CAR LINES

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EUROPE

1. Europeans ‘Suffering’ Due To Air Pollution Inaction, Says Potočnik

In early January, the European Environmental Bureau (EEB) organized a major conference to mark the launch of the 2013 European Year of Air. At the Conference, Environment Commissioner Janez Potočnik scolded European countries for their inaction on EU laws to combat air pollution, which causes an estimated 420,000 premature deaths yearly in the Union.

The 2008 air quality directive aimed at streamlining and tightening EU legislation dealing with pollution and air standards. It is due to be revised by 2013, and Environment Commissioner Potočnik has indicated that he seeks to consolidate many different EU regulations on air quality and pollution into a single law.

The 2008 rules set targets for reducing concentrations of fine particles that health officials say are dangerous pollutants for human health and that contribute to respiratory, sinus and other problems. Many of the policies grew out of a 2005 strategy on air pollution, which sought to cut sulfur dioxide (SO2) emissions by 82%, nitrogen oxide (NOx) emissions by 60%, volatile organic compounds by 51%, ammonia by 27%, and primary fine particulates by 59% compared to the levels of 2000.

Health advocates says the cost of cutting emissions through better smokestack scrubbers, cleaner-burning vehicles and a shift to renewable fuels would be more than offset by savings in treating complications of bad air.

“We are still far from our objective to achieve levels of air quality that do not give rise to significant negative impacts on human health and the environment,” Potočnik told the clean air conference. “We have to recognize that some of the EU air quality standards that were established in the late nineties are not being respected. “This has led to a situation where the majority of member states are infringing EU law on air quality. As a consequence, the health of many people is suffering, and costs to the health suppliers and the economy are rising”, he told the conference.

Officials called on the EU to crack down on diesels. "We will have to address the issue of the diesel car," Potočnik said. "Compliance is crucially dependent on reducing real world emissions from diesel cars." "Diesel vehicles are more efficient, but they emit a higher level of nitrogen dioxide than regular vehicles,” Jacqueline McGlade, executive director of the European Environment Agency (EEA), an EU body, told the conference.

McGlade says inaction on air pollution has strong economic consequences, estimating a price tag of €630 billion for health care and €169 billion in lost productivity.

Christer Ågren, the director of the Swedish environmental organization AirClim, slammed EU states for their “lack of ambition” in curbing air pollution. He said the amount of noxious airborne particles such as SO2, NH3 and PM2.5 could be curbed “without being extremely drastic”.

Ågren criticized governments for their lack of support for high level policy measures and failure to implement existing legislation. A total of 12 EU countries failed to meet the 2010 National Emissions Ceilings for Nitrous Oxide (NOx) emissions with three not meeting standards for VOCs (Volatile Organic Compounds) and/or NH3, he said.
For Potočnik inadequate air policy governance was to blame for the relatively slow progress on air pollution in the EU, which he said had fallen behind the United States. The US has the most stringent air quality legislation in the world.

“In many member states, responsibility for air quality lies with regional or local authorities. However many sources of air pollution are outside their zone of competence”, he said. “This has forced local authorities to apply more expensive measures to the sources of pollution that they can control. “So we need to discuss with Member States ways and means of improving this so that our common objectives for better air quality are actually delivered to more people for instance through improving the link between national and local or regional air quality management programs,” he said.

2. MEP Wants More Generous Super Credits for Cars; Others Disagree

A German MEP has proposed greatly extending the controversial “super credits” scheme in the European Commission’s plan on how carmakers should meet their CO2 emission targets for 2020. Thomas Ulmer’s proposals are very similar to those put forward by German carmakers’ association VDA in a paper distributed by the group in November. The MEP is the parliament’s environment committee rapporteur on this issue.

Meanwhile, the parliament’s industry committee rapporteur has proposed that the super credit scheme should be abolished.

The commission says carmakers could gain super credits for up to 20,000 cars emitting less than 35 grams of CO2 per kilometer (CO2/km) from 2020 to 2023. In practice this emission limit means electric cars. These vehicles would be counted as 1.3 cars, bringing the manufacturers’ overall average emissions down, on paper, making it easier for them to meet their target.

There is already a super credit scheme for cars emitting less than 50g CO2/km, which are counted as 3.5 cars in 2012 and 2013, as 2.5 cars in 2014 and as 1.5 cars in 2015. However the German MEP wants the 2015 multiplier to be raised to 2.5, and a multiplier of 2.5 also to be used in 2016 and 2017, followed by a multiplier of 2 in 2018, 2019 and 2020. Each carmaker would be allowed to use super credits for up to 15% of its emission target in any given year.

He also wants the emission limit for qualifying cars to be kept at 50g CO2/km, rather than being lowered to 35g CO2/km as the commission had suggested. He has proposed that any car “with a minimum range of 40km when running purely on electricity” should also be eligible for the credits.

Environmental campaign group T&E estimates that Mr. Ulmer’s super credit proposals, if implemented, could add an extra 10g CO2/km to the EU average by 2020; in other words, the average emissions from new vehicles would actually be 105g CO2/km rather than the target of 95g CO2/km. Mr. Ulmer’s proposals represent a “huge loophole” which would also allow manufacturers to earn super credits by selling hybrid cars, in addition to plug-in electric vehicles, a T&E spokesman said.

The MEP said his proposals would “compel manufacturers to continue to invest more in alternative propulsion and to market their designs".
In a separate draft opinion, industry committee rapporteur Fiona Hall has proposed replacing the super credits with a “flexible low carbon vehicle mandate”. Under such a scheme, manufacturers’ targets would be made more stringent if fewer than 2% of the cars they sell were low-CO2 vehicles. Conversely, the targets would be less strict if more than 3% of the manufacturers’ cars met the 35g CO2/km limit. “A weakness of super credits is that while they encourage car manufacturers to produce more ultra-low emission vehicles, they also allow manufacturers to sell more higher-polluting cars, thus weakening the CO2 target,” Ms. Hall said.

Mr. Ulmer is a member of the center-right EPP group, the parliament’s largest political alliance. A spokesman for the MEP said it was still too early to say where the group as a whole stands on this issue. Other environment committee members are likely to table amendments on the matter by the end of this month.

In November, VDA criticized the commission’s more limited super credit proposals and its plan to discontinue them after 2015. The group called for a 2.5 multiplier to apply over the period 2016-23, and for eligibility limits to be raised to half the permitted value of a conventional vehicle, giving “circa 50g CO2/km” as an example.

“The numbers of low-emitting vehicles being produced is relatively small, so there is no risk of super-credits diluting the stringency of the overall fleet targets,” said a spokeswoman for European carmakers’ association ACEA. “Because of the high costs involved in the development of low-emission technologies and their slow and very uncertain uptake on the markets, super credits are a strong incentive for manufacturers to keep investing in and further developing such technologies, despite the lack of return on investment so far,” she added.

German carmakers have lobbied heavily for the super-credits scheme, but environmental campaigners say it weakens the targets and works to the benefit of German carmakers, which tend to make larger vehicles, at the expense of carmakers that make smaller vehicles, such as those in France and Italy.

“It is larger vehicles that generally play a pioneering role in vehicle technology,” says a leaked draft of the Ulmer report seen by European Voice. “The rapporteur feels compelled to propose a realistic system of incentives, which will promote the development and use of new, less environmentally-damaging propulsion concepts.”

“A 95g CO2/km target in 2020 will lead to fuel savings of €344-€465 per year,” said Monique Goyens, director general of consumers’ organization BEUC. “Plans to introduce super-credits allowing car manufacturers producing ultra-low emitting vehicles to make their conventional vehicles less efficient risk diluting these monetary benefits.”

A separate text, also to be debated by politicians, called on the EU to match U.S. regulation that stretches out to 2025, allowing for long business-planning cycles. “A weakness of the Commission’s proposal is the lack of a post-2020 vision,” the draft opinion from British Liberal Democrat member of the European Parliament Fiona Hall said. The United States - famous for gas guzzling - had set a target requiring carmakers to cut fuel consumption in cars sold between 2011 and 2025, she said, urging an EU target of 70 g/km for 2025. “Because the EU should remain at the forefront of the global race for cleaner vehicles, it should adopt an equally ambitious pace for development,” she added.

3. Figures on CO2 Reductions from Cars ‘Unreliable’
Between a third and a half of the recorded drop in new cars’ average CO2 emissions between 2002 and 2010 may not be real because of loopholes in the EU’s testing procedures for vehicles, a consultancy study has revealed. The study, led by consultancy TNO and conducted for the European Commission’s climate unit, shows manufacturers are increasingly using ‘flexibilities’ in the procedures used to calculate the emissions of new models prior to type approval.

Key flexibilities identified in the literature review fall into two categories, firstly those that affect the coast down measurement test, secondly those that affect the type approval or NEDC test.

For the road load determination test (coast down measurement) the main identified issues are:
- wheel alignment, adjustment of brakes, transmission and driveline preparation
- ambient conditions – temperature, pressure, wind, humidity
- tires - type, pressure, and wear
- test track – surface type and slope
- vehicle weight as tested
- vehicle body type

Test results described in several reports show differences between CO$_2$ emissions measured on the NEDC using independently determined road loads and those measured using type approval values ranging from 5 – 25%.

For the NEDC type approval test the main issues found are:
- inertia class
- factors affecting driving resistance on the dynamometer
- influence of the driver - using the tolerances in the driving cycle
- preparation of the test vehicle
- optimized measurement
- variation in gear shifting
- battery state of charge
- laboratory soak temperature

For most of the above NEDC test flexibilities the literature has provided quantitative indications of the impact of variation of test parameters on measured CO$_2$ emissions. One report in particular concludes that CO$_2$ total reductions of the order of 20% may be possible by optimizing all the factors relating to the NEDC test procedure. It also concludes that further reductions beyond 20% are expected when other factors are considered such as the coast down derivation test.

The study, published in December, was prompted by concerns that the claimed emission reductions did not tally with the deployment of low-carbon technology, according to an official from the commission’s climate department.

The consultancy study also recommends narrowing and better defining test parameters, or the introduction of correction mechanisms.

Carmakers’ association ACEA stressed that the information provided by manufacturers was “based on legal requirements set out by EU law and UNECE regulations” and “corroborated by national independent type-approval authorities”.

The climate department said the recommendations have been presented to a working group developing a new global test-cycle procedure for light-duty vehicles.

The discrepancy between emissions in test and real-world situations has already come under the spotlight as part of debate on air quality legislation. It was described by environment commissioner Janez Potočnik as a major failure of EU law. But the forthcoming introduction of a more realistic test cycle being developed by UNECE could “put us back on the right path,” he said.

4. Diesel Fuel Output Set To Rise As Refiners Complete Upgrades

As Total's Gonfreville refinery in northwest France gears up for restart, with a much boosted diesel production capacity, last year's refinery upgrade program in Europe and the Mediterranean is nearing completion. And with a large number of other refinery upgrades in Europe, Russia and the Middle East set to be completed in the coming years, the question is whether the market will be swamped with new diesel that it cannot consume.

Diesel consumption in Europe has been growing in recent years, but the rate has slowed and there are fears there could be oversupply in coming years, weighing on prices.

Among the more recent completed upgrades, Galp Energia said last week the new hydrocracker at its Sines plant in Portugal had started up and, in the first week of January, Israel's Paz Oil completed the planned upgrade at its Ashdod refinery.

Some of the raised diesel production in these countries will cover domestic demand, but in the cases of Sines and Ashdod some will go to export. Paz Oil said it plans to export between one and one a half cargoes a month to the Mediterranean, and traders suggested that Sines could benefit from its close proximity to normally diesel-hungry France.

But while France's diesel consumption grew by 1.5% in 2011, last year the growth slowed down to just 0.2%;it even dropped by 5% in December, according to the country's oil industry association UFIP.

So far this year, diesel demand throughout Europe has been slow and diesel prices, which had been the king of the barrel throughout the third quarter of 2012, have been falling. Recently, diesel cargo prices in the Amsterdam-Rotterdam-Antwerp region fell to a 13-month low, reflecting low end-user demand and high supply from European and Russian refineries.

While the winter period traditionally sees lower demand from farmers and for driving, the diesel market has also been hit by ample production from European refiners, increased Russian exports and a lack of support from the German heating oil market. Russia is expected to export around 1 million MT of 10 ppm diesel from its northern port of Primorsk in January, the highest volume in several months, as an increasing number of local refineries switch their output to Euro 5 (10 ppm) standard. More are also expected to do so following major upgrades.

And yet the diesel supply status could have been more acute if all the planned diesel upgrades had been completed on time or had avoided the usual start-up glitches.

- Pernis' new hydrodesulfurization unit became fully operational in June last year, Shell said at the time, adding that it would help "to achieve a substantial production of low-
sulfur diesel and heating oil." But ever since, Europe's biggest refinery has been undergoing both scheduled and unscheduled shutdowns, denting its diesel output.

- And after being in startup mode throughout the summer following a $1 billion upgrade, Hellenic Petroleum's Elefsis refinery in Greece reached full capacity only in November. But traders have said the refinery has reduced its diesel production, which some linked to poor margins, but others suggested could be related to a unit malfunction.

- Ashdod's upgrade was delayed several times during 2012, and was completed only at the end of the year.

- Israel's second refinery Haifa was also set to start using its new hydrocracker in the second quarter of 2012. But it wasn't until January this year that ORL finally announced the start of commercial production. The new facility is set to produce primarily diesel and jet fuel.

Russian refineries have also been relatively slow in pursuing their upgrades, said Stephen George of consultancy KBC. "You look at Russia, they are coming slowly, [but] there is no great incentive to start up before the shift in the heavy oil product export duty structure," he said.

Recently, Rosneft said it had launched two new refinery units in 2012 and is currently working on 24 new units. In 2012, according to Russia's energy ministry, the country's oil companies launched and upgraded 15 refinery units. This is still a minor proportion of the 88 units set for launch or upgrade to 2015. "67% of refining capacity has now committed to upgrade by 2016," George said, adding that that is when the majority of diesel upgrades will come online.

Nonetheless, a number of very big refinery projects were completed in 2012. Gazprom Neft launched the long awaited diesel hydrodesulfurization unit at its Omsk refinery in October, which will help in the product pipeline's switch to lower sulfur diesel. In November, Gazprom Neft also completed upgrades at its Serbian refinery at Novi Sad, including the launch of a new hydrocracking complex, which will increase its gasoline and diesel supply.

But 2016 could see a flooding of the European diesel market as Russia's upgrade program comes to an end, coinciding with a large scale expansion in the Middle East. "Russia, the US and Saudi Arabia will be the marginal suppliers. That is when the market will feel the pressure," said George.

Saudi Aramco Total Refining and Petrochemicals (SATORP) is expected to start commissioning the 400,000 b/d Jubail oil refinery by the end of 2013. Yanbu Aramco Sinopec Refining Company's (YASREF) 400,000 b/d refinery at Yanbu is scheduled to be completed in 2015. Both are geared towards substantial diesel output. And "by then the Russians will be converting as well," George said.

5. European Commission Urges Green Energy Infrastructure for Autos, Ships

In order to accelerate the transition away from oil as the dominant fuel source in the European road and shipping sectors, on January 24th, the European Commission proposed a law requiring European Union countries to significantly increase the number of charging stations for electric cars, fueling stations for hydrogen-powered vehicles, and liquefied natural gas depots for ships.
The commission also proposed legislation calling for harmonized technological standards to boost the production and lower the cost of electric cars, as well as to speed construction of the green infrastructure. The proposal would include consistency in labeling of fuel pumps and vehicles.

Noting that renewable energy accounts for only 4.7 percent of the transport sector fuel use in the EU, Transport Commissioner Siim Kallas said mandatory infrastructure laws would pave the way for affordable alternatives that would be embraced by the public and businesses. “Clean fuel is being held back by three main barriers: the high cost of vehicles, a low level of consumer acceptance, and the lack of recharging and refueling stations,” Kallas said at a January 24th press conference. “Refueling stations are not being built because there are not enough vehicles. Vehicles are not sold at competitive prices because they are expensive and the stations are not there. This is why there is a need for legislation imposing a minimum level of infrastructure for clean fuels as well as common EU-wide standards for the equipment used at the recharging and refueling stations.”

Under the EC’s proposal, the minimum number of electric car charging stations should be implemented by 2020, while the target for liquefied natural gas stations for the shipping sector should be achieved by 2025.

“Developing innovative and alternative fuels is an obvious way to make Europe’s economy more resource-efficient, to reduce our over-dependence on oil and develop a transport industry that is ready to respond to the demands of the 21st century,” Kallas said.

To become law, the proposal requires approval by the EU member states and the European Parliament.

