Generation, 249 million tons; Nova Scotia Power Inc., 174 million tons; Hudson Bay Mining and Smelting Co. Ltd., 169 million tons; SaskPower, 142 million tons; Syncrude Canada Ltd., 121 million tons; Transalta Utilities Corp., 103 million tons; New Brunswick Power Corp, 100 million tons; Noranda Inc., 85 million tons; Aluminerie de Becancour Inc., 68 million tons; and EnCana Corp., 64 million tons.

52. Ontario to Mandate Ethanol Content in Fuel

On October 7th, Ontario Agriculture Minister Leona Dombrowsky announced that the provincial government had finalized regulations requiring all gasoline sold in the province to have at least 5 percent ethanol content by Jan. 1, 2007. In addition to finalizing Ontario Regulation 535/05, which implements the Renewable Fuels Standard, the government has also started accepting applications for support of ethanol production through the Ontario Ethanol Growth Fund, Dombrowsky said in a statement. "We're now ready to begin creating our future of cleaner air and greater prosperity by producing renewable fuels," she said. The 12-year, C\$520 million (US\$ 437 million) Ontario Ethanol Growth Fund offers capital and operating assistance for ethanol producers, support for independent retailers, and research and development support for related technologies, she said. Ontario Premier Dalton McGuinty first outlined the ethanol requirement in November 2004, projecting that implementation in January 2007 would reduce vehicle emissions by 800,000 tons per year.

ASIA-PACIFIC

53. Daihatsu To Use Toyota Hybrid Technology

Daihatsu Motor Co, Japan's second-largest maker of minicars, will sell its gasoline-electric commercial vehicles starting on September 26, tapping parent Toyota Motor Corp.'s technology as record oil prices raised demand for fuel-efficient models.

According to press reports, Daihatsu will sell hybrid Hijet Cargo models for 2.22 million yen (\$ 20,090), almost triple the price of a model using a conventional gasoline engine with 0.66-liter capacity.

Daihatsu aims to sell 300 of the so-called hybrid models a year, said the carmaker's Executive Vice President Katsuyuki Kamio.

Automakers are developing cleaner engines for smaller cars to meet tighter government regulations on emissions and fuel consumption.

54. Cleaner Gasoline And Diesel On The Way in New Zealand

Starting this month, the Marsden Point refinery will begin making "cleaner" petrol and diesel as part of the Government's strategy to reduce harmful vehicle emissions. Diesel must have no more than 50 parts per million (ppm) of sulphur by January 2006 - a significant reduction from the current 500 ppm. All grades of petrol must have no more than one percent of benzene (down from three percent). Other high-octane components called aromatics must also be reduced by 3 percent.

The refinery will lower the octane rating of premium petrol from 96 to 95. New Zealand's legal specification for premium petrol allows this reduction - its octane rating must be a minimum of 95. New Zealand is now one of a very small number of countries still using 96-octane petrol. Moving to the international standard of 95 octane will make it easier for New Zealand to import refined petrol, which should also improve security of supply. Around 40 percent of New Zealand's petrol is currently imported.

Those BP and Mobil stations that currently sell 98-octane premium petrol will most likely continue to do so - it's only the 96-octane petrol that is changing. And it only changes at BP, Caltex, Mobil and Shell stations. Gull imports all its petrol, and has no immediate plans to change from offering 96-octane fuel.

There's no change to the octane rating of 91-octane petrol, so nothing should change on regular pumps.

To meet the Government's January 2006 deadline of having all fuel at service stations meet the new limits, the refinery will begin producing the new lower benzene and lower sulphur fuels in September. The new 95-octane petrol will become available in the northern part of the North Island (Hamilton, northwards) from October, and from November for the rest of New Zealand.

55. Christchurch Air Quality Study Supports Tougher Rules

The Health and Air Pollution in New Zealand (HAPiNZ) Christchurch pilot study has been released, noting that air pollution from domestic fires, industry and vehicle

emissions causes 158 premature deaths in Christchurch each year and costs the local economy \$168 million annually.

The study says the additional effects of fine particle and benzene pollution cause 52 cases of chronic bronchitis, 53 hospital admissions from acute cardiac illness and 194 admissions from acute respiratory problems annually. It also says there are 1.6 cases of leukemia each year and that the number of days where people are so affected by air pollution that they have to take time off work or school, or not engage in normal activities, totals 285,000 across all of Christchurch each year.

Christchurch was chosen as the pilot for the full Health and Air Pollution in New Zealand study because it has been identified as having serious air quality problems, and there were large amounts of data available on air quality. The results are relevant to Christchurch only, and will be different in other areas, where the effects and the split between domestic, industrial and vehicle emissions will differ.

Once the pilot study report has been reviewed the researchers will use the methodology tested in it to analyze the health impacts in the rest of New Zealand.

The full study is funded as a joint project between the Health Research Council, the Ministry for the Environment and Ministry of Transport. The research is being carried out by a large team of experts from the National Institute of Water and Atmospheric Research (NIWA), the University of Canterbury Geography department, the Wellington Medical School, the Christchurch School of Medicine and Health Sciences, the Australian National University, Landcare Research, and private consultants and students. Over 20 people are involved, covering a range of specialties from basic air quality science, modeling, epidemiology, toxicology, economics, and policy and Maori issues.

In 2003 the study was commissioned by the Health Research Council of New Zealand, the Ministry and the Ministry of Transport with in-kind support from regional councils. The study aimed to:

- Identify effects of air pollution throughout New Zealand and to link the health effects to various sources of pollutants
- Confirm preliminary research that concluded New Zealanders are suffering significant adverse health effects because of exposure to outdoor air pollution
- Incorporate up-to-date air quality monitoring, health data and exposure modeling
- Refine existing analysis techniques and apply new techniques to produce more accurate results
- Carry out economic impact assessments and develop potential policy options to improve health
- Assess potential effects in previously unstudied areas.

The HAPiNZ contract was awarded to the National Institute of Water and Atmospheric Science. The three-year study commenced in 2003 and is due to finish in 2006. The Pilot Study focused on Christchurch because there was already significant information on air pollution levels and population exposures.

Key findings of the pilot study for Christchurch are as follows:

- Exposure to PM10 is estimated to cause 116 premature deaths per year in over 30 year olds (82 caused by emissions from domestic heating, 18 by industrial emissions and 16 by vehicle emissions).
- PM10 is further estimated to cause 52 cases of chronic bronchitis as well as 247 cases of acute cardiac and respiratory admissions.
- Other health effects caused by pollutants (including contaminants such as carbon dioxide and benzene) are estimated to result in 1.6 cases of leukemia cancer per year and 285,000 restricted activity days per year.
- The total costs of air pollution in Christchurch are estimated as \$136M per year (\$95M from domestic heating emissions, \$19M from Vehicle and \$22M from industrial emissions). This equates to \$430 per person.
- The most sensitive individuals include older people (particularly over 65s), infants (particularly under 1s), asthmatics and people with bronchitis, people with other respiratory problems, and people that are health compromised in other ways such as those with heart disease.
- A number of policy options for emission reductions from the domestic, transport and industrial sectors were examined. These underscored, in particular, the need for the actions proposed by Environment Canterbury as part of their Regional Air Plan to meet the national environmental standards for air quality by 2013.
- The greatest health impacts, and costs, occur due to pre-mature mortality caused by long-term exposure to fine particles from combustion sources (mainly home heating and vehicle emissions).

56. Air Quality Report Rejected In Hong Kong

The Environmental Protection Department has refuted a newspaper report comparing the results of seven local air quality monitoring locations and the US standard. The department said the report is premised on a misunderstanding of the purpose and parameters of the study on Determination of Suspended Particulate & Volatile Organic Compounds Emission Profiles for Vehicular Sources in Hong Kong, released in July.

The study was to enhance the understanding of and improve the assessment methods for vehicle emissions, and its findings have confirmed many of the current understandings on emissions in Hong Kong and the validity of methods used to assess them.

The department said out of the six monitoring locations, three were inside road tunnels and three were at the roadside, but the US PM_{2.5} standard is applicable only to general outdoor air. For the general outdoor air samples collected in the same study, the PM_{2.5} concentrations were actually below the US standard.

The study also found the emissions of various pollutants in tunnels are generally lower than in other countries. This reflects the fact that the local vehicle emission control program is successful.

The department said it will consider the need for revising Hong Kong's Air Quality Objectives from a scientific perspective and local applicability, by making reference to the results of reviews in the US, Europe and other developed countries, in conjunction with information obtained from ongoing local studies.