The minimum numbers of the new stations are based on targets for the green-energy cars on the road by 2020. Member states will have 2020 as a deadline to meet the new targets with just under 10 million electrical vehicles expected around the same time. According to an annex in the EC’s proposal, the number of electric car recharging stations alone would be as high as 1.2 million in the United Kingdom and 1.5 million in Germany. Currently, Germany has the most electric car recharging stations of any EU member state, with 1,937 as of the end of 2011. France was next with 1,600 followed by Italy and Spain with 1,360 each. Other EU member states—Sweden, Finland and others—have one electric vehicle recharging station.

Harmonizing specifications for electric cars and the charging stations has been a key demand by European automobile manufacturers. “Standardizing the connection between the electricity grid and electrically-chargeable vehicles is one of the prerequisites to help electric cars gain a viable market share,” the European Automobile Manufacturers’ Association said in a statement. “It provides predictability to investors, enables economies of scale, reduces cost for all stakeholders and is essential in increasing user acceptance. However, we are very concerned by the lack of progress in creating the framework to meet these goals.”

The fuels that the proposed legislation are designed to promote are hydrogen, liquefied and compressed natural gas (LNG and CNG), and liquefied petroleum gas (LPG). The proposal was criticized by the leading European biofuels trade association, ePure, because it does not include high-ethanol blends.
“High ethanol blends such as E85, which is an 85 percent ethanol blend in petrol (gasoline), is a clean fuel that significantly reduces greenhouse gas emissions and is a cost-effective way to meet the EU's climate and energy targets,” ePure said. The proposal does not create a level playing field, ePure added. “Most of the emissions of alternative fuels occur upstream, which is why measuring tailpipe emissions alone distorts the picture,” ePure said. “We must stop comparing apples with oranges. Only a harmonized tool to measure greenhouse gas emissions will allow us to judge the environmental performance of the different fuel options.”

The group did welcome the proposal’s call for harmonized labeling of fuel pumps and vehicles regarding information on fuel quality. The European Union already has a law requiring that renewable energy provide 10 percent of the fuel used in the transport sector by 2020. However, the EC recently proposed that the use of crop-based biofuels be limited—a move that biofuel producers are threatening to challenge in the European Court of Justice.

Around 10 percent of the EU transport sector must run on renewable sources of energy by 2020 according to previous EU accords. At the same time, the demand for energy is set to increase amid a dwindling supply of oil. The hope is to reduce member state dependency on the fossil fuel that, according to an expert group on future transport fuels who advise the commission, will peak sometime this decade. "Oil, the main energy source for transport overall, supplying 100 percent of road transport fuels is currently expected to reach depletion on the 2050 perspective," notes the Future Transport Fuels report penned by the advisory group in 2011.

For its part, the commission estimates daily oil costs for EU transport hovers around €1 billion but could increase given the political volatility of the regions where fossil fuel is most often located.

Pro-green NGOs welcome the commission’s proposals to impose the infrastructure but caution that biofuels and liquefied natural gas still contribute to climate change.


On January 23rd, the European Commission approved a Finnish plan to provide government funds for adapting ships' engines to meet stricter sulfur emissions standards that take effect in 2015. The Finnish scheme is unlikely to be copied in neighboring nations despite the potential that it will put companies in other countries at a competitive disadvantage, officials at Nordic ship-owners associations told reporters.

The scheme will allow state aid for up to 50 percent of the cost of refitting Finnish-registered vessels belonging to Finnish companies. The aid will total €30 million ($40.1 million) over three years, €10 million ($13.4 million) of which will be allocated in 2013. It is designed to help shippers comply with a new limit of 0.1 percent sulfur in ships' fuel that will take effect in the Baltic Sea, North Sea, and English Channel starting January 1, 2015. The limit on sulfur in fuel in these areas is now 1 percent.

According to the Confederation of Finnish Industry (EK), the new sulfur limit could cost Finnish companies between €400 million ($535 million) and €600 million ($802 million) annually. The Finnish state aid scheme is an amended version of one the Commission authorized in 2011.

A European Commission spokeswoman, Maria Madrid-Pina, told reporters that the scheme will not cause undue distortion of competition as it is in line with relevant state aid regulations.
7. Denmark Aims to Meet Targets for Renewables, Reductions of GHG Emissions

Denmark this year will continue to pursue policies designed to achieve tough targets for reducing greenhouse gas emissions and energy use. The country is committed to achieving an energy supply fully based on renewable sources by 2050 and an electricity and heating sector fully powered by renewables by 2035. Fifty percent of the nation’s electricity supply is to be derived from wind by 2020. According to the Danish Energy Agency, 40.7 percent of the electricity supply came from renewables in 2011, mostly from wind.

Work will continue in 2013 on conversion to a smart electricity grid that will channel more renewable energy into the national supply when it is cheapest. Remotely readable smart meters that can provide hourly readings are being installed.

Under a November agreement between the government and energy suppliers, energy companies' energy-savings obligations will rise by 75 percent in the period 2013-2014 and by 100 percent in 2015. These are legally mandated requirements for distributors in the electricity, gas, heating, and oil sectors to reduce energy use that will likely result in the unveiling of new incentives for businesses and individuals to consume less.

A draft strategy on energy efficiency in existing buildings and a new strategy for energy-efficient vehicles will also be presented during 2013. A comprehensive analysis to see if taxes and subsidies should be adjusted to achieve further energy savings will likely begin in 2013, but the conclusions will not be presented until 2014 at the earliest. An analysis of the future role of district heating will also be published before the end of the year. District heating is a system for distributing heat generated in a centralized location for residential and commercial requirements such as space heating and water heating.

Denmark is also committed to reducing greenhouse gas emissions by 40 percent by 2020 compared with 1990 levels and has outlined how a 34 percent reduction will be accomplished. A number of measures are already in place to help achieve this target. They include climate-related taxes including a surcharge on electricity that will rise to 3.5 percent per kilowatt-hour in 2013 from 3.1 percent in 2012, grants for businesses to develop renewable energy technologies, and participation in the European Union's Emissions Trading System. In 2013, the government will present a plan for achieving the remaining required reduction in emissions.

The Environment Ministry is expected this year to propose legislation on urban air pollution that will focus on measures to cap traffic-related emissions, particularly particulates and nitrogen oxides, which have been increasing due to a shift to diesel engines in private cars.

8. Moscow to Restrict Traffic in Bid to Reduce Vehicular Air Pollution

Russia's capital, Moscow, will ban large trucks on its main motorways for most of each day starting March 1st as part of efforts to reduce air pollution and improve traffic flow. Trucks weighing more than 12 metric tons will be prohibited from using the city's outer ring road from 6 a.m. to 10 p.m. Between May 1 and Oct. 1, the prohibition will be extended Friday through Sunday by two hours, from 6 a.m. to midnight. On the city's inner ring road, trucks over 3.5 metric tons will be prohibited during those times.
In enacting the ban on December 1, 2012, Mayor Sergei Sobyanin said large trucks make up 30 percent of the city’s traffic. About 150,000 trucks will be impacted daily, many which use low-quality fuel. “That is an enormous amount of emissions and huge part of the environmental problem,” Maksim Liksytov, who is in charge of the city’s road infrastructure, said in a television interview about the ban in late 2012.

The city is expanding public transportation options in the ring road area. It previously enacted restrictions on other roads, allowing access at certain times of day only to trucks using higher-quality fuel.

City lawmakers are also reviving an effort to limit automobile traffic in the city center, the speaker of the Moscow city legislature announced in a newspaper interview on January 14th. Access to the city center, which suffers from significant air pollution, could be allowed only to local residents, taxis, and bicyclists, Speaker Vladimir Platonov told the newspaper Izvestia. A proposed bill would allow the government to introduce restricted areas anywhere in the city that is experiencing high levels of air pollution. The restrictions could be temporary, include only certain times of day, or restrict access based on type of fuel burned.

The measure will be taken up in the first quarter of 2013, according to the speaker.

9. Long Wait for Major Russian Environmental Policy Framework Likely to Continue in 2013

Although President Vladimir Putin has declared 2013 the year of environmental protection in Russia, there is little sign that major changes will be made to the country’s legal framework to foster that goal. This year may include more pronouncements about moving away from Soviet-era practices of ignoring environmental costs and toward more regulation of industry’s impacts. But putting in place the long-promised, comprehensive legal framework for environmental protection seems unlikely, according to sources quoted by the press. Rather than creating an enforceable new legal framework, the government is considered more likely to pursue project-level initiatives on the environment and provide support for select companies or industries to modernize.

The government’s decision to not take part in a second commitment period for the Kyoto Protocol will crush the flourishing market under the protocol’s Joint Implementation mechanism, whereby foreign governments and businesses paid for carbon-reducing upgrades to Russia’s outdated capital stock in exchange for credits. The decision came despite pressure from some Russian ministries and many business groups to continue with the protocol.

A requirement for companies to carry out energy audits and submit the results in the form of energy “passports” to the Ministry of Energy went into effect on January 1st under the federal law On Energy Savings and Energy Efficiency. Millions of industrial enterprises and public institutions are affected by the requirement, which the ministry has called one of the key mechanisms for modernizing Russian industry. However, lawmakers report that they have been flooded with letters from affected entities asking for an extension of the deadline because enacting amendments have not been passed that would fund energy auditors and give them appropriate training, according to the official government news source, Rossiskaya Gazeta.

New regulations on flaring of associated gas at oil wells are imposing higher fees for flaring more than 5 percent of the total volume produced. The new rules went into force on January 1, 2013, under a November 8, 2012 government order. The fee level in 2013 is nearly three times
higher than in 2012. By 2014, the level will increase to more than five times the 2012 level. The order also compels companies to install gas meters on flare units by setting an additional penalty of 26 times the 2012 level for flares without meters.

On a related air quality issue, the Ministry of Energy announced in December that it had completed preparations for a switch from Euro 2 to lower-sulfur Euro 3 fuel as of January 1, 2013. The ministry met with several major oil companies that reported they were prepared logistically to distribute the fuel throughout the country, according to the announcement. However, the Ministry of Agriculture and oil companies have opposed the switch, fueling doubt that the switch will occur as scheduled.

A host of initiatives this year will further focus Russia on development of natural resources in its northern regions and extend its role in the rapidly changing area. New subsidies for exploration of the Continental Shelf went into effect January 1 after approval by the State Duma in November. The new law reduces the export duty on hard-to-reach and highly viscous oil to 10 percent of the normal tariff rate. The law applies to oil extracted on the Continental Shelf, on the Yamal Peninsula, Yakutia, Irkutsk, Krasnoyarsk, Nenets Autonomous District, and the Russian section of the Caspian Sea.

Separate incentives for gas production, including similar tax breaks for more demanding production areas, are being considered by the State Duma.

The Russian government has also approved an action plan for environmental policymaking through 2030, including goals for introducing economic measures to stimulate industry to use lower emissions technologies, recycle waste, and clean up past pollution. The plan of action, published on December 21, is intended to realize the goals of the state environmental policy to 2030, which then-president Dmitry Medvedev established in an executive order at the end of April 2012.

The preparation of mechanisms and programs to stimulate investment in the modernization of industry, including the introduction of energy savings and emissions reductions technologies, has been pushed out to 2015 and 2016, under the plan. The preparation of national environmental standards that reflect international standards, such as those in the European Union and the United States, is to start in 2013.

The long list of actions includes Russia's obligations under various international agreements, as well as broad, ambiguous goals. For example, the Ministry of Environment and Natural Resources, the Ministry of Transport, and other interested federal authorities are tasked with “the development and realization (in the framework of their relevant authorities) of plans for the joint activities (voluntary agreements) of federal bodies in order to reduce negative environmental impacts and provide for environmental safety (of transport, the fuel and energy sector, industrial production, etc.).” This task will be carried out in the years 2015 to 2030, according to the plan.

Russia's environmental action plan also tasks several agencies with helping to realize the government's long-term program to develop the domestic coal industry.

The ratification of the United Nations Economic Commission for Europe's Convention on Long-range Transboundary Air Pollution is included in the plan for 2013. Treaty partners have incorporated softer targets for emissions reductions in order to help secure the country's participation.
The federal agencies tasked with carrying out the action plan, including the ministries of economic development, agriculture, energy, finance, and health, are required to report their progress under the plan to the Ministry of Natural Resources and the Environment every year by February 15th. The Ministry of Natural Resources and Environment in turn must analyze the reports and present its conclusions to the government by March 15th.

10. Reducing the €45 Billion Health Cost Of Air Pollution from Lorries

Road charges for heavy goods vehicles (HGVs or lorries) should reflect the varied health effects of traffic pollution in different European countries. This means charges should be much higher in some countries compared to others, according to analysis from the European Environment Agency (EEA).

Overall, air pollution is estimated to cause 3 million sick days and 350,000 premature deaths in Europe. Such health effects also have a heavy economic cost – the report’s authors estimate that the air pollution from HGVs alone costs EEA member countries €43-46 billion per year, making up almost half of the approximately €100 billion cost of air pollution from all transport modes.

The 2011 Eurovignette Directive prescribes how EU Member States could incorporate the health costs from air pollution into any charging structure for large roads and motorways. The revenue from such schemes should be invested in sustainable transport, the Directive states. However, adoption of road user charges depends on a decision by individual countries.

Jacqueline McGlade, EEA Executive Director, said: “European economies rely on transporting goods long distances. But there is also a hidden cost, paid in years of reduced health and lost life. This cost is especially high for those living close to Europe’s major transport routes. By incorporating these costs into the price of goods, we can encourage healthier transport methods and cleaner technologies.”

While air pollution in Europe has fallen significantly in recent years, it is still a problem in some parts of Europe, where HGVs can be a major factor, the report notes. Diesel, used by most HGVs, causes more air pollution per kilometer than other fuels such as petrol. Exhaust emissions from diesel engines were recently labeled as carcinogenic by the International Agency for Research on Cancer.

Heavy goods vehicles are responsible for 40-50% of nitrogen oxide (NOx) pollution from road transport in countries covered by the EEA. Both NOx and fine particulate matter (PM2.5) are
considered in the report, as they can cause respiratory diseases, cardiovascular illnesses and other health problems.

Same pollutants, different health costs

The cost of air pollution from HGVs is up to 16 times higher in some European countries compared to others, the report notes.

The average cost of pollution from a 12-14 ton Euroclass III lorry is highest in Switzerland, at almost € 0.12 per kilometer. Costs are also high in Luxemburg, Germany, Romania, Italy and Austria, at around € 0.08/km. This is because the pollutants cause more harm where there are high population densities, or in landlocked regions and mountainous areas where pollution cannot disperse so easily.

At the other end of the scale, the same lorry driving in Cyprus, Malta and Finland causes damage of around half a euro cent per kilometer.

In some regions the cost is also much higher than others. Zurich in Switzerland, Bucharest in Romania, Milan in Italy, the Ruhr Valley in Germany and Barcelona in Spain had some of the highest health costs compared to other large urban zones.

The calculations show that newer lorries would have a reduced impact, and therefore a lower cost. Euroclass IV lorries, which are up to six years old, or Euroclass V, up to three years old, would cause 40-60% less external costs on the same transport corridors. Charging haulage companies for the external costs of air pollution would incentivize newer and cleaner technologies, the report says.

The scheme would also create a level playing field, by internalizing the costs that road freight currently imposes on the rest of society. The positive effects of such a scheme have been noted in Switzerland after the country adopted similar legislation.

Background

The EEA analysis attempts to capture the complexity of different geographical influences on air pollution across Europe. The report includes the average costs of pollution for 66 separate classes of vehicles, with the cost of each estimated on three different types of road (suburban, interurban and highways) in 30 countries and 108 cities. Estimates of cost per kilometer, depending on the vehicle and its surroundings, range from virtually nothing to over 30 eurocents per km for a non-Euroclass lorry more than 20 years old.

European Union Member States must report to the Commission by October this year on how they will implement road charging, if at all. The detailed figures released by EEA are intended to help Member States decide on individual schemes.

The high cost of air pollution is in line with a 2011 EEA analysis, which shows that air pollution from large industrial facilities cost Europe € 102 – 169 billion in 2009 in lost life, poor health, crop damage and other economic losses. In the coming months, the EEA will publish an update to this report with more recent data.
11. EU Air Quality Review Likely to Prompt Debate over Costs of Pollutant Limits

The European Commission expects to publish proposals in the fall to revise two laws, the National Emission Ceilings Directive (NEC Directive, 2001/81/EC) and the Air Quality Directive (2008/50/EC). Both directives place limits on the amount of pollution that can be emitted into the air.

- The Air Quality Directive establishes minimum air quality monitoring requirements for EU countries and sets limits on the presence in air of benzene, carbon monoxide, lead, nitrogen dioxide, sulfur dioxide, and fine particles (PM-2.5, or particles less than 2.5 microns in diameter).

EU countries have consistently struggled to stay within limits for some of the pollutants, especially nitrogen oxides and fine particles, which are linked to transportation. In addition, according to the European Environment Agency, almost all people living in urban areas in the European Union are exposed to excess ground-level ozone, which is caused by nitrogen oxides, volatile organic compounds, and carbon monoxide.

The Commission has previously granted time extensions to some countries to meet the pollutant limits imposed by the Air Quality Directive. It is pursuing infringement actions relating to both the Air Quality Directive and the NEC Directive against the majority of member states, which could result in cases being brought at the EU Court of Justice.

The Commission will set out its plans to revise the NEC and Air Quality directives as part of a broader review of the effectiveness of the EU framework to combat air pollution through 2020. The main focus in terms of tighter pollution controls is likely to be the national emission ceilings in the NEC Directive. The review could also include consideration of emission ceiling objectives for 2025 and 2030.

But there is resistance from various member states. For example, the British government has signaled that it will resist lower limits on the presence of pollutants in air. In a September 2012 “Red Tape Challenge” implementation plan, which aims to streamline environmental regulation, the United Kingdom’s Department for Environment, Food, and Rural Affairs noted it would work with other EU countries to “use the EC [European Commission] review of air quality legislation to seek: amendments to the Air Quality Directive which reduce the infraction risk faced by most member states, especially in relation to nitrogen dioxide provisions [and] simplifications to the legal framework (e.g. through reducing requirements for member states) to reduce costs and administrative burdens to local authorities and businesses”.

The Commission has calculated that air pollution in the European Union causes 420,000 premature deaths annually. In many parts of the European Union, air pollution exceeds World Health Organization (WHO) guidelines.

Current EU laws on air quality are directives, meaning they set out a framework with which EU countries must comply but leave the details of implementation to individual governments.
The U.S. EPA adopted in December a National Ambient Air Quality Standard for PM-2.5 of 12 micrograms per cubic meter, compared to a WHO guideline of 10 micrograms and an EU limit value of 25 micrograms.

Alongside the proposals to revise the NEC and Air Quality directives, the Commission review will seek to promote other initiatives and measures that can have an impact on air pollution levels. In a January 8th speech, Potočnik said that “not all sectors have contributed to pollution reductions in the past, despite the high cost-effectiveness potential.” In particular, more could be done to limit emissions from road transport and shipping, and from agricultural practices such as manure spreading, he said.

Many measures will be dealt with separately from the review or are under way. For example, the Euro VI standard for pollutant emissions from trucks and buses came into effect Dec. 31, 2012. The standard cuts permitted exhaust emissions of nitrogen oxides by 80 percent and permitted emissions of particulate matter by 66 percent. Tighter limits for private cars—the Euro 6 standard—will come into force on Sept. 1, 2014, and will reduce nitrogen oxides limits by 55 percent compared to current standards. A remaining issue with both measures, however, is how well they will be enforced in actual driving conditions.

The Commission is also promoting alternatively fueled vehicles by proposing minimum rollouts of electric vehicle recharging networks, standardization of recharging infrastructure, installation of liquefied natural gas fueling infrastructure, and other measures, detailed in a plan published on January 24th.

The air review may also add fine particles and black carbon to the list of substances subject to limits under the NEC Directive, in line with changes to the Gothenburg Protocol agreed to in May 2012.

The effectiveness of the air quality review, however, is likely to be determined to a great extent by the effectiveness of measures adopted locally and regionally in EU member states, with a view to staying within air pollution limit levels. In his January 8th speech, Potočnik said, “We need to discuss with member states ways and means of improving this so that our common objectives for better air quality are actually delivered to more people.”

Measures to limit transportation emissions, such as low-emission zones where speed limits are tightly controlled; traffic restrictions; or promotion of public transportation over private cars, are likely to be required if EU countries are to meet limits in the Air Quality Directive.

12. EU Backs On-Road Emissions Testing For Light Vehicles

The EU is set to introduce a new pollution test for light vehicles based on what they emit in real-life, complementing laboratory-based tests. The test is intended primarily to stop diesel-powered vehicles emitting more nitrogen oxides (NOx) on the road than during type approval tests using fixed engine cycles. Carbon monoxide and possibly particulate matter will also be checked. Hydrocarbons will not be measured for technical reasons.

EU member states and the European Commission agree that the test should use Portable Emissions Monitoring Systems (PEMS) fixed to vehicles, rather than random engine cycles in a laboratory. Their decision follows a technical analysis, published by the Joint Research Centre (JRC), which concludes that both options are feasible. But it states that PEMS are more likely to
ensure that engines do not detect they are under test and so artificially reduce their emissions of air pollutants.

The introduction of a PEMS test is envisioned in current legislation and the commission’s CARS 2020 action plan from November. It would check if vehicles exceed Euro 6 emission standards by more than certain margins, which are not yet established. Compliance with the limits in the laboratory, real-world compliance with the margins and greater randomness during testing “will pose new challenges to vehicle manufacturers” says the JRC report.

The JRC will finish development of the PEMS test, such as setting parameters including permitted temperature and engine loading, by the end of the year. The European Commission will then table draft legislation. Compliance should be a type approval condition from September 2017, four years after Euro 6 enters force.

Vehicle manufacturers have declined an opportunity to develop a random engine cycle test, given the position of member states and the commission. Vehicle industry association ACEA says it will be concentrating on helping to develop PEMS.

In Europe the compliance of emissions from passenger cars with regulatory standards is measured during a predefined test procedure in the laboratory (i.e. the current Euro 5 standard for diesel cars allows for 180 mg NOx emissions per kilometer). Research done by the JRC suggests that this laboratory test does not accurately capture the amount of nitrogen oxides emitted by diesel cars on the road, which is substantially higher.

In view of persisting air quality problems, the European Commission decided in 2010 to address this situation by complementing the current laboratory test with a real-driving test procedure, which should be able to capture the wide range of driving conditions encountered on the road.

A working group led by the JRC and composed by industry stakeholders and Member States representatives was established to assess the potential of 2 candidate procedures: emissions testing with random driving cycles in the laboratory or on road emissions testing with portable emissions measurement systems (PEMS). The newly published report covers the assessment done, based on emissions testing and expert judgment. On-road emissions testing with a portable device was judged to better cover the wide range of driving and ambient conditions than random laboratory test cycles.

Following the findings of this report, it was decided in December last year to primarily develop on-road testing with PEMS as the main real-driving test procedure. To this end, an extensive vehicle test campaign will be conducted in cooperation with car manufacturers and European technical services in 2013.

The real-driving test procedure may be implemented gradually together with more stringent Euro 6 regulatory standards in 2014, but will only become fully effective from 2017 onwards.

13. French Plea for More Time to Meet NO2 Limit Rejected

The European Commission has dismissed all applications from France to delay a 2010 deadline for meeting the EU’s NO2 air quality standard. Recently, Brussels also rejected many requests for a derogation made by Germany.
France had sought five more years to meet the average concentration limit of 40 micrograms per cubic meter in 21 areas. It also wanted more time to comply with the annual and hourly limits in Marseille, Lyon and Paris. But its decision the EC states the country did not provide enough evidence to prove it would comply by 2015. Demonstrating compliance is a key condition for getting the five-year derogation. The French government is currently preparing new policies to avoid paying an EU fine for breaches of EU law.

In a separate decision, the EU executive also rejected requests for a five-year derogation in 33 German cities and regions. Some contained contradictory information, it said. However, Brussels approved 21 applications. The decision leaves Germany’s eight largest cities, including the capital Berlin, in breach of the annual NO2 limit. This means that the commission may now begin infringement action for non-compliance in these areas.

Germany also sought more time to meet the hourly concentration limit on the irritant gas in four areas. Applications for Stuttgart and Munich were refused, while those for Tübingen and Hamburg were approved under certain conditions.

14. Spain Renews Vehicle Replacement Subsidies

Citing fuel efficiency and emission reduction benefits, Spain's Ministry of Industry, Energy, and Tourism on February 4th re-launched a subsidy program to help consumers replace older passenger and light commercial vehicles with newer ones. The second Efficient Vehicle Incentive Program (PIVE 2, by its Spanish initials) reserves €150 million ($202.9 million) to subsidize the scrapping of vehicles older than 10 years (or older than seven years in the case of light commercial vehicles) and their replacement with new vehicles that are more fuel-efficient and emit less carbon dioxide.

While the list of eligible vehicle types is varied, the common denominator is that the new vehicles' carbon dioxide emissions must not exceed 160 grams per kilometer (or 120 g/km in the case of some light commercial vehicles).

Under the plan, which will last 12 months or until funds run out, individuals and small businesses will receive a €2,000 ($2,705) discount off the purchase price directly at vehicle dealerships. Half of this discount will be subsidized by the industry ministry, with the other half covered by participating vehicle manufacturers or importers.

The plan, which also aims to help the hard-hit automotive sector, will be open to private consumers and self-employed individuals, micro-businesses, and small-to-medium enterprises.

According to the government Institute for Energy Diversification and Savings (IDAE), the industry ministry’s goal to take 150,000 older vehicles off the road in 2013 could save up to 78 million liters (20.6 million gallons) of fuel per year and reduce carbon dioxide emissions by 262,000 metric tons annually. That would represent about 0.07 percent of total greenhouse gas emissions and 0.3 percent of road transport sector emissions.

The government said PIVE 2 was motivated by the success of the first PIVE plan, which replaced 75,000 vehicles within roughly three months following its entry into force on October 1, 2012, at a cost of €75 million ($101.6 million).

In February 2012, Spain drastically reduced the total amount of funding designated to support subsidies for companies, individuals, and public sector entities looking to buy electric vehicles.
15. Estonia Goes Electric with New Car Charger Network

Estonia has become the first country in the world to install a nationwide system of fast chargers for electrical vehicles, the manager of the new system said, as part of European efforts to reduce carbon emissions. The 165 chargers were produced and installed by engineering group ABB, and construction was financed from the government's sale of 10 million surplus CO2 emission permits to Japan's Mitsubishi Corporation. The 2011 deal with Mitsubishi also provided the government with more than 500 electric cars and the financing of a subsidiary system for people to purchase electric cars.

Estonia and other countries have seen weak take-up of electric vehicles due to high driving costs and their short range from a single charge. The network of fast chargers strategically placed along roads and in towns means that users need not worry about running out of power during their journeys. It also features a nationwide unified payment system.

Estonia, with a population of about 1.2 million, has 619 all-electric cars, of which 500 are used by public authorities and about 100 by private people and companies. That amounts to one electric vehicle for every 1,000 cars, second only to Norway, which has four per 1,000. The Netherlands is third at 0.6 per 1,000.

16. DG Environment Faces Major Reorganization, Staff Cuts

The European Commission’s environment unit is undergoing a major reorganization, with around 5% of staff likely to be cut to cope with the reduced budget available for 2014-20 following member states’ decision to cut the EU’s budget. Environment commissioner Janez Potočnik has strenuously denied that his office’s ability to take action regarding member states breaching European environmental legislation will be weakened following the reorganization.

“I am perfectly aware that we need to have more people and that we are understaffed, especially if I compare my current DG with the previous,” he told MEPs at a recent parliament committee meeting. “But the situation is that if you look at the [Multiannual Financial Framework] and the conclusions which were reached in the member states’ discussion, this is absolutely forcing us into a restrictive policy,” he continued, adding that further restructuring will have to happen under the next commission, due to take office in 2015.

Danish Green MEP Margrete Auken expressed concern that the department, known as DG Environment, planned to “run down” its legal service, including by redeploying lawyers currently working on infringements. But a spokesman for the commission said that the same lawyers would still be working on infringements, although some of them may also have additional responsibilities in certain policy areas.

The restructuring of the DG had begun before the MFF decision with the aim of enabling greater co-operation across policy areas. An internal commission document seen by representatives of the press indicates that the current legal affairs and cohesion policy section will now also be responsible for DG Environment’s contribution to the European Semester, which has coordinated the EU’s economic policies since the beginning of the financial crisis.

The revamped legal section will be divided into three large regional areas with a fourth unit mostly covering issues under the Aarhus Convention.
Overall, the restructuring would split DG Environment into six broad policy areas: green economy; natural capital; quality of life, water and air; global and regional challenges and LIFE; strategy; and the legal department.

Environmental groups fear that the reorganization of the legal service, though far less drastic than was originally planned, may have been motivated by a push to downgrade environmental enforcement to appease certain member states.

Mr. Potočnik has made implementation of existing EU environment law the main priority under the new environmental action plan (2014-2020), currently being scrutinized by MEPs and member states, with agreement possible by June. MEPs from across the political groups have signaled their backing for stronger implementation of existing laws.

17. Parliament Votes to Weaken Noise Limits for Cars

The European Parliament has voted to revise current limits on vehicle noise. But the limits agreed are less ambitious than those adopted by its environment committee.

The vote marks a victory for the right-wing ECR, EPP and EFD political groups, whose attempts to make compliance by the automotive industry easier were defeated in the committee in December.

The limits agreed in plenary are generally one to three decibels higher than the committee’s figures. A 74-decibel limit for sports cars, which did not have their own category before now, was also introduced to soften the impact of the regulation on manufacturers such as Porsche and Lotus.

The MEPs did not alter the committee’s 69db(A) limit for the lightest minibuses and vans, nor the 68db(A) limit for typical cars, which is lower than the existing one.

The parliament carried the contentious revisions, put forward by Czech conservative rapporteur Miroslav Ouzký, by 307 votes to 292, with 25 abstentions. Mr. Ouzký said the text forms “a real compromise” between contrasting proposals from carmakers on the one hand and NGOs and green MEPs on the other. The greatest change to the commission’s original proposals is how vehicles are categorized, with no significant deviation from the limits it put forward, he added.

The MEPs also agreed vehicle noise should be labeled, as CO2 emissions are now. Another important departure from the commission’s text is that quiet vehicles, such as electric and hybrid cars will have to have a noise-making system to alert pedestrians.

The parliament wants compliance with the regulation to be a type approval requirement six years after the regulation enters force. All new vehicles entering service would have to meet them two years later.

Member states are still debating the proposals in the Council of Ministers. A presidency document that emerged recently indicates that they want to revise how vehicles are categorized but there is no agreement yet on limit values.

18. ILUC Proposal Criticized By EU Energy Ministers
EU energy ministers meeting in Brussels recently have outlined a range of reservations about the European Commission’s proposal to address the indirect land-use change (ILUC) impact of biofuels. There was widespread criticism for the 5% cap on the amount of biofuels from food crops that can be counted towards the EU’s renewables target for transport fuels.

Countries including Poland, Hungary, Czech Republic and Slovakia are against the limit, their ministers indicated at the meeting. Other EU member states including the UK and Denmark are not convinced that the proposals can adequately address the ILUC problem.

Denmark’s own study on the likely effects of the proposal concluded that it would have only a “small effect in the direction of making biofuels more sustainable”, minister Martin Lidegaard said. Denmark would like the 2017 review date proposed by the commission brought forward to 2014.

The UK is worried about the proposed changes to the fuel quality directive allowing double-counting of “advanced biofuels” towards the transport sub-target. The same double-counting will not contribute to countries’ overall targets under the renewable energy directive (RED), which means “the multiple counting acts as no practical incentive at all”, the UK said in a submission.

The resulting shortfall in the transport sector for RED compliance purposes would have to be met in other sectors covered by the directive, increasing costs elsewhere, UK energy minister Ed Davey told the meeting. The UK is unlikely to meet its renewable energy targets set by the EU law.

Energy commissioner Günther Oettinger accepted the reasons behind member states’ unhappiness with the 5% target, adding that a 6% or 7% cap or addressing biodiesel and bio-petrol separately “might have been more in line with the market because it would take account of the investment made in biofuel production”.

Following the debate, the Irish presidency acknowledged that there were a number of areas within the proposal where significant differences between member states would have to be addressed. The presidency aims to bring forward a “meaningful progress report” on the matter by June 7, Minister Pat Rabbitte said.

19. EU Lawmakers Back Suspension of Airline Carbon Payments

European Union lawmakers have backed a Commission plan to suspend for a year a law that would make all airlines using EU airports pay for their carbon emissions, and urged U.S. President Barack Obama to accelerate a global deal. International fury at the EU law led Climate Commissioner Connie Hedegaard last year to propose a temporary exemption for intercontinental flights.

The European Parliament’s Environment Committee voted 50-0 with eight abstentions to back the European Commission’s “stop the clock” proposal on the inclusion of international aviation in the ETS. Under the proposal, operators of flights into and out of the European Union would be excused until 2014 from a requirement to report their greenhouse gas emissions and surrender sufficient carbon allowances to cover those emissions.

The move needs the endorsement of a full parliamentary session in April, but has so much support that it is unlikely to be overturned. The committee strengthened the wording to underline the fact that the suspension could be prolonged beyond a year only if “clear and sufficient”
progress were made at the International Civil Aviation Organization (ICAO), the U.N. body seeking an alternative plan to curbing airline emissions.