57. Chinese Court Imposes Pollution Fines, Prison Terms

On September 9th, a court in Chengdu, capital of Sichuan province, sentenced six people, including local environmental officials and company executives, to prison terms for their roles in a pollution incident that occurred along the Tuojiang River in early 2004, according to state media. The official China Daily reported Sept. 12 that in February and March 2004, the Sichuan Chemical Company Ltd. dumped wastewater containing synthetic ammonia and nitrogen into the upper reaches of the river, which feeds into the Yangtze.

The pollution killed 500,000 kilograms of fish, spoiled the drinking water supply for 1 million people in the area for almost a month, and caused economic losses of 300 million Yuan (\$37 million), the newspaper said.

A subsequent investigation showed that the company had not filtered the wastewater as required, it said.

The court of Chengdu's Jinjiang District found the plant's manager guilty of negligence for failing to obey environmental protection laws, fining him 30,000 Yuan and sentencing him to a three-year prison term. The deputy director of the local environmental protection bureau responsible for pollution control received a 30-month prison term, the report said, for "[failing] to prevent a serious pollution incident from happening." Four others who worked "either with the company or the bureau" also received prison terms, the report said, without offering further details.

Senior Chinese officials in recent months have warned that they will crack down on local officials who are found to be protecting polluters. In early May, the official Xinhua News Agency cited Wu Guanzheng, secretary of the Chinese Communist Party's Central Commission for Discipline Inspection, as promising to "punish whoever causes major environmental pollution and ecological damage due to misuse of authority or neglect of responsibilities."

58. Tokyo To Reward 'Green' Drivers

The Tokyo metropolitan government is to set up an "eco-driving" license system that rewards motorists for cutting back on exhaust emissions. To obtain the license, drivers must meet certain criteria that prove they don't abruptly accelerate or brake, or leave their cars idling unnecessarily—all factors that have been found to increase harmful gas emissions. For their efforts, eco-license holders will be rewarded, officials said, adding that a reduction in car insurance fees is one option being considered.

Findings of an eco-driving project set up by the metropolitan government, along with the Japan Automobile Manufacturers Association, the Japan Automobile Federation, a nonlife insurance company and six other auto-related firms, found that encouraging drivers to adopt environment-friendly driving practices would greatly assist the capital in meeting its vehicle emissions targets.

Under the project, the city's research institute for environmental protection pinpointed a series of environmentally sound driving techniques on which the new license system will be based. Officials said by adopting those techniques, motorists could cut total exhaust emissions by between 10 and 20 percent per vehicle.

Drivers who want to obtain the license will be required to have their cars temporarily fitted with equipment that measures engine revolution and speed. After a designated monitoring period, the officials said, an authorized institution will screen measurement records. If a driver successfully meets certain criteria, the institution will then issue the special license.

It is estimated that vehicle emissions make up about one-quarter of Tokyo's annual 67-million-ton CO2 emissions output.

59. Honda Rolls out New Civic, Hybrid Model for Japan

Japan's Honda Motor Co. Has unveiled the latest version of its popular Civic sedan, with improved gasoline and hybrid engine systems for the domestic market, as it looks to reignite flagging sales of a car that was launched a third of a century ago. Production of the Civic -- which has sold some 16 million worldwide -- has dropped 24 percent from a 1997 peak as consumers shifted to newer designs. But the Civic still accounts for nearly a fifth of Honda's global sales and is seen, along with the company's best-selling Accord, as a lifeline in ferociously competitive world markets.

Japan's third-biggest auto maker hopes the Civic revamp will catch buyers' imagination and has targeted annual global sales of more than 600,000 units, including 40,000 of the gasoline-electric hybrid model. It is sticking to its 2005 worldwide group sales target of 3.42 million cars.

"We have developed the remodeled Civic to add new value to customers' needs in various regions in today's globalized society," Chief Executive Takeo Fukui told a news conference. "We are confident that it would exceed the expectations of customers in Japan and all around the world."

The eighth version of the Civic made its debut earlier this month in the United States, Honda's biggest market and where hybrid vehicles are gaining popularity as fuel prices soar. Honda aims to sell 28,000 Civic hybrids a year in the US

The new Civic will go on sale in Europe from January.

The latest Civic carries a lighter engine than previous models, using fewer components so as to reduce costs. The engine also uses a mechanism that helps it burn fuel more efficiently while enhancing driving performance, raising the new gasoline-only Civic's fuel economy by 6 percent.

The new hybrid system enables the gasoline-electric vehicles, like Toyota Motor Co.'s Prius sedan, for the first time to run solely on the electric motor at low cruising speeds.

Sales of the remodeled gas-only Civic start at 1.79 million yen (\$16,090) before tax in Japan. The hybrid versions, which will hit the market on Nov. 22, start at 2.09 million yen.

Honda will sell the new Civic only in a 4-door model in Japan, while the US market has both 2-door and 4-door versions.

60. Volkswagen to Make Hybrid Cars with China

Volkswagen will start making hybrid cars by 2008 with its main Chinese partner and may kick off large-scale production of the energy-efficient vehicles by 2010, the Chinese company has announced. Europe's biggest car maker is teaming up with Shanghai Automotive in a project that could spur China's hunt for alternative energy sources and curb pollution as demand for cars soars in the world's seventh largest economy.

Their venture intends to make 500 hybrid Touran cars to be used as people carriers during the 2008 Beijing Olympics, Shanghai Automotive, and China's largest car manufacturer, said in a statement. "We expect that large-scale production will start before the 2010 World Expo in Shanghai," Shanghai Auto said, without providing an investment figure.

Shanghai Auto is also working with General Motors Corp. on similar technology, the company added.

The Volkswagen venture will develop hybrid technology for the Chinese market, a Volkswagen spokesman in Germany said, but the European firm would work alone to develop its own hybrid engine technology for the United States and Europe.

Last September, Toyota Motor Corp. said it would start building its Prius hybrid sedans in China with FAW Group in a step it hopes would promote the vehicles as the global standard for fuel-efficient cars. Toyota's Prius, first launched in Japan in 1997, has emerged as the most popular hybrid. The Japanese firm plans to build 180,000 Prius cars this year and is targeting combined annual output of 62,000 Lexus luxury sport utility vehicles and Highlander hybrid cars, both launched earlier this year. Toyota had initially set a goal of selling 300,000 hybrid vehicles annually by this year or next, and has said it aims to boost that to 1 million as soon as possible.

China is the world's largest consumer of oil after the United States, importing more than a third of its oil needs. Beijing is concerned that an energy shortage could harm economic growth. Beijing has said it wants to raise the average fuel efficiency on vehicles by 15 percent by 2010 from 2003's levels. To do so, it has said it would support research into alternative powertrain -- such as hybrids and cleaner diesel engines -- while also exploring fuel-cell vehicles.

61. Fuji Heavy To Develop Electric Car With TEPCO

Subaru car maker Fuji Heavy Industries Ltd. has announced that it would co-develop and produce 10 electric cars with Tokyo Electric Power Co. (TEPCO) to be tested by the utility as a first step towards spreading the use of the ecologically friendly vehicles. Over

the next year, the partners aim to develop cheaper and more efficient technology to meet several conditions including a minimum driving range of 80 km (50 miles) and a recharging time of 15 minutes for 80 percent of the battery's capacity.

Japan's biggest electricity provider would purchase Fuji Heavy's electric cars for internal use if the price were limited to around 3 million yen (\$27,290), a Fuji Heavy spokesman said, and test them for practicality, feasibility and cost.

Fuji Heavy currently has a prototype mini electric car that runs on a lithium ion battery co-developed with NEC Corp.

The auto maker said recently it was also aiming to market a hybrid gasoline-electric car in 2007 using the high-performance battery, which lasts 15 years, or about twice as long as those used in today's hybrid cars.

Most auto makers have given up on pure electric vehicles, instead focusing on hydrogen-fuelled fuel-cell vehicles and gasoline-electric hybrids as an ecological alternative to internal combustion-engine cars because they found that electric cars required too many hours of recharging for relatively short distances.

Japan's Mitsubishi Motors Corp. is the only other major auto maker with plans to commercialize electric vehicles. It now has a prototype that can run 150 km (93 miles) on about 10 hours of recharging, also using a lithium ion battery, and is aiming to expand the driving range to 250 km (155 miles) by 2010. Mitsubishi Motors has said it was also talking with TEPCO and other utilities to exchange information on electric car-related technology as part of its aim to market a practical and affordable electric minicar. If the issues of charging time, driving range and cost are resolved, electric vehicles could be a more attractive alternative to fuel-cell vehicles, which require massive investment for hydrogen fuelling stations, among other hurdles.

During the experiment, TEPCO would also gauge the possibility of switching some or all of the 3,000 or so in-house small cars that it uses for traveling short distances beyond March 2006. It estimated that if all 3,000 were switched to electric vehicles, carbon dioxide emissions would be reduced by 2,800 tons a year and fuel costs cut by 190 million yen (\$1.73 million) annually.

Fuji Heavy said it would aim to offer electric vehicles to other companies through technology gained from the experiment, with the eventual aim of commercializing them for personal use.

62. Malaysia Urges Neighbors to Do More on Haze

Malaysia has urged its neighbors to ratify an agreement to control air pollution in Southeast Asia, a month after forest fires in Indonesia caused some of the worst haze in the region in eight years. Malaysian authorities imposed a state of emergency in two areas in August after air pollution levels reached dangerous levels, threatening public health, grounding some flights, disrupting shipping and shutting schools.

"Every member country should ratify the agreement," Dato S. Sothinathan, Malaysia's deputy environment minister, told reporters during a meeting in Manila of Association of South East Asian Nation (ASEAN) environment ministers. "If it's ratified by all, I think it can be given its full force". He said only seven of ASEAN's 10 member states had ratified the June 2002 region-wide agreement to prevent and control transboundary haze pollution as a result of land and forest fires. Indonesia has yet to ratify the accord.

In a joint communiqué issued on the final day of a two-day informal meeting, the ASEAN environment ministers agreed to form a regional panel of experts on fire and haze assessment to strengthen cooperation among affected countries.

"We want better cooperation," Sothinathan told reporters, adding his government would support efforts by Jakarta to prosecute companies and individuals causing land and forest fires, including Malaysian companies. "What we would like to see is to prevent this from happening. There should be no burning of plantation for cultivation purposes".

63. Bangladesh Introduces Five-Day Work Week To Save Fuel

The working week in Bangladesh has been reduced to five days, in line with most other countries, as a result of an austerity drive to save fuel. "From Sept. 9 all government, semi-government and autonomous organizations will have Friday-Saturday holidays that would substantially cut use of fuel-powered transport," according to an official.

"Introducing a five-day work week will reduce use of transport by both public and private sectors, thus saving costly fuel and easing pressure on foreign exchange required to import oil," an energy ministry official said. Bangladeshi workers used to working six days a week will have to stay on the job an hour longer, from 9 a.m. to 5 p.m., to make up for the extra day off. Offices in Bangladesh customarily close at 4 p.m.

The news of two-day weekend delighted workers at all levels. But garment factory owners and exporters asked the government to change the weekend to Saturday and Sunday to provide better business opportunities.

In a drive to clean up the country's polluted cities, the government has also ordered all public transport, especially some 150,000 diesel-run buses and trucks, to convert to compressed natural gas (CNG). Officials said some 40,000 small vehicles had already been changed to CNG since 1996 under an environmental safety program, replacing vehicles emitting harmful carbon.

"More use of CNG-fired transports would further help us to save money, as well as ensure clean air. That is why we are asking entrepreneurs to set up more CNG filling stations across the country," energy adviser Mahmudur Rahman said.

The Bangladesh government recently increased prices of diesel, petrol, octane and kerosene by about 17 percent on average in the wake of spiraling world oil prices. Owners and operators of buses and trucks have called for a two-day countrywide transport strike in protest against increased fuel costs.

Transport fares have already gone up by about 20 percent.

64. As Oil Prices Rise, Asia Pursues Alternatives

Across the Asian region, renewable energy such as solar, wind and geothermal power is gaining ever greater credence as a way to curb the region's appetite for oil and cut runaway import bills. With oil prices near \$70, and expected by many analysts to stay over \$50 through the end of 2006, governments believe alternative energy will help keep their economies growing.

The environmental benefits are also dawning on populous nations such as China, where pollution from burning fossil fuels is causing health costs to soar and growing urbanization combined with a booming economy means more appliances from hairdryers to air-conditioning are plugged in to an already-stretched grid. One of the world's biggest energy consumers, it already aims to get one-tenth of its energy from renewable sources by 2020 but is considering setting its sights even higher. "By 2020 renewable energy (could) account for 15 percent of energy production in China, including large-scale hydropower projects," Shi Lishan, director of renewable energy at the National Development and Reform Commission, told the conference.

China plans to build its first offshore wind power plant next year, while Greenpeace has estimated Chinese wind power potential at 1 million megawatts (MW), more than twice China's current total installed power generating capacity of 440,700 MW.

"Indonesia has big geothermal reserves that can generate more than 25,000 megawatts of electricity," said an energy ministry official in Jakarta. "However, lack of investors in geothermal development is slowing it down. The government has to give incentives to this project," said the official. Director-General of Electricity, Yogo Pratomo, said the government would continue to develop renewable energy such as solar power but costs were a problem.

The Philippines, the world's second largest producer of geothermal power, says high oil prices are helping the green drive. "Indirectly, it (high oil price) has created a sense of urgency in developing renewable energy because of its growing advantage over fossil-based fuels," Energy Secretary Raphael P.M. Lotilla said in a recent interview.

India, which produces only 30 percent of the oil it consumes, is encouraging power generation from renewable sources, which account for about 4 percent of its output. The country is already one of the top five wind power producers in the world. "Renewable sources of energy were always a top priority, particularly in recent years," said a spokesman for India's ministry of non-conventional energy sources. "The current surge in oil prices makes it all the more important that a greater impetus is given to harnessing renewable energy in a country like India," he said.

Smaller Asian nations, lacking the resources or investment to develop large-scale renewable energy projects, have devised more inventive ways to cut oil use. In Cambodia, the government has ordered ministries to cut their energy use by 10 percent, while neighboring Thailand, a net crude importer, is trying to persuade motorists and motorcyclists to switch to biofuels and domestically produced natural gas. The

government wants to reduce a ballooning oil import bill by mixing nine parts gasoline and one part ethanol -- made from sugarcane or cassava -- to produce gasohol.

Sri Lanka, which used to produce most of its electricity by hydropower, has had to turn to oil and coal to meet growth demands but aims to exploit biomass, small hydro plants, solar, sea waves and wind power to cut oil imports.

65. EU-China Climate Deal Fuels Carbon Capture Hopes

The EU and China have agreed on a partnership on climate change including a pledge to develop a demonstration "zero carbon" fossil fuel power station by 2020. The deal is a further boost for the concept of carbon capture and storage, which could potentially reconcile continued large-scale coal and oil burning with big greenhouse gas emission cuts. More broadly, the partnership also aims, by 2020, to "reduce significantly" the cost of a range of clean energy technologies. In preparatory drafts, the EU had suggested a more concrete objective of halving such costs.

Priority areas for technical cooperation include cleaner coal combustion techniques, methane recovery, hydrogen and fuel cells and energy efficiency, energy conservation and renewable energy. The two sides agreed action plans on clean coal and energy efficiency and renewables earlier this year.

The partnership also represents an attempt to forge a high-level political consensus on the future direction of global climate policy. In particular, it features a joint commitment to the "objectives and principles" of the Kyoto protocol.

This was welcomed by the European Commission as strengthening the momentum for the next round of global climate policy negotiations in December. Green group WWF called the deal "a very welcome signal".

In addition, the two sides said they would cooperate to strengthen the Kyoto protocol's clean development mechanism for project-based greenhouse gas reductions in developing countries.

UK Prime Minister Tony Blair, who represented the EU at the talks, underlined the broad political goals of the partnership. Strengthening dialogue with India and China and other emerging economies "is essential if we are to find equitable solutions to global environmental problems," he wrote. Mr. Blair also expressed optimism about the prospects for a post-2012 climate deal. "My hope is that the political divisions over Kyoto are receding and that there will now be political and practical action helping to lay the groundwork for a global agreement beyond 2012," he wrote.

In two related developments;

* The Spanish government has backed a €90 million pilot project to improve efficiency and reduce costs of carbon sequestration according to an article in El Pais newspaper. A dedicated power station is to be built in Ponferrada, northern Spain, where it is hoped increasing the concentration of CO₂ in emissions will reduce the current €30/ton cost for sequestered gas.