“There’s no excuse any more. Nobody can say now that the EU is obstructing any agreement,” said German Christian Democrat Peter Liese.

The International Air Transport Association said the EU law had been an obstacle to a global deal. "With that roadblock removed, we are well positioned for a breakthrough on market-based measures," said Tony Tyler, IATA’s director general. But he said “the devil will be in the details” and it was crucial to have an agreement that preserved “fair competition”.

The EU Emissions Trading Scheme (ETS) continues to apply to flights between EU airports, which some airlines maintain is an unfair cost burden, given the intercontinental freeze. The Commission argues that the cost is in fact minimal - only about 2 euros per passenger per long-haul flight given the current price of carbon permits, which have fallen to a record low of less than three euros per metric ton (1.102 ton).

Exclusion of international flights on a permanent basis could weaken the market even more. A report from international energy consultants IHS CERA said the permanent exclusion of intercontinental flights could deprive the EU ETS of more than 500 million metric tons of potential allowance demand to 2020.

The European Commission, the bloc's executive arm, proposed in November 2012 to delay the inclusion of international aviation in the ETS in the face of pressure from a number of countries, including China, India, and the United States. Those countries said the European Union should not unilaterally impose controls on international aviation emissions, but should negotiate on a global system governed by the International Civil Aviation Organization (ICAO). If talks in the ICAO fail to produce international regulation of greenhouse gas emissions from aviation, international flights would be re-included in the ETS, the Commission said.

The committee opted to open negotiations with the EU Council, which represents the governments of EU member states, to finalize the decision as soon as possible, so that the European Parliament can ratify it before April 30, when under current legislation, airlines would have to report their 2012 emissions. The approval of both the European Parliament and EU Council is required before the decision can take effect. The full parliament is expected to vote to ratify the decision at a plenary session April 15-18.

Since the Commission proposed the “stop the clock” decision, the ICAO has claimed progress toward an international market-based measure to limit aviation emissions. It has tasked a High-Level Group on International Aviation and Climate Change with drafting an agreement by the next ICAO Assembly meeting, scheduled for Sept. 24-Oct. 5 (see related story).

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Green Groups Urge Ambitious New Climate Goals for Europe

Green campaigners pressed the case for an ambitious new decade of energy and environment policy recently as the European Commission kicked off debate on 2030 goals, seeking to balance economic reality with climate concerns. Environment groups say a possible new target of cutting greenhouse gas emissions by 40 percent from 1990 levels - implied from EU documents - fails to address their climate change fears. They want another triple set of targets along the lines of the 2020 goals - to cut carbon emissions by 20 percent from 1990 levels, get
20 percent of energy from renewable sources and increase energy savings to 20 percent versus business as usual.

Brook Riley, climate and energy campaigner at Friends of the Earth (FoE), called on Commission President Jose Manuel Barroso to show leadership.

Spokeswoman Pia Ahrenkilde Hansen said the Commission had had an initial debate about what she called the "sensitive political and economic context" and the EU's desire to be in vanguard in tackling climate change. A preliminary policy paper would be published in March, she said.

A Commission internal briefing note seen by the press reportedly says early agreement is needed to tie in with the "long investment cycles" of the energy sector. The note said EU energy and climate road maps to 2050 implied the need for a 40 percent cut in greenhouse gas emissions by 2030, compared with 1990 levels.

The Commission says the bloc is on track to meet its 2020 carbon cutting and renewables goals, which were agreed by EU governments before the financial crisis brought austerity and recession to many parts of the European Union. But the target on energy savings will only be met in part and environmentalists argue that proves the case for legally enshrined targets.

They say a new triple set of goals has financial and environmental logic because it would save consumers and business money as well as ensuring secure and sustainable energy supplies.

Conservation organization WWF earlier this month said the 2030 policy could pave the way for 100 percent green energy by 2050 provided it was ambitious enough. It argued for energy savings of at least 38 percent compared with business as usual, obtaining 40 percent of fuel from green sources and cutting CO2 emissions by 50 percent.

With Climate Action Network Europe, an umbrella group, FoE commissioned a report from Dutch consultancy Ecofys, which analyzed the implications of cutting energy consumption by about 35 percent compared with 2005 levels. The financial benefits, it said, would be about 250 billion euros ($333.9 billion) a year by 2030, derived from a combination of lower energy prices following lower demand and a reduced need to invest in infrastructure, lowering the cost of power generation.

21. EU Parliament Hesitates In Drafting Law for CO2 Fix

European lawmakers backed an emergency plan to save the world's biggest market for carbon allowances from collapse recently, but put off drafting the necessary legislation, sending prices down by as much as 20 percent. The carbon market, a pillar of the European Union's climate policy to cut greenhouse gas emissions, has hit a series of record low prices because of a huge surplus of allowances mostly caused by the economic recession in the euro zone.

The Commission's proposed plan, referred to as backloading, entails an amendment to the ETS Directive (2003/87/EC) clarifying that the Commission, the EU's executive arm, has the right the alter the timing of planned auctions of emission allowances to ETS participants, temporarily removing some of the surplus that has pushed prices far below the levels needed to make low carbon investment profitable as part of efforts to curb planet-warming emissions. The amendment would have the effect of permitting the Commission to delay, or backload, the...
auctioning of 900 million emission allowances so that the auctions take place in 2019-2020 rather than 2013-2015.

Recently, members of the environment committee of the European Parliament gave their support to the plan by 38 votes in favor, 25 against and two abstentions. But they said they needed time to decide on a possible mandate for negotiations on wording of legislation. They are now expected to decide soon whether to take the discussion straight to a plenary session of the European Parliament, expected in April, or whether to speed up the process by kicking off legal haggling between the parliament, Commission and member states before then.

The European Commission had hoped backloading would be a quick fix pending deeper reform, but it has run into opposition from member state Poland, which relies on carbon-intensive coal for most of its energy, as well as some in industry and business. The views of member states will be sought at a committee meeting on February 27. Germany has yet to take a stance.

At every stage, the debate has been intense. Climate Commissioner Connie Hedegaard in a tweet welcomed a "clear, positive vote", while Polish Environment Minister Marcin Korolec said, also by Twitter: "Common position still far away".

Those supporting the Commission emergency plan to remove some of the surplus of carbon allowances say the action is essential as a first step to deeper reform. Otherwise, the energy industry could face a decade without any kind of investment signal, and carbon emissions would almost certainly rise as there would be no deterrent to burning carbon-intensive coal.

Those against the plan say the carbon market's weakness is just a reflection of low demand in difficult economic times and that action to boost the carbon price would increase energy prices, reducing EU competitiveness on world markets.

The ETS is presently in its third phase (2013-2020), and the Commission has said that the short-term fix should be put in place while broader structural reforms to the ETS are considered for the post-2020 phase.

The amendment to the ETS Directive approved by the environment committee made it clear that the Commission should intervene in the ETS only in "exceptional circumstances," and stated that the Commission "shall make no more than one such adaptation." As such, it limits the Commission to carry out the currently planned backloading operation, but no more.

The amendment is subject to ratification by the full European Parliament and the EU Council, which represents the governments of European Union member states.

The Commission published the proposal for the amendment in November 2012 alongside a specific backloading plan, which in a separate process is subject to approval by a regulatory committee of European Union member state representatives. The committee would vote on the backloading plan on a qualified majority basis, meaning that no one EU country could block it. Previously, Poland has blocked a number of Commission attempts to push for discussion of structural reform of the ETS, or of long-term emission reduction commitments for the European Union in cases where unanimity was required to move ahead.

**22. German Car Plans Would Breach EU Carbon Goal: Commission Paper**
German proposals to protect its output of big, luxury cars threaten EU plans to limit carbon emissions by 2020 and could jeopardize future ambitions, a document from the bloc's executive said. Proposals from the German government and German Christian Democrat politician Thomas Ulmer undermine attempts to enforce a 95 grams of CO2 per km (g/km) emission ceiling on cars by 2020, according to the Commission document seen the press.

EU politicians are divided between those keen for rigorous green standards and those seeking flexibility.

The German car industry and Ulmer, who is leading debate on the car law continuing in the European Parliament recently, have been at the forefront of demands for increased allocation of so-called super credits. These allow manufacturers to produce cars that exceed the EU target if they also make very low emission electric or hybrid vehicles.

The Commission says a certain number of super credits (a maximum of 20,000 per manufacturer) could support innovation, but too many would be counterproductive because that could prevent conventional cars from becoming any less polluting.

The internal Commission document looked at four scenarios based on the German proposals - which would set no limit on super credits - and found they would mean emissions in a range of 99 g/km to 123 g/km - compared with the EU goal of 95 g/km on average across all new EU vehicles by 2020. The result would be "substantial increases in CO2 emissions and oil use" as well as "significant increases in consumer fuel costs and resulting decreases in GDP".

And because the super credits would delay achievement of the 95 gram target, the German proposals would "have implications for the ability to set further CO2 targets".

German manufacturers including Daimler, BMW and Audi dominate the premium car segment.

The Commission also analyzed proposals by British Liberal Member of the European Parliament Fiona Hall and Spanish Socialist MEP Eider Gardiazabal, which give an incentive for very low emissions vehicles, but have only "a limited impact on the effective CO2 target". As a result, "their impact on consumer fuel costs and GDP is also rather limited," the Commission paper said.

For the German proposals, the scenarios give a range of deviation from the Commission target, depending on how many super credits are earned through the production of ultra-low emission vehicles.

**23. BMW Quits Industry Group Testing Safety of New Car Refrigerant**

German carmaker BMW has stepped down from its role in an automotive industry research program investigating the safety of a potential new air conditioning refrigerant, disagreeing with the test methods employed. It joined Daimler and also Audi who quit the group before it was due to issue its next report in the middle of February. Final findings are scheduled to be published in the second quarter of this year.

"Today we have ended our observer role in the working group," a spokesman for BMW said, adding the company is continuing its own internal research into the issue. "We do not want to say the test results are wrong, but we are not convinced the methods applied are sufficient to achieve a definitive conclusion that guarantees our high safety standards," he said.
Flammability tests by Daimler last year sparked new concerns after years of research into the safety of the proposed new refrigerant, dubbed HFO-1234yf, which European regulators want to be adopted by carmakers to cut atmospheric emissions which have the potential to cause global warming.

Daimler’s initial doubts triggered the formation of the latest working group last year, the Cooperative Research Program (CRP) being conducted under the auspices of the international Society of Automotive Engineers (SAE), to further analyze the safety of HFO-1234yf.

The production of the refrigerant, which Daimler said releases a toxic gas when it burns, is being developed by Honeywell and its partner DuPont and could lead to a billion dollar monopoly starting in 2017 when a phase-out of current refrigerants is complete.

In December the research working group released a statement saying that none of the 12 other carmakers involved apart from Daimler “has provided information that would suggest a concern for the safe use (of HFO-1234yf) in their vehicles.

Daimler decided late in September to recall all 1,300 Mercedes cars using HFO-1234yf after simulated frontal car crashes repeatedly showed a leakage of the refrigerant-lubricant mix in the A/C system could spontaneously ignite when the surface of the turbocharged gasoline engine reached higher operating temperatures.

The latest working group was then formed in November, comprising Daimler and 12 other carmakers, including General Motors, Fiat-Chrysler, Ford, Honda, Hyundai, Jaguar Land Rover, Mazda, PSA Peugeot Citroen, Renault, Toyota BMW and Audi.

24. London Mayor’s Plan to Create ‘Ultra Low Emission’ Zone Disappoints Green Groups

All vehicles being driven in the center of London during working hours would be required by 2020 to emit either zero or very low levels of pollutants under a scheme proposed on February 13th by Mayor Boris Johnson. Environmental groups were largely unimpressed with the time frame outlined in the announcement. “2020 is far too late for an Ultra-Low Emission Zone in central London—EU pollution limits are supposed to be met by 2015,” Friends of the Earth London campaigner Jenny Bates said in a statement.

Currently, larger vehicles including trucks, inter-city coaches, city buses, vans, and minibuses that circulate in a demarcated part of Greater London known as a Low Emission Zone must comply with EU emission standards for particulate matter to avoid paying both daily charges and fines. Transport for London (TfL), which regulates the U.K. capital’s transport system, says the particles emitted by vehicles can cause asthma, heart and lung disease, and other respiratory illnesses. Last year, the World Health Organization concluded that diesel emissions can cause cancer.

Johnson has tasked TfL to prepare the terms for a public consultation on ways to create what he described as the world’s “first big city Ultra Low Emission Zone.” To help create this zone, the mayor pledged to deliver in the next three years 600 additional hybrid buses which, according to the TfL, emit almost a third less pollutants and carbon dioxide than standard diesel buses. The new fleet would be in addition to the 1,000 hybrid buses already planned by 2016.
The mayor has also proposed retiring the last 900 standard buses in London so that all of TfL's bus fleet complies with the Euro 4 standard or better for emissions of nitrogen oxides. He also wants to examine ways of commercially producing taxis with zero emissions.

In addition, Johnson said he wants to examine ways to clean up construction sites, which are responsible for about 12 percent of London's nitrogen oxides emissions, such as introducing a new Low Emission Zone for construction machinery and rolling out so-called dust suppressants at industrial sites to reduce PM concentrations.

According to a December 2012 report by the London Assembly, a body tasked with holding the mayor's office to account in all areas of policy, the capital is unlikely to comply with tougher limits the European Union has set for PM by 2015.

Jenny Jones, a member of the Green Party and of the London Assembly, called for the mayor, whose term ends in 2016 and who cannot run again, to “make the big changes happen by the end of this year” and not leave the job for his successor. Simon Birkett, founder and director of the nongovernmental organization Clean Air in London, agreed in a statement that action needs to be taken without delay, arguing that London has the highest concentrations of nitrogen dioxide, a toxic gas, of any European capital city.

Running alongside the Low Emissions Zone is the congestion charge, a daily levy charged for vehicles passing through central London. Although the primary purpose of the CC, since its 2003 introduction, is to reduce traffic congestion, it also encourages the use of low-emitting cars by exempting electric vehicles, for instance, from paying any levy.

25. Irish Air Pollution Breaches EU Target

Air pollution linked to road traffic in Ireland breached the specified EU emission ceiling in 2011, the Environmental Protection Agency (EPA) has announced. The latest EPA emissions data showed levels of nitrogen oxide (NOx) in the air exceeded the target level of 65 kilotons by 2.6 kilotons in 2011.

High nitrogen oxide emissions can pose a threat to human health as a respiratory irritant, particularly in people with asthma.

The road transport sector represents the largest source of NOx emissions, accounting for 55 percent of total NOx emissions in 2011.

Emissions of NOx fell by 47 percent between 1990 and 2011 as a result of stricter EU standards for emissions from cars and heavy duty vehicles in combination with the economic downturn in more recent years. However, the EPA said advances in emission controls have been "largely off-set" by increases in vehicle numbers and fuel use during the economic boom.

"Reducing NOx emissions requires travelling less by car as well as the uptake of new vehicles with improved emission control technologies," it said.

In the power generation sector, the agency said a substantial reduction in NOx emissions had been achieved as a result of emission control technology and fuel-switching from oil to gas and renewable energy.
EPA senior manager Dr. Eimear Cotter said: "The key to decreasing nitrogen oxide emissions lies in reducing travel and incentivizing the purchase of cleaner vehicles with improved emission controls." "Changing behavioral patterns in these two areas will reduce emissions so contributing to a cleaner, healthier environment and a better quality of life".

The EPA figures show that levels of sulfur dioxide (SO2), volatile organic compounds (VOC) and ammonia (NH3), the other three main air pollutants, were below the EU emission ceilings. The main sources of these emissions are power generation, residential and commercial sectors for SO2; solvent use and transport for VOCs; and agriculture for NH3.

Dr. Cotter said: "The switch to low sulfur fuels and low solvent products such as paints is welcome, and has kept Ireland below EU emission ceilings for sulfur dioxide and volatile organic compounds.

"Ammonia emissions have stayed reasonably constant since 1990; however, ambitious targets under Food Harvest 2020 could put pressure on ammonia emissions into the future."

**26. Air Pollution is Disturbing People’s Health in UK**

Air pollution is severely triggering the health of people especially the heart attack survivors in the country, says a new report of experts. Researchers actually studied records of more than 154,000 heart attack survivors. They carefully examined the fine airborne particulate matter (PM) and its effects upon the people's health. In their conclusions, experts have linked the reports of the patients to that of the average air pollution levels.

They have also mentioned in the report about some main sources of PM in the UK, which according to them are road traffic, industry emissions, and power generation too. Researchers claim to have noticed an increase of almost 20% in the death rate of all those people, whom they studied with every ten cubic meter increase in PM levels.