* Norwegian environmental group Bellona has issued a report backing carbon sequestration in undersea oil fields. Using carbon dioxide to enhance oil recovery "will generate economic growth and would be the most profitable way for Norway to meet its Kyoto protocol emissions commitments", the group said. Environmental groups have been mostly skeptical of carbon sequestration until now. The report was warmly received by Norwegian politicians and government officials.

66. Vietnam Leaps To Euro 2 Standards

On October 10th the Vietnam Prime Minister signed a decision to adopt Euro 2 standards by 1st July 2007 for all kind of new vehicles. The adoption schedule of other tighter Euro standards will be developed further and submitted to the Government for approval by the Ministry of Transport. The decision also mentions that the local governments can adopt Euro 2 standards earlier and/or more stringent standards.

67. Vietnamese Environment Ministry Seeks Broader Support

Vietnam's Ministry of Natural Resources and Environment (MONRE) has asked the government to devote more funding to environmental protection and to take tougher action against polluters, the official Vietnam News Agency (VNA) reported on September 21. According to MONRE, 30 percent of all Vietnam's waste is dumped irregularly and only 25 of 70 designated industrial zones nationwide have infrastructure to treat waste comprehensively.

"For the remaining (zones) waste water is discharged directly into surrounding rivers, while their solid waste is dumped together with household garbage without being treated," VNA said.

The increased use of chemical fertilizers and herbicides for agriculture poses an additional environmental threat, and "many species of rare animals and plants (are now) facing the daily threat of extinction," the report said.

While the government has taken "drastic measures" and is planning to allocate 1 percent of the annual state budget to environmental protection, these initiatives have so far "failed to achieve the desired results."

VNA said MONRE is proposing that the government divert even more funding to environmental protection. In addition, it has urged the ministries charged with overseeing polluting businesses to work more closely with local authorities "to deal strictly with the violators."

68. Beijing Makes Emergency Plan Against Winter Air Pollution

The Municipal Environmental Protection Bureau has made an emergency plan to prevent heavy air pollution in Beijing's winter, said vice director Du Shaozhong. The plan was made after wide consultations with government departments and companies and it will be launched when heavy air pollution emerges for two consecutive days. According to the plan, the government will organize special street cleaning and sprinkling work

when it is in effect and factories with huge pollutant emission will be ordered to reduce their production.

Beijing has seen 190 days with blue sky this year, eight days more than the same period last year. But Du said "Viewing from the weather changing trend in Beijing's past few winters, the situation is not very promising." He said air pollution in Beijing is growing increasingly complex and the emergency plan is important to cope with the plight.

The official said the bureau will pay especial attention to curbing smoke pollution from burning coal for heating use in the winter. High quality coal with low sulphur and ash content will be recommended to be used for heating in the winter and the municipal government will also invest in replacing coal with cleaner fuels in small furnaces.

69. DaimlerChrysler To Sell Diesel Cars Again in Japan

German automaker DaimlerChrysler AG plans to start selling diesel-powered passenger vehicles in Japan next year amid concerns about rising gasoline prices in a country that imports nearly all its oil, according to a news report. DaimlerChrysler stopped selling diesel models in Japan in 2002 but will resume sales in the fall of 2006, possibly with versions of the Mercedes C- and E-Class luxury sedans, the Nihon Keizai newspaper reported.

The diesel vehicles will cost about 200,000 yen to 400,000 yen (\$1,750 to \$3,500) more than respective gasoline-powered models, giving them a markup similar to that for hybrid gasoline-electric vehicles, the report said.

Diesel-powered cars are more fuel efficient than gasoline-powered ones but are less popular because they emit more particulate matter and other pollutants in their exhaust. While sales of diesel cars are growing sharply in Europe, they accounted for only 0.1 percent of the passenger cars sold in Japan in 2002, the newspaper said.

Gasoline prices have skyrocketed in Japan in recent months. The country is especially sensitive to overseas disruptions such as hurricanes in the Gulf of Mexico because it imports nearly all its oil.

Automakers including DaimlerChrysler have been working on ways to make diesel-powered cars more environmentally friendly.

70. Japanese Ministers Call for National Policy To Reduce Oil Dependence

On October 4th, Japan's Cabinet agreed at an inter-ministerial meeting to develop a new national energy policy that would emphasize energy conservation and non-oil energy sources. This was the first such meeting since the energy crisis in the 1970s, when Japanese policy focused primarily on securing oil supplies by diversifying energy sources.

At the Oct. 4 meeting, the Cabinet did consider how to secure oil supplies, but it also emphasized ways to reduce consumption and to switch to coal, gas, geothermal, and

other energy sources, according to a statement from Prime Minister Junichiro Koizumi's office. Ministers agreed to establish an inter-ministerial forum to develop concrete measures by the end of the year, according to a spokesman for Koizumi.

One related measure being considered by the Ministry of Economy, Trade, and Industry (METI) and the Ministry of Land, Infrastructure, and Transport (MLIT) would set tougher standards for automobiles regarding fuel efficiency and carbon dioxide emissions, officials said. In 1998, Japan set targets for fuel efficiency and carbon dioxide emissions to be met by 2010. In July, officials from the two ministries said they were developing tougher standards to follow these. In addition, the two ministries are developing fuel efficiency standards for large diesel trucks and buses to be met by 2015. (See related article below).

Separately, METI is preparing energy efficiency standards for a range of household electronic equipment in addition to 18 products already covered by an energy conservation law.

71. Japan Proposes Fuel Efficiency Standards For Large Trucks, Buses

Japan has proposed fuel efficiency standards for large diesel-powered trucks and buses as part of a broader initiative to conserve energy and reduce greenhouse gas emissions, officials at the Ministry of Land, Infrastructure, and Transport said on October 7th. No other country has yet taken such a step.

The standards would require vehicle manufacturers to improve mileage by an average 12 percent from 2002 levels by 2015, which is expected to be "very challenging for manufacturers" as no Japanese or foreign truck or bus makers are currently selling vehicles that can meet the standards, according to authorities.

The ministry will receive comments on the proposed targets until Oct. 31. MLIT, jointly with the Ministry of Economy, Trade, and Industry, plans to include the standards as an amendment to the Energy Conservation Act by the end of the year for promulgation in April 2006.

The proposed standard for diesel vehicles between 3.5 and 7.5 tons would be 8.12 to 10.83 kilometers per liter. Vehicles from 7.5 to 20 tons would have to achieve 4.15 to 7.24 km/L and those heavier than 20 tons would have to get 4.04 km/L. Manufacturers would be required to submit corporate average fuel efficiency data for vehicles they currently sell and plan to sell. Those that fail to submit data showing mileage improvements would be subject to penalties, and makers of vehicle models that are "significantly inferior" in fuel efficiency would be ordered to terminate sales.

A report issued by an inter-agency policy panel on September 29th said that fuel efficiency standards for large trucks and buses would be necessary for Japan to meet its Kyoto Protocol commitment to reduce greenhouse gas emissions by 6 percent from 1990 levels by the period 2008-2012. Japan's emissions in fiscal year 2003 were 8.3 percent above 1990 levels, which would mean that Japan would have to reduce emissions by 13.2 percent from 2003 levels to meet the Kyoto target.

According to the report, the transport sector's carbon dioxide emissions account for 20 percent of Japan's total GHG emissions. It said transportation emissions had risen 19.8 percent from 1990 by 2003, and that commercial vehicles accounted for more than 40 percent of transportation emissions.

An official at the Japan Automobile Manufacturers Association said truck and bus makers are expected to develop hybrid engines to meet the targets. Toyota's Hino Motor is currently the only company selling hybrid trucks and buses. Foreign truck makers that export to Japan are also likely to be affected by the proposed fuel-efficiency targets, industry officials said.

Separately, Japan is moving to introduce tighter emissions standards for diesel trucks and buses on nitrogen oxides and particulate matter. One problem, however, is that the filters and other technologies needed to reduce these emissions generally increase fuel consumption, the JAMA official said.

72. Singapore Offers Rebates for Cleaner Vehicles

On October 3rd, Singapore's National Environment Agency (NEA) and Land Transport Authority (LTA) announced that special rebates for environmentally friendly vehicles will be extended from the end of 2005 for an additional two years. NEA said in a statement that a rebate equivalent to 40 percent of the open market value of any electric or hybrid fuel cars as assessed by the Customs and Excise Department may be used to offset the additional registration fee (ARF) paid when a new car is registered with the LTA, usually set at 150 percent of the car's market value. The 40 percent rebate will also apply to passenger cars running on compressed natural gas, while gas powered buses will receive a 5 percent rebate. Natural gas taxis qualify for an ARF rebate of 80 percent of their market value until October 2006, when the rebate will drop to 40 percent.

73. U.N.-Backed Project Held Up as Model for China

A U.N.-sponsored project initiated in 2001 to encourage the adoption of clean energy in China has helped reduce emissions of sulfur dioxide and particulate matter, U.N. and Chinese officials told a conference on September 23rd. The project, jointly administered by the U.N. Development Program and China's environmental and technology agencies, worked with officials in 18 cities to develop and implement "clean energy action plans."

The demonstration projects undertaken as part of the program included switching boilers from coal to natural gas; eliminating small boilers and heavily polluting restaurant stoves; utilizing coal briquettes instead of raw coal; installing central heating; developing renewable sources of energy; and installing flue gas de-dusting and de-sulfurization units. The projects helped control emissions, improve air quality, and reduce the percentage of coal in the energy mix, according to a project document.

By the end of 2004, sulfur dioxide emissions in the project cities were down 12 percent and particulate matter emissions were down 22 percent from 2000 levels, the document said. More than half of the cities achieved sulfur and particulate emission reductions of between 10 percent and 30 percent, it said.

Over the same period, the percentage of coal in the cities' energy mix declined 6 percent to 66 percent while energy consumption grew 28.7 percent.

74. Environmental Spending Growing In Asia

The market for environmental goods and services in Asia is growing 8 percent to 12 percent each year and is expected to expand from the current \$37 billion to \$100 billion by 2015, according to a report released by the Asian Development Bank Oct. 10 titled Asian Environment Outlook 2005. "We now see that governments across our region--from India, to Thailand, to the People's Republic of China--are increasingly ready to take on environmental challenges," ADB's environment director Nessim Ahmad said in a statement announcing the report. "Enforcement of pollution control laws is tightening, budgets for environmental protection are increasing, and judiciaries are taking tougher stances. The improved environmental quality demanded by the public will require investment in wastewater treatment, solid waste management, sustainable public transport, and clean, renewable energy systems--all of which are critical to the economic and environmental future of the region."

75. Australian States Move Forward With Push For GHG Emissions Trading

Australian states have taken a step forward in their push to jointly implement a greenhouse gas emissions trading scheme with the release in September of a background paper outlining proposals for distributing emissions permits under an overall cap that would extend beyond 2012. Public comments on the "Background Paper for Stakeholder Consultation" will be accepted through Nov. 11. Officials hope to release a "green paper" outlining the proposed design of the scheme in early 2006.

States and territories have taken the initiative on the issue after the federal government declared it would not establish a trading scheme. In March, chief ministers of states and territories announced "design principles" for the scheme.

The background paper says the scheme should initially cover emissions from electricity generation, oil refining, gas processing, and all combustion emissions associated with the use of coal and gas in non-transport uses. Having a cap that extends beyond 2012 would provide investors with greater certainty, it says. However, it acknowledges that setting a longer-term target runs the risk of being out of sync with post-2012 targets under the Kyoto Protocol, which have yet to be set.

The paper also seeks comment on how the scheme could best be linked to trading regimes in other countries, and on the merits of imposing controls on international transactions through "single desk" export arrangements. Such an arrangement would provide scope to ensure that any international trading in permits would not undermine efforts to meet domestic greenhouse gases abatement goals.

Other issues on which views are sought include the merits of allowing large downstream energy users to opt into the scheme.

76. Australia's Howard Renews Biofuels Push

On September 22nd, Prime Minister John Howard announced that Australia will implement new measures to boost biofuels production to 350 megaliters a year by 2010. He made the statement at the release of a report which concluded that boosting biofuel use would be an expensive way to reduce greenhouse gas emissions, but that it might deliver significant air-quality improvements.

The government set the 350 ML target in 2001, but the report of the biofuels taskforce concluded current policies would be unlikely to achieve it.

Howard said new measures would include simplifying the label for gasoline containing 10 percent ethanol (E10), which "inadvertently acts as a warning" to consumers against using it. The government will also consider dropping the requirement for E5 blends to carry a label and will encourage federal government vehicles to use E10. The government already provides assistance to biofuels producers in the form of capital grants and tax concessions, though much of this assistance is scheduled to eventually be phased out.

The report says the greenhouse benefits of achieving a 350 ML target "are not sufficient to warrant significant policy intervention, given that cheaper carbon reduction options are readily available." However, it says there could be major air-quality benefits in the form of reduced particle emissions. If further investigations confirm this, it could provide the government with a "significant public health opportunity." Any benefits from reduced particle emissions need to be weighed against the increased emissions of smog-forming compounds, it cautions. The report concludes that regional development should be the primary policy driver for fostering an Australian biofuels industry.

77. First Meeting of Asia-Pacific Partnership May Be Postponed

The planned inaugural meeting of Asia-Pacific Partnership on Clean Development and Climate may be postponed as the six participating governments so far have been unable to agree on a date according to press reports. Australia, China, India, Japan, South Korea, and the United States announced the partnership in July, billing it as a nonbinding pact to address climate change and energy security issues. At the time, officials said a meeting would be held in November in Adelaide, Australia, to draft a charter. No specific date was set, but it was expected to precede the 11th Conference of the Parties to the Kyoto Protocol and the U.N. Framework Convention on Climate Change (COP-11), scheduled to take place in Montreal Nov. 28-Dec. 9.

"We're seeking to get six governments to get together with very senior level ministers from each government to make an historic breakthrough on saving the climate and saving the planet," Australian Environment Minister Ian Campbell said in an October 7th media interview. "The particular date will be announced as soon as we've got that date."

A day earlier, the minister defended the partnership in response to questioning in Parliament from Australian Greens Sen. Christine Milne. "Can the minister confirm that when the Asia-Pacific Partnership for Clean Development and Climate was announced in July, the government boasted that there would be a follow-up meeting in Adelaide in

November which would attract high-profile delegations, including [U.S. Secretary of State] Condoleezza Rice, to negotiate the details of the partnership, including a joint fund to finance emission cutting projects?" Milne said. "Will the minister now confirm reports that the meeting has been postponed?"

Campbell told Parliament that details of the meeting will be announced "as soon as all the nations in the partnership, who are very keen to come to Australia to progress action on climate change, can do so."

He added that environmental ministers at a COP-11 preparatory meeting in Ottawa in September had largely recognized "that the Kyoto Protocol is ineffective, that it is not the answer, and that if we put all of our eggs in that basket, then the world will be environmentally doomed." "There was a clear recognition," he said, "that the world is going to have to find a different way forward and that the partnership approach that was put together with the leadership of the [Prime Minister John] Howard government bringing together 48 percent of the world's emitters, including Japan, the United States, Korea, India and China, was one of the most substantial steps forward that had been taken."

78. Malaysia Proposes Incentives For Renewable Energy, Cleaner Fuels

On September 30th, Malaysian Prime Minister Abdullah Badawi proposed in his national budget speech for 2006 extra funding for environmental and waste management initiatives, as well as extended tax incentives for the renewable energy sector and for clean vehicles.

Badawi, who also serves as finance minister, said the government would allot 1.9 billion ringgit (\$503 million) to environmental preservation initiatives; 40 million ringgit (\$10.6 million) to the prevention of erosion in coastal areas; 484 million ringgit (\$128 million) for the cleanup of rivers and flood mitigation and drainage improvement projects; 991 million ringgit (\$263 million) for the repair of existing sewage plants and the construction of new ones; and 363 million ringgit (\$96 million) for a national solid waste management program.

The prime minister said the funding would ensure that the physical development of the nation "will be balanced with environmental preservation to ensure sustainable development."

In an effort to reduce pollution and cut Malaysia's dependence on oil, Badawi also outlined new tax breaks for alternative energy developers and for natural gas vehicles. The government plans to double the current 51 natural gas stations nationwide by 2007. And starting Oct. 1, 2005, Malaysia will exempt national energy monopoly Petronas from import duties and sales tax on conversion kits that enable diesel vehicles to run on natural gas. Vehicle assemblers and manufacturers will also be granted duty exemptions on imported natural gas engines.

In addition, companies generating energy from "environmentally friendly sources," including biomass plants, hydropower projects of less than 10 megawatts, and solar operations, will see the corporate income tax exemptions they currently enjoy rise from

70 percent to 100 percent for a period of 10 years, up from five currently. These firms can also choose to take advantage of special provisions allowing them to claim deductions of up to 100 percent of their capital expenditures when filing taxes. The revamped incentives will apply to any firms whose projects are approved by the Malaysian Industrial Development Authority (MIDA) after Oct. 1, 2005.