Explaining about the issue of air pollution level in UK, British Heart Foundation Senior Cardiac Nurse, Ms. Maureen Talbot, said that some parts of the UK have very high air pollution levels, which experts believe, are contributing majorly in affecting the health of people in the country.

"We’re currently funding further research in this area, to establish how air pollution affects the blood vessels and so increase our knowledge about its effects on the heart", she said.

**NORTH AMERICA**

**27. Obama Urged to Finalize Tier 3 Vehicle, Gasoline Standards to Reduce Pollution**

Environmental groups, a labor union, and manufacturers of emissions control equipment have appealed to President Obama in urging the administration to finalize Tier 3 vehicle and gasoline standards by December 31st. In a letter to Obama on January 9th, the groups said one-third of Americans live in areas that exceed at least one national ambient air quality standard (NAAQS), and Tier 3 standards will reduce pollution to help states attain the air standards.

The 2013 Regulatory Agenda said the Environmental Protection Agency intends to propose the Tier 3 rule by March and finalize it by December. Frank O'Donnell, president of Clean Air Watch,
has told reporters that if the rule is not final by the end of the year, the standards probably will not be able to take effect for model year 2017 vehicles.

Twenty-one groups sent the letter to Obama, including International Union, United Automobile, Aerospace and Agricultural Implement Workers of America; Manufacturers of Emission Controls Association; Emissions Control Technology Association; Sierra Club; Natural Resources Defense Council; and Union of Concerned Scientists.

“Tier 3 will help states reach their NAAQS attainment goals as required under the Clean Air Act because reducing sulfur in gasoline will result in significant, immediate reductions of smog-forming pollutants from the existing fleet of vehicles,” the letter said.

The Tier 3 vehicle emissions standards are expected to be modeled after California’s Low-Emission Vehicle III program. The Tier 3 standards would revise a Tier 2 rule, which EPA finalized in 2000 and lowered the sulfur content in gasoline to 30 parts per million. Observers have said the Tier 3 gasoline sulfur standard could be 10 ppm.

Chris Grundler, EPA’s new director of transportation and air quality, told the press on December 13th that the proposed rule has been prepared “for some time” and was undergoing a final review within EPA.

In a May 2010 memo, Obama asked EPA to review the existing standards for sulfur content in gasoline, among other regulations.

The American Petroleum Institute has said the rule would increase the manufacturing costs of gasoline by 6 cents to 9 cents per gallon, but EPA has said the rule would raise the cost of gasoline by 1 cent per gallon.

**28. Tier 3 Proposal Promises Immediate Benefits, Low Cost, McCarthy Says**

The Environmental Protection Agency’s upcoming Tier 3 gasoline and vehicle standards will strike a balance between providing immediate environmental benefits and keeping compliance costs as low as possible, according to the Environmental Protection Agency’s top air official. Details of the proposed rule have yet to be released, but Gina McCarthy, assistant administrator for air and radiation, told the Clean Air Act Advisory Committee she hopes to release the rule in early March. “We’re really looking forward to getting that out, so people can see what it looks like,” McCarthy said.

The White House Office of Management and Budget received the proposed rule for interagency review on January 29th. Interagency review typically is the last stop for a rule before it is released to the public.

Although the proposed rule has not yet been made public, earlier statements by EPA indicate that the standards will limit the sulfur content in gasoline to 10 parts per million. Lowering the sulfur content in gasoline would immediately reduce ozone pollution and help states attain air quality standards, McCarthy said. The Tier 3 program would be a cost-effective way to reduce ozone, and without it, nonattainment areas would have to require more costly control measures, she said.
McCarthy anticipates EPA will finalize the Tier 3 rule by the end of the year. If the rule is final by then, the standards are expected to take effect for model year 2017 vehicles, which means the Tier 3 vehicle emissions standards would coordinate with greenhouse gas and fuel economy standards, which also take effect in 2017.

Representatives from the emissions control industry urged the White House to complete the interagency review of the Tier 3 gasoline and vehicle standards by early March to ensure the Environmental Protection Agency's rule is effective for model year 2017 vehicles. The Emissions Control Technology Association and Manufacturers of Emission Controls Association are supporting the yet-to-be-proposed Tier 3 rule, saying investments from the regulation will drive economic growth and job creation in the emissions control industry. The groups met with officials from the White House Office of Management and Budget, EPA, and the Office of Science and Technology Policy on February 22nd, according to OMB's website.

“Delay in the review of Tier 3 beyond early March will lose the promise of technology development, economic growth, job creation, and export growth by the emissions control industry for a year,” the groups told OMB in a written presentation that the office posted on its website.

OMB also met with the petroleum industry on February 21st and public health groups on February 20th to hear arguments against and for the proposed rule.

Although the petroleum industry has argued against the rule, saying the gasoline standards would be costly, the emissions control industry highlighted the rule's economic benefits to its industry. The mobile source emissions control industry generated $12 billion in U.S. economic activity in 2010, and the industry supports 65,000 American jobs, the groups said. “Tier 3 promises to build on previous EPA regulation to drive the virtuous cycle of technology development and investment by the emissions control industry,” the groups told OMB in written materials.

The tailpipe emissions standards for new light-duty vehicles are expected to be modeled after California's Low-Emission Vehicle 3 program.


EPA has released “America’s Children and the Environment, Third Edition,” a comprehensive compilation of information from a variety of sources on children's health and the environment. The report shows trends for contaminants in air, water, food, and soil that may affect children; concentrations of contaminants in the bodies of children and women of child-bearing age; and childhood illnesses and health conditions. The report incorporates revisions to address peer review and public comments on draft materials released in 2011.

Among the contaminants clearly linked to health conditions in children, key findings include:

- The median concentration of lead in the blood of children between the ages of 1 and 5 years was 92 percent lower in 2009-2010 compared to 1976-1980 levels. Although the majority of the decline occurred in the 1980s, consistent decreases have continued since 1999.

- The median level of cotinine (a marker of exposure to environmental tobacco smoke) measured in blood of nonsmoking children ages 3 to 17 years was 88 percent lower in 2009-2010 than it was in 1988–1991. In 2010, 6 percent of children ages 0 to 6 years lived in homes where someone smoked regularly, compared with 27 percent in 1994.
The percentage of children living in counties where pollutant concentrations were above the levels of one or more national air quality standards declined from 75 percent to 59 percent from 1999 to 2009.

The level of knowledge regarding the relationship between environmental exposures and health outcomes varies widely among the topics presented in this report, and the inclusion of an indicator in the report does not necessarily imply a known relationship between environmental exposure and children’s health effects. The report provides data for selected children’s health conditions that warrant further research because the causes, including possible contributing environmental factors, are complex and not well understood at this point.

In the case of asthma, researchers do not fully understand why children develop the condition. However, substantial evidence shows exposure to certain air pollutants, including particulate matter and ozone, can trigger symptoms in children who already have asthma. Although the report found the percentage of children reported to currently have asthma increased from 8.7 percent in 2001 to 9.4 percent in 2010 and that minority populations are particularly affected by asthma, the severity of children’s asthma and respiratory symptoms has declined. The rate of emergency room visits for asthma decreased from 114 visits per 10,000 children in 1996 to 103 visits per 10,000 children in 2008. Between 1996 and 2008, hospitalizations for asthma and for all other respiratory causes decreased from 90 hospitalizations per 10,000 children to 56 hospitalizations per 10,000 children.

The report also looks at trends in other health conditions, such as Attention-Deficit/Hyperactivity Disorder (ADHD) and preterm births, for which rates have increased. There is no conclusive information on the role of environmental contaminants in ADHD or preterm births, and additional research is ongoing.

The national indicators presented in this comprehensive report are important for informing future research related to children’s health. Children may be more vulnerable to environmental exposures than adults because children’s bodies are still developing. Children eat more, drink more, and breathe more in proportion to their body size; and their behavior can expose them more to chemicals and organisms.

This report includes 37 indicators of children’s environmental health to address 23 important topics. The expanded content reflects the latest research on children’s health issues and the availability of data for more topics. Each indicator and its supporting text were peer reviewed by independent external experts and made available for review and comment by the public.

30. EPA Weighs Next Steps on Interstate Pollution

The Environmental Protection Agency has begun to consider how it will address air pollution that crosses state lines, should it be required to promulgate yet another air transport rule. On January 24th the U.S. Court of Appeals for the District of Columbia Circuit declined to rehear a case in which the court vacated the Cross-State Air Pollution Rule, which means the agency can either pursue an appeal to the U.S. Supreme Court or begin drafting a new regulation.

The D.C. Circuit struck down the cross-state rule in August 2012, finding EPA erroneously issued federal implementation plans when it should have allowed states an opportunity to issue their own plans. Based on the D.C. Circuit’s direction, EPA would have to inform upwind states of their significant contribution to downwind states’ nonattainment problems, then let each state
submit plans to address its own pollution, Gina McCarthy, EPA assistant administrator for air and radiation, told reporters, before the D.C. Circuit declined to rehear the case.

The cross-state rule, published in August 2011, would have required 28 states in the East, Midwest, and South to reduce power plant emissions of nitrogen oxides and sulfur dioxide that cross state lines. The rule was intended to help downwind states meet national ambient air quality standards for ozone and fine particulate matter.

The cross-state rule was meant to replace the 2005 Clean Air Interstate Rule, which remains in place today even though the D.C. Circuit found it to be unlawful in 2008. The rules were intended to help areas attain the 1997 and 2006 air quality standards for ozone and fine particulate matter.

McCarthy said a revised interstate transport program would not have the same constraints as the two previous rules, and the new regulation could help downwind areas meet the most current air quality standards. EPA strengthened the fine particle standards in 2012. It revised the ozone standards in 2008 and is expected to finalize more stringent standards in 2014. However, EPA has said it expects just seven counties in California will not meet the revised particulate matter standards by the 2020 attainment date. The agency has said other federal regulations will help reduce particulate matter emissions in the coming years, including mercury and air toxics standards for power plants, vehicle and fuel standards, and regional haze regulations.

To address ozone pollution, EPA should issue Tier 3 vehicle and gasoline standards to reduce nitrogen oxides emissions, Frank O'Donnell, president of Clean Air Watch, said in a statement after the D.C. Circuit denied the rehearing. Ozone forms when nitrogen oxides react with volatile organic compounds in sunlight, and O'Donnell said the Tier 3 rule would be the "single best way" to reduce nitrogen oxides emissions.

Getting a new transport program in place could take years, observers say. EPA would have to begin the process by quantifying upwind states' significant contribution to downwind states' air quality problems. The "good neighbor" provision of the Clean Air Act, Section 110(a)(2)(D), requires states to reduce emissions that "contribute significantly" to nonattainment of air quality standards in downwind states.

31. Supreme Court Won't Hear Challenge to EPA Sulfur Dioxide Rulemaking

The Supreme Court has refused to consider reducing the Environmental Protection Agency's authority to set air quality standards, leaving intact a tough new limit on sulfur dioxide emissions in a victory for the Obama administration. Without comment, the court decided not to hear an appeal by Grupo Mexico SAB's Asarco LLC unit of a lower court ruling that upholds a 2010 EPA rule limiting sulfur dioxide in the air to 75 parts per billion over one hour.

Under the Clean Air Act, the EPA is authorized to adopt standards that are necessary to protect the public health, while allowing an "adequate margin of safety." Asarco, whose copper smelter in Hayden, Arizona, is one of the three main U.S. copper smelters, had been appealing a July decision by the Washington, D.C., Circuit Court of Appeals to uphold the EPA rule. It estimated the rule could cost companies $1.5 billion.
Asarco contended that the D.C. Circuit gave the EPA an effective license to set needlessly stringent environmental standards, rather than standards "not lower or higher" than necessary as it said was required under Supreme Court precedent. But in upholding the new standard, the D.C. Circuit said it lacked jurisdiction to review the EPA's rulemaking and that the agency did not act arbitrarily or unreasonably.

Sulfur dioxide is typically the result of fossil fuel combustion at power plants and other industrial facilities. The EPA had first set sulfur dioxide standards in 1971.

The U.S. Department of Justice had urged the Supreme Court not to accept Asarco's appeal. Freeport-McMoRan Copper & Gold Inc., the world's largest publicly traded copper producer, filed a brief supporting Asarco's appeal.

Five states joined Asarco in challenging the rule at the appeals court level. Only Asarco sought Supreme Court review.

In tightening the sulfur-dioxide limits, the EPA pointed to research indicating that even short-term exposure can lead to respiratory illness.

### 32. State Department Delays Keystone Pipeline Decision

The Obama administration has delayed a decision on TransCanada Corp's rerouted Keystone XL oil pipeline until after March, even though Nebraska's governor approved a plan for part of the line running through his state.

"We don't anticipate being able to conclude our own review before the end of the first quarter of this year," said Victoria Nuland, a spokeswoman at the State Department, which had previously said it would make a decision by that deadline. She said the department would take into consideration approval of the line by Nebraska Gov. Dave Heineman.

Interest in The fate of the $5.3 billion pipeline that would link Canada's oil sands to refineries in Texas has been heightened after President Barack Obama promised to fight climate change. Obama said in his inaugural address the United States will respond to the threat of climate change and that failure to do so would "betray our children and future generations.

The Keystone pipeline is staunchly opposed by environmentalists, who say it will lock the United States for 50 years into dependence on fuel that has higher emissions than average crude oil refined in the United States. They want the State Department to re-examine the climate impact of the line after it previously said the project would not result in additional emissions because the oil would find its way to market even if Keystone were not built.

It was the latest delay on the pipeline, which has been pending for more than four years.

Last year Obama threw his support behind the southern section of the line, which is now being built and would help drain a glut of crude in the nation's midsection resulting from new oil drilling in North Dakota. The State Department will rule on a final permit for the northern section of the line because it would cross the national border.

It expects to issue a draft environmental assessment of the Keystone line in the near future and before the end of March, a second official at the department said. That report will have a public comment period before the department makes a final decision on the line.
Nuland's comments came shortly after Nebraska's governor approved a revised route in his state for the Keystone XL pipeline. Heineman, a Republican, sent a letter to President Obama that said TransCanada would adhere to 57 safety conditions. Those include rigorous pipeline design, testing and the reporting of leaks. It would also avoid Nebraska's ecologically sensitive Sandhills region.

TransCanada had submitted a new route for the northern pipeline, expected to transport 830,000 barrels per day of oil, after the Obama administration had rejected an initial plan. Environmentalists had complained it would cross ecologically sensitive regions in Nebraska.

Heineman said TransCanada would provide evidence that it is carrying $200 million in third party insurances to cover any cleanup costs from leaks. He approved the line even though his state's environmental regulator said this month it would still cross a section of the massive Ogallala aquifer, an important source of irrigation and fresh water to the Great Plains states.

Nuland said Nebraska's decision was important but gave no clues about what the State Department's review would say. "Our processes move in parallel," she told reporters. "We obviously want to take the Nebraska environmental study, we want to compare it with the work that we've done."

TransCanada's CEO Russ Girling, who attended Obama's inauguration, said he was not worried by the president's latest comments, and that the Nebraska decision was "hugely positive step forward." Regarding the State Department's eventual decision, he added: "I'm still optimistic that this thing can be done in a relatively short period of time."

Girling said work on the southern section of the pipeline, now called the Gulf Coast project, is on schedule.

Many Republicans in Congress support the pipeline for the jobs it would bring to their states. Senator John Hoeven of North Dakota said he is making preparations to reintroduce legislation enabling Congress to approve the line if Obama does not. He could attempt to attach the measure to a must-pass bill. Similar attempts have failed in the past.

33. Obama Wins Praise Abroad For Climate Change Goals

U.S. President Barack Obama won praise abroad recently for his pledge to lead the fight against climate change, which has faltered as nations argue over who should foot the bill to lower carbon emissions. Two decades of summits and resolutions have not stopped mankind pumping growing quantities of greenhouse gases into the atmosphere, despite a wealth of evidence that it is causing more frequent and devastating droughts, storms and floods.

Obama devoted a surprisingly long section of his inauguration speech to climate change -- more than a minute out of about 20. He said failure to respond to the threat "would betray our children and future generations." "The path towards sustainable energy sources will be long and sometimes difficult. But America cannot resist this transition; we must lead it," he said.

"Great strong words on climate... The U.S. President could not commit stronger to delivering now," Connie Hedegaard, the European Union's climate commissioner, wrote on Twitter.
"We have got work to do on climate change and President Obama was very forthright about the need to tackle climate change," Australian Prime Minister Julia Gillard told reporters.

A succession of recent natural disasters has put a sharper focus on climate change. Superstorm Sandy struck the United States in October, a typhoon left more than 1,000 people dead or missing in the Philippines in December and this month a searing heat wave caused hundreds of wildfires in Australia. The United States has declared a natural disaster in its central and southern Wheat Belt because of a severe and persistent drought.