The growth of the renewable energy sector will also be encouraged by plans for three palm oil biodiesel plantations with a total capacity of 180,000 tons that will primarily target the export market. The prime minister pledged that the government would formulate a "national biofuel policy" before the end of 2005 that would include "the provision of various incentives to encourage private sector involvement."

Badawi said the government would "take the lead" in promoting energy conservation by requiring all state agencies to reduce their energy consumption by 10 percent in 2006. To promote similar moves in the private sector, companies providing energy conservation services will be given an additional five years--until Dec. 31, 2010--to apply to MIDA for special tax and import duty exemptions, but must implement their projects within one year of gaining the agency's approval.

MIDA will also consider allowing any firms that incur expenses in improving their conservation practices to set off 60 percent of their total outlay against 70 percent of their income when filing income tax, also until the end of 2010.

LATIN AMERICA

79. Peru's Congress Overrides Presidential Veto Of Environmental Law

On October 13th, Peru's Congress unanimously passed for a second time the General Environment Law, overriding a presidential veto but also modifying the legislation in certain key aspects. Under Peru's legislative process, the bill automatically becomes law because it was passed twice by more than half the members of the unicameral Congress. Of members present for the October 13th vote, 73 voted yes while five abstained.

Law 28611 was published Oct. 15 in El Peruano, the official gazette. The legislation was initially passed by Congress in June but was vetoed by President Alejandro Toledo a month later. The president objected to 23 articles in the 155-article bill, with the most pointed criticism directed at clauses that called for the use of World Health Organization standards to set maximum allowable levels of contaminants and raised fines for environmental contamination to 10,000 Tax Units. Each Tax Unit is equivalent to 3,300 nuevos soles (\$975). He also strenuously objected to Title VII of the bill, which would have allowed legal action against companies or individuals with "reasonable indications of grave and irreversible harm to human health or the environment."

The congressional Environment, Ecology, Indigenous, and Afro-Peruvians Commission reviewed the veto on Aug. 31, accepting five of the president's suggestions. The most controversial elements, however, remained in the legislation.

During the Oct. 13 vote, lawmakers made several additional changes to the legislation before approving it. They eliminated the controversial phrase from Title VII and slightly modified Art. 31, which refers to the WHO standards. Under the new version, the WHO standards will only be employed if a national agency has not already set local limits. In total, Congress rejected 15 of the president's objections, accepted five, and partially included three others in the new version.

Commission Chairman Rep. Walter Alejos said the law was acceptable, but that he would have preferred the original version.

Earlier in the week, Cabinet members called on Congress to reconsider the version that came out of the commission before voting on it again, and Toledo weighed in from Belgium. He asked lawmakers to take more time to reflect on the legislation, saying the bill would paralyze investment if passed without further modifications.

CONFIEP, a powerful business association, also lobbied hard against the legislation, saying it would scare off investors.

The General Environment Law replaces the Environment and Natural Resources Code (Legislative Decree 613) that was passed in September 1990.

80. Officials in Amazon Frontier Meet On Smog Problem

Environmental officials in the city of Leticia, in Colombia's southeast Amazonian frontier near the borders with Brazil and Peru, have declared that smog caused by the burning of tropical forests is threatening an environmental and public health emergency. On September 27th, officials from the three countries held an informal meeting in Leticia that was sponsored by the Colombian Consulate in the adjoining Brazilian city of Tabatinga. At the meeting, Colombian officials said they would ask the Colombian Foreign Ministry to alert the governments of Brazil and Peru about the problem.

According to experts from the Corporation for the Sustainable Development of the Southern Amazon (Corpoamazonia, the regional environmental authority in Colombia) and the Amazonian Institute of Scientific Research (Sinchi, a Colombian research institute affiliated with the Ministry of Environment), the smog is being caused by fires in the Brazilian states of Acre and Rondonia. The smoke from these fires is then carried hundreds of kilometers by northwesterly winds.

The unprecedented smog, which has affected Leticia since early this summer, has led to the closing of the Leticia airport on several occasions, sometimes for days at a time. Because there are no roads between Leticia and the rest of Colombia, the city is heavily dependent on the airport for shipments of food, access to medical care, and for tourism, a main source of income.

Local health officials have also reported a dramatic increase in respiratory diseases. At the same time, officials from the Colombian Meteorological Institute (Ideam), who attended the meeting, suggested the smog may be behind the area's recent record-high temperatures and unusual absence of rain.

81. Spending Cuts at Brazil Environment Agency May Hurt Enforcement

The enforcement arm of Brazil's Environment Ministry has been forced to make spending cuts that are undermining its effectiveness, according to the president of the body's employee association. IBAMA (Instituto Brasileiro de Meio Ambiente e dos Recursos Naturais Renovaveis) Employee Association President Jonas Correa said on September 28th that "IBAMA is, for lack of funds, being forced to make spending cuts that are undermining its effectiveness." Correa's association represents 4,200 of IBAMA's 5,800 employees, he said.

An IBAMA press official said that the agency would cut 15 percent of its "outsourced labor" by the end of the year at its Brasília headquarters, where there are 2,000 employees, of which 800 are outsourced. Those who would lose jobs include mainly secretaries, coffee-servers, drivers, and guards, "but we don't believe such labor cuts will compromise IBAMA operations," the official said.

Correa said IBAMA has also been forced to cut back on everything from phone bills to office supplies in Brasília and throughout its regional offices.

"IBAMA's cost cuts have been so tight in some regional offices that basic office supplies aren't being restocked, forcing employees to bring everything from their own computer paper to their own toilet paper," he said. "Those cost cuts have affected IBAMA's administrative side. But a weakened administrative arm hampers IBAMA's overall operations."

The IBAMA press official said, "IBAMA's operations have been somewhat affected, but not undermined, by its 2005 budget deficit of 33.5 million reais (US\$ 15 million). That deficit was created when the government, to honor its domestic and foreign debt, did not release funds earmarked for IBAMA in its budget programming this year."

Flavio Montiel, IBAMA's director of environmental protection, said in late August that his agency spent R\$29.5 million of the R\$36 million the government allotted the agency this year to combat Amazon deforestation, and that it expected to receive the remaining R\$6.5 million by the end of September. But on September 28th, Rubens Amador, an aide to Montiel, said that it had not yet received these remaining funds and did not know if or when it would.

Marcel Marquesini, a Greenpeace Amazon campaign coordinator and formerly IBAMA's coordinator of monitoring activities, said in late August that if IBAMA did not get that additional R\$6.5 million to continue monitoring and enforcement activities in the Amazon by October it would have to pull its inspection field crews from the region, something which could cause the Amazon deforestation rate during the coming months to rise.

MIDDLE EAST

82. Diesel Tax To Rise 47 Percent In Israel

As the first step of a four-year program to match gasoline and diesel taxes, the duty on diesel will rise 47 percent, from NIS 0.68 to NIS 1.00 per liter, on September 1, the Israel

Tax Authority has announced. Conversely, over the next three years, the licensing fee on diesel vehicles would be brought down to match that of gasoline vehicles, the ITA said. In the last two months, the surcharge to the licensing fee for private diesel vehicles was reduced by roughly NIS 900, the authority added.

The tax authority also said heightened fuel prices over the past year were "purely the result of rising oil prices in the world, not of changes in the level of taxation." Fuel tax, rather, is not calculated as a percentage of the price, but is a fixed shekel amount per liter, as agreed between the Knesset Finance Committee and consumer representatives.

To reduce the level of damage to various business-sector user groups, the tax authority said a selective duty refund mechanism would be operated for "diesel that served to create income." Industrial installations consuming more than 5,000 liters of diesel, monthly, were eligible to receive a refund on diesel used in manufacturing processes, the tax authority said.

83. Petrol And Diesel Prices Increased In U.A.E.

The prices of petrol and diesel have been hiked and motorists will have to pay an extra Dh 1.50 per gallon for petrol and Dh 1.40 per gallon for diesel. The decision for an across-the-board hike in fuel prices at all service stations in the country was taken to 'stem the losses of millions of dirhams per month at the pumps,' said a statement issued by Enoc.

This is the second time that petrol prices have been hiked. Like the first time, this time too it has been fuelled by the rocketing price of oil that touched \$70 per barrel yesterday showing little signs of easing off. Last year, the crude oil price was around \$34 per barrel and by August of this year, it had almost more than doubled. According to Enoc, this means, that at today's oil prices, "the loss per gallon is over Dh 4.10 for petrol at the pumps."

The business of the petrol distributing companies, says Enoc, has been suffering high financial losses for years from fuel sales. "The losses are now colossal as global prices have shot up to unprecedented levels," it said in a statement, adding that it was with great regret that it had been forced to take this decision knowing it will be a burden on the motoring public.

The Price of Mogas 95 and Mogas 98 will also rise to Dh 6.25 and Dh 6.75 per gallon respectively from Dh 4.75 and Dh 5.25. Pump price of diesel will be increased to Dh 7.70 from Dh 6.30 a gallon.

AFRICA

84. South Africa Begins Process To Implement New Air Quality Act

On September 11th, South Africa announced in the Government Gazette that key provisions of the National Environmental Management: Air Quality Act [No. 39 of 2004]

would take effect immediately, thus triggering a government plan to develop stricter air quality controls over the next two years.

"We have now started the clock ticking," Minister of Environmental Affairs and Tourism Marthinus van Schalkwyk said in a statement.

The Act, which was signed into law last February by President Thabo Mbeki, calls for the development of a National Air Quality Management Framework within two years of the date of promulgation. The framework will set rules for monitoring and regulating air emissions across the country. "By September 2007 we will ... have drafted, consulted, and published the framework, which will outline how air quality will be managed in our country," van Schalkwyk said. The framework will then be reviewed every five years, according to the Act.

The Act is the product of four years of negotiations between government officials, environmental advocacy groups, and industry associations.

In addition to triggering the development of the Framework, the provisions of the Act that take effect with the Sept. 11 notice also call for the appointment of national, provincial, and local air quality officers; enable these officials to set new emissions standards; set new fuel standards; and identify priority pollutants.

Another provision taking effect authorizes the Environment Minister to declare national priority "hot spot" areas.

Van Schalkwyk announced in June that his first step under the Act would be to formally declare a heavily polluted industrial area outside Johannesburg, known as the Vaal Triangle, the country's first priority area. He reiterated this in his Sept. 11 statement. Such a designation requires local industries and authorities to adopt comprehensive management plans to improve local air quality.

85. Plan To Eliminate Cape Town's Brown Haze

Cape Town's notorious winter brown haze could be blown away by an ambitious municipal plan to provide the cleanest air in Africa. The city's mayoral committee has approved an 11-point plan to manage air quality. The plan is set to be tabled in council soon. It aims to reduce pollutants like sulphur dioxide, nitrogen dioxide, ozone, hydrogen sulfide, carbon monoxide and inhalable particulate matter (PM10) in the air to acceptable standards. These pollutants have been found to "exceed human health guideline values" in the past, according to the Mayco report. PM10 has been the main cause of the brown haze which has been a cause for concern for many years.

The plan aims to target informal settlements where people burn wood and other fuel, the central city, residential areas close to highways, residential areas near industrial areas like Bellville South and Milnerton, and residential areas near Cape Town International Airport.

The plan will see:

- The formulation of an air-quality management system. This will include working out how to test efforts to reduce emissions, and a framework for putting together information such as the results of air-monitoring, weather data and traffic movement.
- An effort to specify air-quality standards and targets in the short, medium and long term.
- The monitoring of major pollutants causing brown haze and affecting people's health. This will involve developing ways of measuring pollutants not currently being monitored, and also identifying air-quality guidelines.
- The improvement of air quality in informal areas. The plan is to select a pilot site in Khay-elitsha to compile a detailed emission inventory for the area, and use this information in the overall air quality strategy.
- The enforcement of legislation for air quality management.

A review will be carried out on the current permits issued in terms of the Atmospheric Pollution Prevention Act. Other steps will include:

- The compilation of a comprehensive emissions inventory database for Cape Town to link emissions to an assessment of health risks.
- Moves to control vehicle emissions in the city. This would include improving public transport and limiting use of private vehicles.
- The consideration of air quality in land use and transport planning.
- Moves to establish the health effects of poor air quality on the people of Cape Town.
- Education on air quality management to create greater community awareness.
- Periodic reviews of the air pollution situation and reports on progress. Data would be contained in an annual report of air-quality trends, complaints, fuel usage, law enforcement and other indicators.

GENERAL

86. Research Indicates Health Effects of Air Pollution Are Underestimated

Air pollution may be a bigger health threat than previously believed, a 20-year study of residents of Los Angeles indicates. Researchers report that the contribution of particulate matter to chronic health problems may be as much as two to three times greater than current estimates.

Michael Jerrett of the University of Southern California, Los Angeles and his colleagues analyzed two decades of data collected from nearly 23,000 residents of 260 Los Angeles neighborhoods. They found that as the number of fine particles less than 2.5 microns in diameter increased, so, too, did the risk of dying: each jump of 10 micrograms per cubic meter corresponded to an 11 to 17 percent increase in the risk of dying from any cause. "By looking at the effects of pollution within communities, not only did we observe pollution's influence on overall mortality, but we saw specific links between particulate matter and death from ischemic heart disease, such as heart attack, as well as lung cancers," Jerrett says. The team's findings are published in the November issue of the journal *Epidemiology*.

In the same issue, a second group of researchers from the Keck School of Medicine of the University of Southern California reports that living close to the freeway raises a child's risk of developing asthma. Tracking the respiratory health of 208 children in 10 cities, the scientists determined that those youngsters who lived closer to highways were more likely to develop asthma. Remarks lead study author W. James Gauderman of Keck: "Considering the enormous costs associated with childhood asthma, today's public policy toward regulating pollutants may merit some reevaluation."

87. Antarctic Ozone Hole Back Near Record Size

The hole in the ozone layer over the Antarctic has yet to show signs of reduction. This year's hole is approaching the all-time record in 2003. The latest measurements have been published in the World Meteorological Organization's (WMO) Ozone Bulletin on 16 September, International Day for the Preservation of the Ozone Layer 2005.

"Currently, scientists are looking for the first signs of recovery, to determine if we may have reached phase one of ozone recovery. Full recovery of the ozone layer is not expected until the middle of this century, when atmospheric chlorine and bromine are expected to drop below the threshold for the formation of an Antarctic ozone-hole. However, it is in fact uncertain whether we may ever reach full ozone recovery," said WMO Secretary-General, Mr. Michel Jarraud who added: "Uncertainties on the future of the ozone layer call for continued observations and more extensive integration of ground-based observations, satellite observations and numerical modeling."

Klaus Toepfer, Executive Director of the United Nations Environment Program (UNEP), whose Ozone Secretariat supports the Montreal Protocol and the Vienna Convention said: "The campaign to protect the ozone layer represents an extraordinary success story – but until emissions of CFCs and other ozone-depleting substances are reduced to zero, saving the ozone layer will remain unfinished business."

In recent years, scientists have become increasingly aware of the possible links between ozone depletion and climate change. Increased atmospheric concentrations of greenhouse gases (GHGs) will lead to a warmer climate at the Earth's surface. At altitudes where we find the ozone layer, the same increase in GHGs is likely to lead to a cooling of the atmosphere. A cooling of the winter stratosphere over the last decades has indeed been observed, both in the Arctic and in the Antarctic. Lower temperatures enhance the chemical reactions that destroy ozone. At the same time, the amount of water vapor in the stratosphere has been increasing at the rate of about 1 per cent per year. A wetter and colder stratosphere means more polar stratospheric clouds, which is likely to lead to more severe ozone loss in both polar regions.

These observed changes in the stratosphere could delay the expected recovery of the ozone layer. It is therefore vital that all nations with stratospheric measurement programs continue to enhance these measurements and that funding agencies continue to support research on stratospheric ozone and harmful UV radiation.

Twenty-two countries signed the original Convention in 1985. Two years later the Montreal Protocol was signed on 16 September, which has been designated by the United Nations as International Day for the Preservation of the Ozone Layer. The

Protocol stipulated that production and consumption of compounds that deplete ozone in the stratosphere – chlorofluorocarbons (CFCs), halons, carbon tetrachloride, and methyl chloroform – were to be phased out by 2000 (2005 for methyl chloroform).

88. Warming Causes Record Arctic Ice Melt

The Arctic ice shelf has melted for the fourth straight year to its smallest area in a century, driven by rising temperatures that appear linked to a buildup of greenhouse gases, US scientists said on Wednesday.

Scientists at NASA and the National Snow and Ice Data Center, which have monitored the ice via satellites since 1978, say the total Arctic ice in 2005 will cover the smallest area since they started measuring.