The global economic slowdown has made the governments of richer nations more reluctant to invest in technology to mitigate climate change, led by a shift from fossil fuels towards clean energies such as wind or solar power.

Developing countries whose carbon emissions are rising fastest say they cannot afford the entire cost of shifting to greener technology and that developed nations should help more.

In the latest failure of environmental diplomacy, U.N. climate negotiations in Qatar in December ended without a single new pledge to cut pollution from a major emitter. Instead, governments agreed to try again for a binding United Nations pact to limit climate change that would enter into force from 2020, replacing the Kyoto protocol adopted in 1997 that the United States never ratified. Environmental campaigners were dismayed at the decision to wait years before taking concerted action.

Obama's renewed promises could help. "It really changes the nature, style and substance of the U.S. engagement with the international climate negotiations," said Bill Hare, a scientist who heads Berlin-based Climate Analytics. He said that Washington, even in Obama's first term, had low ambitions for confronting climate change and that had dimmed efforts by other major emitters. China, the United States, India and Russia are the top greenhouse gas emitters.

Unlike all of Washington's major allies in developed nations, the U.S. Congress has not legislated caps on domestic greenhouse gas emissions. But Obama can still take the lead with actions that side-step the divided Congress. The administration could impose tougher rules for coal-fired power plants or introduce measures to promote renewables. It also faces a decision on whether to approve TransCanada Corp's planned $5.3 billion Canada-to-Nebraska Keystone XL oil pipeline.

"Words in an inauguration speech are one thing... Many are waiting to see what specific actions the president will take," said Samantha Smith, head of the WWF conservation group's climate and energy initiative. She still praised Obama for starting a new U.S. debate about climate change with the speech. She said one measure Obama could take included a phase-out of fossil fuel subsidies.

When Obama first came to office he promised to act on climate change in a shift from ex-President George W. Bush who decided against trying to ratify the U.N.'s Kyoto Protocol for limiting emissions by industrialized nations. In 2009, Obama promised to cut U.S. greenhouse gas emissions by 17 percent below 2005 levels by 2020. But the U.S. Senate did not ratify the plan.

Kyoto, originally backed by all other major developed nations, has been hit by defections by Russia, Canada and Japan from January this year, leaving only a core group led by the European Union and Australia targeting deeper cuts by 2020.
Bush and the U.S. Senate reckoned that Kyoto unfairly omitted targets for emerging nations such as China and India and would mean U.S. jobs moved abroad. On the other hand, Washington risked losing a race to develop clean technologies. A study by the Pew Charitable Trusts indicated that worldwide revenue from installing clean energy facilities could total $1.9 trillion from 2012 to 2018. With the right policies, it said the United States could get 14.5 percent of the total.

34. Boxer Sees EPA Taking Key Role in Obama’s Second-Term Climate Push

Senate environment committee Chairwoman Barbara Boxer (D-CA) says she expects EPA to play a key role in achieving President Obama's inauguration promise to address climate change, saying the agency already enjoys authority to regulate most of the greenhouse gases (GHGs) that contribute to the problem without new legislative powers.

"EPA has control over probably about more than 70 percent of the problem," Boxer said in a January 22nd interview, noting the agency already has authority to address emissions from the electricity, industrial and transportation sectors. She said the administration can move forward with most of those sectors' emissions under current law. "There is already a . . . Clean Air Act and it covers carbon. You don't need any more law," she said.

Her comments suggest the agency may face increased pressure to craft a new rule to regulate GHG emissions from existing power plants, a top priority for environmentalists but one that the administration has delayed, as well as other pending policy measures that could address the issue. Obama is expected to outline his plans in more detail in his upcoming State of the Union address on February 12th.

While Boxer said EPA already has extensive authority to act, she indicated that she plans to introduce legislation to address emissions related to the "housing sector," citing the 11 percent of GHG emissions that are currently contributed from buildings. "We are going to push forward with energy efficiency and other things," Boxer added.

White House Press Secretary Jay Carney indicated on January 22nd that he does not anticipate the administration asking Congress for new authority to address the issue. "I think the President has long supported congressional action on climate change. And while it's clear that bipartisan opposition to legislative action is still a reality, the President's position remains the same as it was in the first term," Carney said.

While Obama has frequently reiterated his commitment to continue to address climate change in his second term, he drew criticism from environmentalists when, after the election, he did not outline any actions to address the problem and instead launched wide-ranging talks with experts on what can be done without causing undue economic harm.

"Understandably, I think the American people right now have been so focused and will continue to be focused on our economy and jobs and growth that, you know, if the message is somehow we're going to ignore jobs and growth simply to address climate change, I don't think anybody's going to go for that. I won't go for that," he said Nov. 14.

Heather Zichal, the top White House climate official, initiated such talks during a closed meeting with the U.S. Conference of Mayors on January 17th, according to press reports.
Many environmentalists have worried, though, that Obama was subverting climate goals to economic ones and delaying action on key policy measures, including an EPA rule to set GHG performance standards for existing power plants, which agency officials have said has no deadline. “We will continue to pursue opportunities to build on our success to date through common sense policies that create jobs, enhance security and reduce carbon pollution,” an agency spokeswoman said recently.

In addition to the new source performance standard (NSPS) for both new and existing power plants, environmentalists are also urging the administration to regulate GHG emissions from stationary sources that burn biomass, create a national low-carbon fuel standard for all transportation fuels, kill the Keystone pipeline and create new incentives for cleaner energy sources.

Environmentalists and others now say they are hopeful that Obama's inaugural promises will result in action. Michael Brune, executive director of the Sierra Club, said in a statement that he was “heartened” that Obama gave climate change such a high profile. “We will work tirelessly to ensure the transition to safe, clean energy sources to fight the most pressing challenge of our time,” he said in a statement.

While Obama has not laid out a specific plan, he appears to be closely following recommendations from the Presidential Climate Action Project (PCAP), an independent group that develops climate and energy security policy recommendations for the White House. The group, which was established in January 2007, released its fifth report on climate change actions last fall, which included a call for Obama to launch talks like those that Zichal began with the mayors -- though the group also advised him to send an executive communication to Congress outlining the president's preference for legislation rather than executive action.

The group also urged Obama to “speak directly and more often to the American people to build support for the president's use of executive authorities to address the nation's energy and environment challenges” and to “explain that the time has come to acknowledge and confront global climate change.”

PCAP also urged Obama to de-carbonize the U.S. tax code, add global climate change to a list of the president's authorities in national emergencies, and to have executive agencies take a number of actions. For example, the group says EPA should expedite the process of regulating GHGs at new and existing power plants under NSPS rules, and to use its Clean Air Act authority to phase down the use of hydrofluorocarbons and replace them with alternatives that protect the ozone layer without boosting GHGs.

Other groups are also proposing extensive recommendations for the administration to address climate change. The Information Technology and Innovation Foundation (ITIF), a group whose board members include representatives of major high-tech companies and environmental groups, are seeking the creation of “a dedicated tax on natural gas and oil drilling” to generate revenues “for a clean energy innovation trust fund” and raising three-fold federal clean energy investment in civilian and defense research, development, and demonstration, while strengthening commercialization and procurement programs.

The group also calls for reorganizing and reforming the Department of Energy and its national labs “to spur clean energy innovation and enhance implementation of technologies into energy markets.”
35. Mayors Focus on "Local Warming," Urge Obama to Act

Reeling from an historic drought, the hottest year on record and more frequent wild weather, mayors from a number of U.S. cities urged the White House this week to take the lead on setting an agenda to address climate change. City leaders said that only the federal government has the tools and clout to address greenhouse gases often blamed for warming the planet, while mayors focus on issues of "local warming" such as providing a reliable water supply or protecting citizens during dangerous weather events such as the 1995 Chicago heat wave that was blamed for over 700 deaths. "We are fixing pot holes, dealing with transit issues," Seattle mayor Michael McGinn said while attending the U.S. Conference of Mayors' winter meeting. "But this can be a top tier issue for the president."

The White House asked that a discussion about climate change at the mayors' meeting take place behind closed doors, frustrating some participants, even as hot button topics from immigration to gun control got public airings.

White House liaison for climate change Heather Zichal led the discussion, but declined to comment on why the meeting was closed. "At the end of the day, it was a productive conversation," she said, noting that the White House was eager to hear from cities on reducing emissions of greenhouse gas.

Los Angeles, for example, plans to slash carbon emissions from government sources 35 percent below 1990 levels by 2030, a more ambitious target than even the state has set. Among other measures, Chicago is spending billions of dollars to boost public transit and help public buildings save energy. Mayors say they are proud of such steps and understand Obama's reluctance to take on a politically charged issue, but only Washington can achieve the overall greenhouse gas cuts that many say are needed.

"We are looking for leadership from the president in detailing to the American people the magnitude of this issue," McGinn said after the meeting with about two dozen peers.

The Obama administration pinned its hopes on Congress to enact a comprehensive energy and climate bill that would have set a national price on carbon dioxide emissions during the president's first term. That effort failed in bitter partisan wrangling, forcing the administration to rethink its strategy and reach for existing regulations as a way to mitigate climate warming emissions. "I absolutely would anticipate that we will continue to use existing authority to make progress in this area," Zichal said after her meeting with mayors.

But efforts by states and cities will also be crucial to "move the needle" on reducing emissions, she said, noting that she heard new ideas about city climate initiatives that create jobs and reduce pollution. Mayors contend that those efforts often need federal funding. They are counting on help from Washington to upgrade storm water systems, for example, and otherwise brace for the practical fallout from more extreme weather.

36. Court Rejects Climate NSPS Suit, Citing Bar on Reviewing Proposed Rules

The U.S. Court of Appeals for the District of Columbia Circuit has rejected power companies' lawsuit over EPA's proposed new source performance standard (NSPS) greenhouse gas (GHG)
rule for new utilities, saying it lacks authority to hear the case because the proposal is not a final agency action subject to judicial review.

The Dec. 13 decision in Las Brisas Energy Center LLC v. EPA is a win for the agency, which had urged the court to dismiss the suit by arguing that the NSPS proposal does not meet a Supreme Court test for what constitutes a final reviewable action. And it means opponents of the agency's plans to use an NSPS to regulate GHGs from newly constructed power plants will have to wait until EPA finalizes the rule in order to challenge it in court. EPA has already missed a May 26 consent decree deadline to issue a final NSPS to limit GHGs at both new and existing power plants.

EPA is expected to finalize the new source NSPS and then issue a proposal to limit GHGs at existing plants, but President Obama has suggested a go-slow approach to new climate rules in his second term.

EPA's proposal, published in the April 13 Federal Register, would regulate utility GHGs at a level critics say would effectively bar new coal-fired power plants, as the only way they could comply is by using expensive carbon capture technology. EPA is developing the rule under NSPS authority in section 111(b) of the Clean Air Act.

“We were asking the court to break new ground by finding that the proposed rule, in these unique circumstances, should be seen as 'final agency action.' It's disappointing that the Court declined to do so, but it's not entirely surprising,” says one industry source. “The court said that our lawsuit was premature, but it did not say anything about the merits of our argument. If EPA continues on its current path and issues a final rule that effectively bans new coal-fired power plants, I'm pretty confident that the rule will be overturned in court,” the source told the press.

Power companies and the Utility Air Regulatory Group (UARG) argued in their briefs that the court has authority to hear the case because the NSPS takes effect from the time of its proposal and is already having the effect of a final rule by blocking construction of new coal generation. For example, UARG in a September 19th filing said that the agency's rulemaking in the Register "itself altered the legal regime" because a proposal "based on controls that indisputably are demonstrated only for natural gas combined-cycle units is an action already taken and completed." UARG adds, “There is no escaping the truth of the matter: this rulemaking's very purpose is establishment of a [carbon dioxide] NSPS that no coal-fired [electric generating units] can meet, thus effectively eliminating coal-fired electric generation as a new-source option.”

But in its own court filings, EPA countered that the air law limits the court to only reviewing actions deemed "final" and that the proposed NSPS does not meet the law's definition of a "promulgated" rule subject to legal challenge. Such rules are "only issued after the public comment period and must be accompanied" by a response to data and criticisms received during the public comment period, according to the agency's motion to dismiss.

EPA also argued that the NSPS does not meet the test for what constitutes "final" action under the Supreme Court's decision in 1997's Bennett v. Spear -- specifically, that the action at issue must first "mark the consummation of the agency's decision making process" and second "must be one by which rights or obligations have been determined, or from which legal consequences will flow" -- a statement the court appears to back. In the order to dismiss the suit, Judges Judith Rogers, Merrick Garland and Janice Rogers Brown cite Bennett to say, “The challenged proposed rule is not final agency action subject to judicial review.”
37. Court Overturns E.P.A.’s Biofuels Mandate

A federal appeals court has thrown out a federal rule on renewable fuels, saying that a quota set by the Environmental Protection Agency for incorporating liquids made from woody crops and wastes into car and truck fuels was based on wishful thinking rather than realistic estimates of what could be achieved. The ruling by the United States Court of Appeals for the District of Columbia involved a case brought by the American Petroleum Institute, whose members were bound by the 2012 cellulosic biofuels quota being challenged.

Production of advanced biofuels for use in gasoline is a goal of the Obama administration and a major long-term hope for reducing emissions of greenhouse gases. But production of the “cellulosic” fuel, made from woody material, has been slow to start up, making it virtually impossible to come by. That has presented the refiners, the ones required to buy the cellulosic fuel, with a quandary.

From 2010 through 2012, the E.P.A. has required gradually higher levels of cellulosic fuel to be incorporated into motor fuel each year, for a total of 20 million gallons to date. But actual production has been near zero.

While the mandate springs from a 2007 act of Congress meant to promote advanced biofuels to run cars and trucks, “we are not convinced that Congress meant for E.P.A. to let that intent color its work as a predictor, to let the wish be father to the thought,” the court wrote.

The three-judge panel said that the cellulosic fuel rule is fundamentally different from other regulations. It is intended to force an industry to develop new technology to meet environmental goals, but in this case, the regulated industry was the refiner, not the producer, the court said. “Apart from their role as captive consumers, the refiners are in no position to ensure, or even contribute to, growth in the cellulosic biofuel industry,” the judges wrote. They said the E.P.A.’s message was essentially, “Do a good job, cellulosic fuel producers. If you fail, we’ll fine your customers.”

Given that the larger category of advanced biofuels is left intact, the decision could lead to increased use of two non-cellulosic fuels that are “advanced,” biodiesel made from fat and waste or soybeans, and ethanol from Brazilian sugar cane, to fill the gap. The Brazilian ethanol is considered advanced because making it from sugar requires less energy than making it from corn, as producers do in this country.

Cellulosic fuel that is produced from woody crop matter or waste can either be ethanol or components of gasoline or diesel fuel.

If cellulosic biofuel can eventually be commercialized, it would represent a triple play for administration policy. It would help cut oil imports, which would advance the nation’s energy security and its balance of payments. It would lower the amount of carbon loaded into the atmosphere. And if the technology can be exported, it would also reduce the importance of oil-exporting countries globally.

There are signs that the cellulosic sector could soon gain some momentum. Several companies have invested tens of millions of dollars in building commercial-scale projects. Last year, two companies said they were near production. KiOR, one of the two companies, said recently that it had sold 1,024 gallons of diesel fuel in December that was produced at its plant in Columbus, Miss., but that it could provide no additional details in advance of its next earnings report. The
other venture, Ineos Bio, said it could not immediately respond to questions about the production status of its cellulose-to-ethanol plant in Vero Beach, Fla.

### 38. Mexico’s Modified Fuel Economy Regulation to Be Subject to Public Review

Mexico's proposed fuel economy regulation will be subject to a 60-day public consultation period, the environmental secretariat (Semarnat) announced on February 14th following complaints that the measure provides too many incentives to the auto industry. Semarnat’s sub secretary for development and environmental policy, Cuauhtémoc Ochoa Fernández, said the move will “add transparency” to the regulation by allowing institutions and citizens to voice their opinions about it.

Under the previous government, Semarnat had been working on a fuel economy standard for new cars and light-duty trucks that would mirror the United States’ corporate average fuel economy (CAFE) program. But in elections last summer, the Institutional Revolutionary Party (PRI) recaptured the presidency from the National Action Party. President Enrique Peña Nieto took office in December.

In September, Toyota teamed with Chrysler, GM, and Ford in an attempt to block the previous government’s proposed regulation, arguing that compliance would be too difficult for industry in the absence of credits or incentives. Toyota filed a lawsuit in the Tribunal Federal de Justicia Fiscal y Administrativa, a special Mexican high court. The tribunal granted Toyota’s request for a so-called precautionary measure to freeze the regulation’s approval while a judge considered its merits. The measure is now moot.