It is the least amount of Arctic ice in at least a century, according to both the satellite data and shipping data going back many more years, according to a report from the groups.

As of Sept. 21, the Arctic sea ice area had dropped to 2.05 million square miles (5.31 million square km), the report said.

From 1978 to 2000, the sea ice area averaged 2.70 million square miles (7 million square km), the report said. It noted the melting trend had shrunk Inuit hunting grounds and endangered polar bears, seals and other wildlife.

The report warns that if melting rates continue, the summertime Arctic may be completely ice-free before the end of the century, echoing last year's findings from the Arctic Council, an eight-nation report by 250 experts.

The melting trend increasingly appeared to be caused by a buildup of greenhouse gases in the atmosphere, the scientists said.

"It's increasingly difficult to argue against the notion that at least part of what we are seeing in the Arctic, in terms of sea ice, in terms of warming temperatures ... is due to the greenhouse effect," Mark Serreze, a research scientist at NSIDC, said in an interview.

"We've put a hit on the system and we are in the midst of a grand global experiment," Serreze said about the impact of global warming and ice melting on humans and animals. "We will have to live with the outcome."

The NSIDC, part of the University of Colorado at Boulder, helps NASA analyze satellite data.

Most scientists believe greenhouse gases, including carbon dioxide that is released mainly from cars and utility smokestacks, cause global warming by trapping solar heat in the atmosphere. Many believe global warming can lead to catastrophic consequences, including raising sea levels and strengthening weather events such as hurricanes.

One Arctic variation, known as Arctic Oscillation, an atmospheric circulation pattern that can push sea ice out of the area, had become less of an influence in the region since the mid-1990s, the report said.

Inuit hunters threatened by the melting of Arctic ice plan to file a petition in December accusing the United States of violating their human rights by fueling global warming. The Bush administration has opted out of the Kyoto Treaty to reduce greenhouse gas emissions.

The Inuit number about 155,000 people in Canada, Alaska, Greenland and Russia.

Scientists say the Arctic is warming faster than the rest of the globe because water or bare earth, once uncovered, soaks up more heat than ice and snow. That process means melting can spur even warmer temperatures and more melting.

89. CO2 Reduction Efforts Save BP \$650 Million

Cutting greenhouse gas emissions, which some US politicians have warned could hurt industrial competitiveness, has been good business for BP Plc. and will save the oil major about \$650 million, a company official told the press. In 2002, BP pledged to trim emissions of greenhouse gases by 10 percent below 1990 levels through 2012. At the time, BP said that could be done at no net cost to the world's second-biggest oil company. As it turns out, BP's carbon dioxide reduction strategy -- achieved mostly through efficiency gains -- will save it about \$650 million, said Mark Proegler, director of BP's Emissions Markets Group.

Energy efficiency measures helped BP reduce operational emissions by 10 percent between 1998 and 2001, Proegler said. For example, BP cut flaring of unwanted natural gas at oilfields by the equivalent of 850,000 tons of greenhouse gases per year. BP also uses cogeneration -- or producing electricity from waste heat from refineries -- to boost its efficiency, he said.

BP is among some 12,000 industrial plants and businesses required to limit emissions beginning this year as part of European Union-wide rules to comply with the international Kyoto treaty. However, BP has been tracking its carbon emissions internally since 1998.

BP's Proegler said the United States needs to enact mandatory reduction targets to bring industry into sync with other markets. Such mandates "are the right way to go with government setting the cap and providing the level playing field," he said.

BP eventually envisions a worldwide greenhouse gas trading market with standard rules and practices.

90. Global Warming and the Airline Industry

Aircraft taking off from airports in the European Union should join the bloc's emissions trading scheme to cut greenhouse gases that damage the environment, the EU executive Commission proposed on Tuesday.

According to Reuters, here are some facts about the airline industry and its link to global warming:

- Some 16,000 commercial aircraft pump out 600 million tons of carbon dioxide every year, consuming some 190 billion liters of jet fuel.
- Aviation causes 3.5 percent of man-made global warming, according to the Inter-Governmental Panel on Climate Change. This could rise to 15 percent by 2050.
- Within Europe the aviation sector produces about 100 million tons of carbon dioxide annually. The European Union aims to halve carbon dioxide emissions from aircraft by 2020.
- Jet emissions include carbon dioxide, water vapor and nitrous oxides, at high altitude. Some experts say that flying is more damaging than driving as aircraft pollutants spewed high in the air enter the ozone layer straightaway.
- Jet fuel is not included in the Kyoto protocol on greenhouse gases because of difficulties in allocating emissions between countries.
- The International Air Transport Association (IATA), which groups most of the world's airlines, says aircraft fuel efficiency has improved by 17 percent between 1990 and 2000. It forecasts additional improvement of 10 percent by 2010, resulting in aircraft emissions falling by about 300 million tons.

91. World Bank Says Leverage on Greenhouse Emissions Limited

The World Bank has only limited leverage to foster projects in the developing world that mitigate climate change, in part because of competing pressures for increased energy development in India, China, and other developing nations, the bank's environmental director said on September 22. World Bank Environment Director Warren Evans said the bank has been criticized unfairly as an obstacle to sustainable-energy efforts that might mitigate climate change.

"Is the bank part of the problem or part of the solution? It depends on the lens you're looking through," Evans said. "I think we've probably been a leader in addressing climate change," he said, although he acknowledged that reducing the effect of carbon emissions has yet to be "fully integrated" throughout the institution's various financial and assistance sectors.

Evans spoke during a World Bank panel discussion, held jointly with the World Resources Institute, to discuss challenges to integrating provisions to raise awareness and mitigate climate change in global investments. The panel was held as the board of governors for the World Bank Group and the International Monetary Fund were set to open their annual meeting on September 24th to discuss poverty reduction, international economic development, and other issues.

Evans said critics of the World Bank's efforts on climate change must recognize the other global forces at work, including the lure of private investment to traditional energy projects and pressures in the developing world for increased energy usage to improve economic vitality and to reduce poverty.

"I think you have to look at this from the bank's developing-country partners' perspective. I worked years in China and India, and these people know exactly what they want," which is, he said, to build economies that can compete with more developed nations in part by increasing energy capacity.

The role of the World Bank, operated with support from 180 member governments, and other international institutions is to provide technical assistance and other information as developing nations decide between efforts that rely more heavily on fossil fuels and those that are more sustainable, he said.

Evans and other panel members said they were encouraged by signs of increasing international leadership on the issue of climate change, including a commitment in July from leaders of the Group of Eight countries to promote cleaner technologies with a view to stabilizing greenhouse gas concentrations. The leaders of the G-8 countries--Canada, France, Germany, Italy, Japan, Russia, the United Kingdom, and the United States--issued the communiqué at a series of meetings July 6-8 in Glean eagles, Scotland. The leaders called for transforming their use of energy through improved efficiency, diversifying energy supplies toward renewables, and managing the impacts of climate change.

Apart from the United States, all the G-8 nations have ratified the Kyoto Protocol, which requires industrialized countries to collectively reduce their greenhouse gas emissions by 5.2 percent from 1990 levels by the period 2008-2012. The United States pulled out of the protocol process in 2001, arguing that mandated emissions reductions would damage its economy.

Evans said the recent G-8 commitment toward more efficient and diversified energy supplies and the Kyoto Protocol's mandated emission reductions "is a combination of targets and technology" that has in fact forced a shift at the World Bank to address climate change more directly. "I think it was going to come up eventually in a big way, maybe not quite as in-your-face, but it was going to come up. Now we're going to have to face the facts," the World Bank official said.

Many developing nations already have in place a regulatory framework and development policies that encourage "clean energy," Evans said. "But at the end of the day if we don't find a way to come up with that incremental financing, the chances of that happening are slim, and I promise they are not going to wait to develop their energy until we find that incremental financing."

Frances Seymour, the World Resources Institute's director of institutions and governance, argued that the World Bank has been slow to "mainstream" climate change considerations into its projects in developing countries. According to WRI, the World Bank Group continues to concentrate financial support in sectors that leave substantial greenhouse gas "footprints," including transportation, oil, electric power, and mining. In 2004, World Bank loans in those sectors totaled \$7.6 billion, or 37 percent of total lending, according to WRI.

Seymour said various departments within the World Bank have resisted incorporating sustainability provisions in their developing-world projects, but she added that she hoped such criticism would provide support for efforts to better integrate climate change into the bank's decision making.