A revised version of the proposed regulation was released in January. NOM163 would affect new cars and light-duty trucks and would mirror the United States’ corporate average fuel economy (CAFE) program. Semarnat said on January 17th that the proposed regulation would save 603 million barrels of oil and prevent the emission of 225 million metric tons of carbon dioxide, though it did not provide a time frame in which that would occur.

According to Gabriela Niño, public policy coordinator for the environmental group Centro Mexicano de Derecho Ambiental, the 2016 fuel economy target for cars and light-duty trucks would remain unchanged at 14.9 kilometers per liter (35 miles per gallon). However, manufacturers could begin earning early-compliance credits starting in 2014. She also said the new regulation, unlike the previous version, would give manufacturers credits for using low-emitting refrigerants for air conditioning systems and reward the introduction of cars with hybrid, electric, and plug-in engines.

Semarnat decided to seek a public review after it presented the proposed regulation in early February to a so-called normalization committee—a group made up of representatives from Mexico’s leading industries, including the metals and chemicals sectors, as well as environmental groups and related institutions—to gain input. Semarnat is required to submit a regulation to public consultation only if there is opposition in the committee, which often occurs. During the meeting of the committee, the nongovernmental organizations Mexican Center for Environmental Law (Centro Mexicano de Derecho Ambiental) and Center for Sustainable Transport (Centro de Transporte Sustentable) complained that NOM163’s proposed incentives for the auto industry, which include early achievement credits that are tradable, were too high and should be reviewed.
They complained the [early achievement benefits] were too strong and could provide double incentives in some cases,” said Salvador Medina, who leads efforts to reduce car usage in Mexican cities for the Mexican transport policy institute ITDP, and who attended the meeting of the normalization committee. Medina said NOM163’s auto-industry incentives—aimed at appeasing manufacturers’ complaints about an earlier version of the regulation released last year—“are not justified.” He added he could not provide more specifics until the public consultation ends.

Semarnat is expected to publish NOM163 in Mexico's official diary within the next few days so the two-month review can begin.

**39. Hotter, Wetter Climate Slashes Labor Capacity By 10 Percent: U.S. Study**

Earth's increasingly hot, wet climate has cut the amount of work people can do in the worst heat by about 10 percent in the past six decades, and that loss in labor capacity could double by mid-century, U.S. government scientists reported recently. Because warmer air can hold more moisture than cooler air, there's more absolute humidity in the atmosphere now than there used to be. And as anyone who has sweated through a hot, muggy summer knows, it's more stressful to work through hot months when the humidity is high.

To figure out the stress of working in hotter, wetter conditions, experts from the National Oceanic and Atmospheric Administration looked at military and industrial guidelines already in place for heat stress, and set those guidelines against climate projections for how hot and humid it's likely to get over the next century. Their findings were stark: "We project that heat stress-related labor capacity losses will double globally by 2050 with a warming climate," said lead author John Dunne of NOAA's Geophysical Fluid Dynamics Laboratory in Princeton.

Work capability is already down to 90 percent during the most hot and humid periods, Dunne and his co-authors wrote in the journal Nature Climate Change. Using a middle-of-the-road projection of future temperature and humidity, they estimate that could drop to 80 percent by 2050.

A more extreme scenario of future global warming, which estimated a temperature rise of 10.8 degrees F (6 degrees C), would make it difficult to work in the hottest months in many parts of the world, Dunne said at a telephone briefing for the press. Labor capacity would be all but eliminated in the lower Mississippi Valley and most of the United States east of the Rocky Mountains would be exposed to heat stress “beyond anything experienced in the world today,” he said. Under this scenario, heat stress in New York City would exceed that of present-day Bahrain, while in Bahrain, the heat and humidity could cause hyperthermia - potentially dangerous overheating - even in sleeping people who were not working at all. Humans are endothermic creatures, which means they give off heat. If they can't get rid of it faster than they create it, they go into hyperthermia. Typically, humans cool off by doing less heat-producing activity, but it may get so hot and humid that even a sleeping person wouldn't be able to dissipate heat fast enough.

The only way to retain labor capacity, Dunne said, is to limit global warming to less than 5 degrees F (3 degrees C). Global average temperature has risen by about 1.2 degrees F (0.7 degree C) compared to pre-industrial times. It is likely to rise another 1.8 degrees F (1 degree C) by mid-century, Dunne said.
The U.S. Department of Energy has eased off President Barack Obama's stated goal of putting 1 million electric cars on the road by 2015, and laid out what experts called a more realistic strategy of promoting advanced-drive vehicles and lowering their cost over the next nine years.

Since Obama announced the goal in his 2011 State of the Union speech, auto analysts and executives have doubted American consumers would buy a million electric vehicles by 2015. "Whether we meet that goal in 2015 or 2016, that's less important than that we're on the right path to get many millions of these vehicles on the road," an Energy Department official said, in advance of remarks by Energy Secretary Steven Chu in a speech at the Washington D.C. auto show.

Promoting plug-in hybrids and electric vehicles has been another long-running focus for the White House, which has also pushed for more stringent standards on fuel economy. Overall, U.S. federal policies to promote electric vehicles will cost $7.5 billion through 2019, the Congressional Budget Office said in September. That includes $2.4 billion in grants to lithium-ion battery makers and projects to promote electric vehicles as well as $3.1 billion in loans to auto companies, intended to spur production of fuel-efficient vehicles. But demand for hybrids and electric vehicles have been weaker than expected. Last year, nearly 488,000 hybrids, plug-in hybrids and electric cars were sold in the United States, accounting for 3.3 percent of the overall auto market, according to green-car website Hybridcars.com.

For the administration to meet its 2015 goal, electrified vehicles would have double their market share to roughly 6 percent of the U.S. auto market, which automotive consulting firm Polk estimates will reach 16.2 million vehicles that year.

Under the new strategy, the DOE is supporting research into new battery technologies and manufacturing methods that would lower the cost of lightweight materials and improve vehicles' fuel-efficiency. The DOE also confirmed its goal to lower the cost of lithium-ion batteries to $300 per kilowatt hour by 2015 from the present $650. The department eventually hopes to get the cost down $125 per kilowatt hour.

Ultimately, the department's goal is to have about 500 companies offer workplace charging over the next five years. Several companies are already on board, including Google Inc., Verizon and General Electric Co.

U.S. plug-in electric cars started 2013 slowly, as sales of the Chevrolet Volt, the Toyota Prius Plug-In and Nissan Leaf each had deep drop-offs in January from December. Volt sales fell 57 percent in January from December, Leaf sales fell 56 percent and Prius Plug-In sales were down 36 percent. Industry wide, U.S. auto sales fell 23 percent from December, and rose 14.2 percent from last January.

Even after accounting for the fact that January is one of the slowest months of the year for auto sales, the drop off for plug-in electric cars was considerable, said Michelle Krebs, analyst with Edmunds.com. Krebs said U.S. consumers who want an alternative to fully gasoline-powered cars are opting for less-expensive standard hybrids, rather than plug-in electric cars. The automakers themselves cited other factors such as limited inventories and production that has yet to gear up fully.
Toyota and Nissan officials each said sales for their plug-in electric vehicles were down because of model year changeovers that cut the number of available cars on dealer lots.

Also, said Nissan brand North American sales chief Al Castignetti, production of the Leaf cars for the U.S. market was down because production at a plant in Tennessee which began recently is not yet at full capacity. Production of the Leaf recently switched from a plant in Japan.

General Motors Co officials said January sales were down for the Chevy Volt due to a spike in December sales related to buyers who bought before the end of the year to gain 2012 tax benefits.

Limited inventory in January makes sense, said Jesse Toprak, analyst with TrueCar.com, who agreed dealer inventory was slight in January. "I anticipate the sales of the three vehicles to grow by at least 8 percent in 2013," said Toprak.

The Volt and the Prius Plug-In are both gasoline-electric plug-in hybrids while the Leaf runs fully on electric power.

U.S. January sales of the Volt were 1,140, down from 2,633 in December. Its 2012 sales were 23,461, up from 7,671 in 2011.

For Toyota Motor Corp's Prius Plug-In, January U.S. sales were 874, down from 1,361 in December. Its 2012 sales were 13,200, the year it was introduced. But sales for the Prius Plug-In will slide this year, to about 12,000, said Bill Fay, head of U.S. sales for the Toyota brand.

Nissan Motor Co.'s Leaf saw sales drop in January to 650. After production ramps up to full capacity in Tennessee, Leaf sales will be about 1,500 a month, said Castignetti.

42. Obama Apparently Settles On EPA, Energy Department Nominees

Press reports indicate that President Barack Obama intends to nominate air quality expert Gina McCarthy to lead the U.S. Environmental Protection Agency and nuclear physicist Ernest Moniz to head the Department of Energy. McCarthy would likely become the face of Obama's latest push to fight climate change. Currently the assistant administrator for the EPA Office of Air and Radiation, she would replace Lisa Jackson, who stepped down as EPA chief this month.

Moniz, a former undersecretary of energy during the Clinton administration, is director of the Massachusetts Institute of Technology's Energy Initiative, a research group that gets funding from industry heavyweights including BP, Chevron, and Saudi Aramco for academic work on projects aimed at reducing greenhouse gases. Moniz would replace Steven Chu, a Nobel Prize-winning physicist, who is stepping down.

McCarthy has the respect of environmental groups and a reputation for working well with utilities and state regulators, which bear the brunt of implementing EPA rules. But she will face tough questions from Republican lawmakers who believe the EPA has gone too far in its rules, which they argue have hurt the economy.
Obama has taken up climate change as one of his main second-term challenges, warning during his State of the Union speech to Congress that his administration would consider taking executive actions to fight the problem if lawmakers fail to revive a market-based system to regulate carbon emissions. The EPA would likely be the agency to implement such executive actions.

A Boston native, McCarthy came to Washington after serving as the top environmental regulator in Massachusetts and Connecticut under Democratic and Republican governors. Former Massachusetts Governor Michael Dukakis, a Democrat, appointed her chairwoman of a council to oversee a review of a proposed hazardous waste incinerator in the Boston area in 1990. She later served as an environmental policy adviser to then-Massachusetts Governor Mitt Romney and launched the state's first Climate Protection Action Plan. Romney was Obama's Republican opponent in the 2012 presidential election. In 2004, McCarthy was appointed to head Connecticut's Department of Environmental Protection under then-Governor Jodi Rell, also a Republican, and helped lead the state into a carbon cap-and-trade system for Northeastern states, known as the Regional Greenhouse Gas Initiative.

By choosing Moniz, Obama would put another scientist at the head of the Department of Energy, despite a sometimes rocky tenure for Chu. At MIT, Moniz led intensive studies about the future of coal, nuclear energy and natural gas, and he helped attract funding and research momentum to energy projects on campus.

People familiar with Moniz's work said, if chosen, he would bring his own energy and pragmatism to the job. Moniz earned kudos for a pragmatic approach toward using research to find ways to reduce carbon pollution from fossil fuels and transition to cleaner forms of energy.

43. U.S. Government Risks Financial Exposure from Climate Change Says GAO

The U.S. government is at high risk of financial exposure from climate change, the Government Accountability Office said two days after President Barack Obama vowed to tackle the issue with or without Congress’ help. For the first time, the non-partisan congressional watchdog added fiscal exposure from climate change to its "High Risk List" of measures the federal government needs to fix. "Climate change is a complex, crosscutting issue that poses risks to many environmental and economic systems - including agriculture, infrastructure, ecosystems, and human health - and presents a significant financial risk to the federal government," the agency said.

There are now 30 programs and operations the GAO considers at high risk for waste, fraud, abuse and mismanagement, or that need broad-based transformation, from the management of federal oil and gas resources to enforcement of tax laws. "GAO added this area because the federal government is not well positioned to address the fiscal exposure presented by climate change and needs a government-wide strategic approach with strong leadership to manage related risks," the agency said in a statement.

The government owns extensive infrastructure, including military bases; insures property through the National Flood Insurance Program; and provides aid to victims of natural disasters, making it especially vulnerable to the impact of climate change, GAO said. Climate change has been linked to more extreme weather, sea level rise that can make storm surges more damaging, and worsening heat waves, wildfires and droughts.
In addition to the risk from climate change, GAO also warned of potential gaps in environmental satellite data starting as soon as 2014, which could make weather forecasts and warnings for hurricanes, storm surges and floods less accurate and timely.

The leaders of a congressional climate change task force applauded the GAO listing as a possible prod to Congress to take action. California Representative Henry Waxman, who co-chairs the task force and is the ranking Democrat on the House Energy and Commerce Committee, called it a "huge development." "Congress can't ignore an issue that its own auditors say is a top risk to taxpayers," Waxman said in a statement. "The costs of inaction on climate change will be much higher than the costs of responsible action."

**44. Obama Gives Congress a Climate Change Ultimatum**

U.S. President Barack Obama gave Congress an ultimatum on climate change: craft a plan to slash greenhouse gas emissions and adapt to the dangers of a warming world, or the White House will go it alone. "If Congress won't act soon to protect future generations, I will," Obama said in his State of the Union address. "I will direct my Cabinet to come up with executive actions we can take, now and in the future, to reduce pollution, prepare our communities for the consequences of climate change, and speed the transition to more sustainable sources of energy."

Congress should consider putting a price on climate-warming carbon emissions, Obama said, briefly nodding to his failed, first-term plan to confront climate change. Republican opposition means the president's best chance to confront the issue will mean flexing executive power. He vowed to push for more and cheaper solar and wind energy, and pledged to cut red tape to encourage more drilling for domestic natural gas, which Obama said had driven down fuel prices in the United States. "But I also want to work with this Congress to encourage the research and technology that helps natural gas burn even cleaner and protects our air and water," the president said.

Framing the politically charged issue in terms of recent severe weather, Obama said the nation should use its abundance of fossil fuels to pivot towards a no-emissions energy future. To help pay for it, Obama proposed using revenue from oil and gas drilled on federal land to wean the nation off those same carbon fuels and promote clean energy. "I propose we use some of our oil and gas revenues to fund an Energy Security Trust that will drive new research and technology to shift our cars and trucks off oil for good," the president said.

About 30 percent of U.S. oil and gas production and 40 percent of the nation's coal is managed by the Interior Department. The department collected roughly $12 billion in revenue from federal land last year. Interior, steward of federal lands, already has proposed collecting higher royalties on some oil and gas exploration while critics have said the agency does a poor job of collecting revenue due taxpayers.

Energy efficiency is also key, Obama said, urging that Americans cut in half the energy wasted in homes and business in the next 20 years. He said the federal government would support states that create jobs and cut power bills by constructing more efficient buildings.

Building on his Inauguration Day pledge to confront climate change despite the skepticism of Republican critics, Obama framed the issue in terms of recent severe weather and took aim at those who deny the link between human activity and global warming. "We can choose to believe that Superstorm Sandy, and the most severe drought in decades, and the worst wildfires some
states have ever seen were all just a freak coincidence. Or we can choose to believe in the overwhelming judgment of science - and act before it's too late," he said.

Promoting renewable energy like wind and solar power could make the United States a more globally competitive economy, Obama said. "Last year, wind energy added nearly half of all new power capacity in America," he said. "As long as countries like China keep going all-in on clean energy, so must we."

The president's first term saw a doubling of energy from wind and solar power and a measure to increase fuel economy standards to 54.5 miles per gallon by 2025. This year is expected to see rules to curb emissions from power plants, which accounts for about 40 percent of carbon emissions.

But Obama's first-term ambition to put a price on carbon fell flat and any similar initiative is likely to fail while Republicans control the U.S. House of Representatives. Democratic Senator Barbara Boxer and Independent Bernie Sanders have introduced legislation to curb emissions of carbon dioxide, levying a $20 tax for each ton of this climate-warming substance over a set limit. That limit would be 5.6 percent annually over a 10-year period, raising up to $1.2 trillion in revenue over 10 years that would largely be returned to consumers, the bill's sponsors said.

One of the executive actions Obama could take would be to increase green fuels for the U.S. military, the world's largest petroleum buyer. The Pentagon already has helped finance renewable fuel suppliers, and this spur to the renewable energy market could grow in Obama's second term.

The Interior Department could also require companies that drill or mine on federal land capture more methane, a potent greenhouse gas.

45. U.S. Needs Additional Steps to Reduce Emissions Says WRI

The United States will not be able to meet its goal of slashing greenhouse gases 17 percent by 2020 from a 2005 baseline without taking additional steps to target emissions, a new report has found. The economic downturn and an increase in supplies of cheap natural gas, which has displaced coal in some power plants, have slashed carbon emissions but are only temporary trends, according to the World Resources Institute, a think tank that focuses on global environmental issues.

"The administration has multiple ways to move forward with smart policies to reduce U.S. emissions. The best opportunity is to enact new standards for existing power plants, which represent one-third of all U.S. emissions," said Nicholas Bianco, a senior associate at WRI and the report's lead author.

Power plant standards are one of four key measures the Obama administration can take to curb greenhouse gases without legislation, said the report, which was entitled "Can we get there from here?" Other measures include reducing hydrofluorocarbons (HFCs), used mainly in cooling and refrigeration systems; curbing methane leaks from natural gas production; and boosting energy efficiency.

Non-energy greenhouse gases, such as methane and HFCs, are projected to rise 18 percent above 2005 levels by 2020 and 36 percent above that level by 2035 if no policies are implemented, the WRI said.
The United States pledged to reduce its greenhouse gas emissions 17 percent below a 2005 baseline by 2020 at U.N. climate negotiations in Copenhagen in 2009, at a time when the White House assumed Congress might pass climate change legislation.

The EPA is expected to take its first steps to regulate greenhouse gas emissions from existing power plants later this year, after it finalizes emissions performance standards for the construction of new power plants this April.

The federal Clean Air Act does not specify how the EPA must regulate existing sources but says states need to determine the "best system of emission reduction." "States can play a very important role in achieving reductions," Bianco said at an event to launch the report, adding that they will be in charge of implementing national standards set by the EPA.

While the EPA is widely expected to regulate existing power plants, it is not yet clear if it plans to regulate methane as a greenhouse gas from natural gas systems - a significant unknown in light of the boom in the natural gas production called hydraulic fracturing, or fracking. U.S. natural gas production has increased by more than 25 percent between 2005 and 2011 due to fracking, causing a significant release of methane gas. "There is a great deal of uncertainty with regard to emissions for natural gas systems. This means that the absolute magnitude of abatement opportunities is uncertain," the report said.

46. White House Wants $2 Billion to Give Cleaner Transport a Boost

President Barack Obama wants Congress to create a $2 billion clean-energy transportation fund using fees paid by oil and gas producers on federal lands, the White House said, expanding a plan announced in Obama's State of the Union address. "This $2 billion investment will support research into a range of cost-effective technologies - like advanced vehicles that run on electricity, homegrown biofuels and domestically produced natural gas - (and) will be funded by revenue generated from federal oil and gas development," according to a White House outline of the initiative.

The size of the fund pales in comparison to a similar initiative Obama backed in his first term, though. Between 2009 and 2011, the U.S. Department of Energy extended nearly $9 billion in loans to automakers to support cleaner vehicle technologies. Those included a $5.9 billion loan to Ford Motor Company to upgrade facilities and raise the fuel efficiency of its cars.

The new program's aim would be "shifting our cars and trucks off oil," a White House document said, while also saying that the United States would continue to rely on "responsibly produced oil and natural gas."

The White House document called on Congress to establish an "Energy Security Trust" that would be administered by the Energy Department. The five-page memo, entitled "President Obama's blueprint for a clean and secure energy future," touted the administration's "all of the above" strategy that meshes expanded oil and gas production with clean energy investments.

The plan for an Energy Security Trust resembles a proposal from Alaska's Lisa Murkowski, the senior Republican on the Senate Energy and Natural Resources Committee. Getting cross-party support would be key to passing legislation to make Obama's proposal a reality. "I intend to get to work on this as soon as possible," Murkowski said in a statement. Republicans like
Murkowski would likely want the White House to expand energy drilling as a price for their support - a concession that would not sit well with some Democrats.

The plan could also struggle at a time of tight budgets since money going into the trust would divert funds otherwise bound for the U.S. Treasury.

Still, the plan was applauded by energy security groups that said it was a way to loosen U.S. dependence on oil suppliers in the Middle East. Secure America's Future Energy, an advocate for domestic energy production, said the president's plan could chip away at the military's reliance on foreign fuel. The Pentagon is the nation's largest fuel buyer.

47. U.S. and South Korea to Share Information on Air, Water Quality, Sustainability Issues

U.S. and South Korean officials pledged on February 14th to build on existing “robust cooperation” between the countries to address a range of environmental issues, including sustainable urban growth, air and water pollution, and wildlife trafficking. Officials said a newly approved bilateral work plan aims to strengthen environmental protections, protect wildlife, promote sustainable cities, increase the development of cleaner energy sources, establish new cooperative mechanisms, and protect ports in environmentally friendly ways, among other things.

Judith Garber, the senior State Department official in charge of the environmental negotiations, called the work plan “very general” and said specific environmental projects the countries will collaborate on will be outlined over the next three months.

The meetings were the first on environmental issues since the free trade agreement between the United States and South Korea went into effect in March 2012.

48. Canada Aligns GHG Standards and OBD For Heavy-Duty Vehicles With U.S.

On February 25th, Canada’s environment minister announced the finalization of regulations aligning the country's standards for greenhouse gas emissions from new, on-road, heavy-duty vehicles with those of the United States. The final regulations include changes to an earlier draft version that respond to requests from U.S. manufacturers to better align the Canadian measures with U.S. standards.

The Heavy-Duty Vehicle and Engine Greenhouse Gas Emissions Regulations create progressively more stringent emissions standards through the 2014-2018 model year period for heavy-duty vehicles, Minister Peter Kent said in a statement. “With these tough new measures, greenhouse gas emissions from 2018 model-year heavy-duty vehicles will be reduced by up to 23 percent,” he said. The regulations will take effect on publication in the Canada Gazette, Part II, which is scheduled for some time in March, Kent said.

The regulations will apply to manufacturers and importers of heavy-duty vehicles and engines, including large pickup trucks; short- and long-haul tractors; buses; and freight, delivery, service, and cement trucks. They will apply starting with the 2014 model year and set standards for emissions of carbon dioxide, nitrous oxide, and methane. The 2018 standard will apply for subsequent model years unless later modified.
Manufacturers are expected to meet the new standards by adopting vehicle technologies such as improved aerodynamics and low rolling resistance tires that improve vehicle energy efficiency, Environment Canada said.

The regulations are expected to reduce greenhouse gas emissions by 19.1 million metric tons over the lifetime of heavy-duty vehicles produced in the 2014-2018 model years, Kent said. That will build on measures to date, including regulation of emissions from light-duty vehicles and coal-fired electricity generation that have reduced Canada’s greenhouse gas emissions by 6.5 percent from 2005 levels he said. Canada is committed under the Copenhagen Accord to a 17 percent reduction in greenhouse gas emissions from 2005 levels by 2020.

Environment Canada said that compliance with the regulations will provide significant economic benefits to the Canadian trucking industry, including net benefits totaling C$4.5 billion ($4.4 billion) due to fuel savings over the lifetime of heavy-duty vehicles produced in the 2014-2018 model years.

Canadian vehicle manufacturers fully support alignment of the heavy-duty vehicle emissions rules with U.S. standards, according to Mark Nantais, president of the Canadian Vehicle Manufacturers’ Association.

To assist in the transition to aligned standards, and recognizing industry concerns with shorter lead times in Canada, the final regulations provide new transitional measures for the 2014-2016 model years for vocational vehicles and tractors, the department said. No changes were made for other vehicles, as the large companies that import the vast majority of heavy-duty vehicles have sufficient volume and diversity to ensure the standards are not more stringent in Canada, it said. The regulations define vocational vehicles as those not normally used for long-haul highway transportation, including vehicles that are used in local delivery and pick-up, that are used both on- and off-road, and incomplete vehicles that require further manufacturing before being sold. In each of those cases, the vehicles were not deemed likely to benefit significantly from improved emission standards, Environment Canada said.

Another new measure exempts from the regulations small companies that have imported 200 or fewer vocational vehicles and tractors. To address concerns that this could lead to a proliferation of small-volume companies, only companies that imported or manufactured 200 or fewer such vehicles in 2011 are eligible for the exemption.

Environment Canada said it rejected calls to add measures to promote increased use of alternative fuels, particularly liquefied natural gas and biofuels. The regulations are intended to be fuel-neutral, so providing incentives or obstacles to the use of any particular fuel would be inappropriate, it said.

Transportation represents one of Canada’s largest sources of greenhouse gas emissions, about 28 percent of total national emissions in 2009, Environment Canada said. Heavy-duty vehicles account for about 24 percent of transportation emissions, or 7 percent of total greenhouse gas emissions, it said. Canada’s transportation-related greenhouse gas emissions fell by about 3 million metric tons per year between 2005 and 2009, but heavy-duty vehicle emissions grew by about 1 million metric tons per year over that period, it said.

Also on February 13th, Environment Canada published final regulations to maintain the alignment of Canadian requirements for on-board engine diagnostic systems in heavy-duty
vehicles with current rules in the United States and ensure that the vehicles meet regulatory requirements covering emissions of smog-forming pollutants.

The final amendments to the On-Road Vehicle and Engine Emission Regulations require manufacturers to ensure that engines in heavy-duty vehicles sold in Canada have on-board diagnostic systems, aligning the regulations with a final rule published in February 2009 by the U.S. Environmental Protection Agency, the department said in a regulatory impact analysis published with the final regulations in the Canada Gazette, Part II.

“While the majority of heavy-duty vehicles and engines sold in Canada would likely already comply with U.S. EPA standards, it is important to recognize that some of these vehicles or engines sold in Canada may not,” it said. “The amendments create a level playing field for companies supplying the North American market for heavy-duty vehicles and engines. At the domestic level, it ensures that all manufacturers, importers, and distributors comply with the same standards.”

The regulations apply to engines used or intended for use in heavy-duty, on-road vehicles with a gross vehicle weight rating (GVWR) of more than 6,350 kilograms (seven tons), including large 3/4-ton-capacity pickup trucks, minibuses, school buses, road tractors, and dump trucks. The regulations take effect on January 1, 2014, and apply to heavy-duty engines in the 2014 and later model years.

On-board diagnostic systems monitor engines for signs of emissions system problems and trigger a dashboard indicator light when a problem is detected. The systems facilitate repairs to ensure that the vehicles continue to meet the regulations’ standards for emissions of the smog-forming pollutants nitrogen oxide, non-methane organic gases, carbon monoxide, formaldehyde, and particulate matter. Canadian on-road vehicle emissions standards are aligned with U.S. standards.

The regulatory amendments are expected to cost Canadian manufacturers of heavy-duty engines a total of about C$858,000 ($856,660) per year in 2011 dollars, Environment Canada said. Purchasers of heavy-duty vehicles will likely bear the incremental costs through higher vehicle prices, but the high cost of most heavy-duty vehicles will make the added cost insignificant and the cost will be offset by reduced maintenance costs from having the on-board diagnostic systems in place, it said.

Environment Canada noted that most heavy-duty engines in Canada are imported, most of them from the United States, and the only Canadian manufacturer of heavy-duty engines exports all of its production to the United States for final assembly in heavy-duty vehicles. In 2008, Canadian production of heavy-duty vehicles totaled 64,000, with about 90 percent exported to the United States, the department said.

49. Greenhouse Gas Emissions from U.S. Power Plants Down 4.6 Percent

Greenhouse gas emissions from U.S. power plants fell 4.6 percent in 2011 as more generators were switched to cleaner-burning natural gas and renewable sources from coal, according to new data from the Environmental Protection Agency. The agency’s second inventory of greenhouse gas emissions reported by the country’s largest industrial polluters showed that power plants - which account for one-third of U.S. emissions - released 2.22 billion metric tons of carbon dioxide equivalents (CO2e) in 2011. Despite the decline in power plant emissions,
coal-fired power plants continue to be the largest single source of carbon emissions in the United States, the data showed.

The congressionally mandated EPA database covers 8,000 industrial sources that together emit more than 25,000 metric tons of CO2e per year - large enough to be subject to some of the rules being proposed by the EPA to curb greenhouse gas emissions.

This year, the database was expanded to include data on methane emissions, which are generally produced by large emitters in the oil and gas sector. The Environmental Defense Fund said in a statement that the addition of methane to the EPA database will be valuable as lawmakers and regulators consider how to regulate emissions from the boom in U.S. natural gas production. "Today's new data will provide insights into methane emissions industry wide, which can help policymakers as well as oil and gas operators identify cost-effective opportunities to reduce pollution and prevent the waste of a valuable domestic energy source," said Peter Zalal of EDF's Climate and Air legal team.

Oil and natural gas systems emitted 225 million metric tons of CO2e in 2011, making them the second largest greenhouse gas source.

The EPA also showed that refineries increased their greenhouse gas emissions by 0.5 percent in 2011 from 2010, making them the third largest source of domestic greenhouse gases.

50. Acting EPA Chief Warns Staff of Furloughs

The acting head of the U.S. Environmental Protection Agency (EPA) has warned staff that it may place an unspecified number of jobs on temporary furlough if across-the-board federal budget cuts take effect on March 1, 2013 as expected. Bob Perciasepe, acting administrator of the EPA, wrote in an email that despite taking early measures to cut agency spending on contracts, grants and administration in recent months, furloughs are inevitable. "Even with these actions, the arbitrary nature of the required budget cuts of sequestration would force us to implement employee furloughs over the remainder of the fiscal year, ending on September 30, 2013," Perciasepe wrote.

President Barack Obama and lawmakers in Congress have yet to resolve how to avoid the deep automatic spending cuts due on March 1, known as "sequestration."

Perciasepe said the agency will provide employees with 30 days notice before any furlough process begins. The EPA will try to minimize the burden on staff while trying to meet its regulatory obligations, he added.

The agency is also meeting with its national unions to prepare a plan, Perciasepe said.

The Energy Department warned workers of furloughs on February 7.

Furloughs at the EPA could create slowdowns in some of the agency's ongoing projects at a time when Obama has signaled that federal agencies will play a leading role in carrying out his promise to respond to the threat of climate change. Among other things, the EPA is due to finalize rules to reduce greenhouse gas emissions from new power plants within a few months.
Air quality in Beijing was the "worst on record" recently, according to environmentalists, as the city's pollution monitoring center warned residents to stay indoors with pollution 30-45 times above recommended safety levels. The Chinese capital, home to around 20 million people, was wrapped in thick smog for several days, reducing visibility and disrupting traffic.

Data posted by the monitoring center (www.bjmemc.com.cn) showed particulate matter measuring less than 2.5 micrometers in diameter (PM2.5) had reached more than 600 micrograms per square meter at some monitoring stations in Beijing, and was as high as 900 on one evening. The recommended daily level for PM2.5 is 20, according to the World Health Organization. Such pollution has been identified as a major cause of asthma and respiratory diseases.

The Beijing Municipal Environmental Monitoring Centre said heavy pollution had been trapped by an area of low pressure, making it harder to disperse, and the conditions were likely to last several days.

Pollution has been identified as one of the biggest challenges facing China's leaders, with outgoing President Hu Jintao saying during his address to the Communist Party Congress last November that the country needed to "reverse the trend of ecological deterioration and build a beautiful China". China said at the end of last year that it would begin releasing hourly pollution data for its biggest cities.

Beijing has already committed to a timetable to improve air quality in the city, and has relocated most of its heavy industry, but surrounding regions have not made the same commitments.

China says major pollutant levels dropping, but hard task ahead

China's environment minister said recently that emissions of four major pollutants dropped last year and should fall by a similar level this year, but admitted the country faced a tough task in trying to end chronic air pollution. This winter's pollution, especially in northern China, has been so severe that even usually pliant state media has criticized government inaction, partly because it can't be hidden from the public. But emissions of sulfur dioxide, nitrogen oxides, chemical oxygen and ammonia nitrogen all recorded on-year falls of two percent in 2012, and were expected to drop by the same degree in 2013, or even faster, state media cited Zhou Shengxian as saying.

"To cope with an air quality crisis, contingency measures will be adopted, such as suspending or limiting the production of certain vehicles and limiting emissions and car usage," the official Xinhua news agency cited him as saying. "The ministry will also ban the operation of vehicles registered before 2005 under exhaust emissions requirements ... and efforts will be made to improve the quality of gasoline and diesel."

But Zhou said China "faces a long battle" in controlling what is known as PM2.5 intensity, which measures particulate matter in the air with a diameter of 2.5 micrometers.
Pollution levels in Beijing and many other Chinese cities regularly exceed 500 on that index. A level above 300 is considered hazardous, while the World Health Organization recommends a daily level of no more than 20.

The ministry had set timetables for cities plagued by air pollution, the report said. Cities with air pollution 30 percent above the national standard or higher should try to meet those standards by 2030.

Smoke from factories and heating plants, winds blowing in from the Gobi Desert and fumes from millions of vehicles can combine to blanket northern Chinese cities in a pungent shroud for days on end. The government has promised repeatedly to resolve the problem, and in recent days has unveiled new measures, including taking 180,000 old vehicles off the road in Beijing this year and controlling the “excessive” growth of new car sales in the city.

**China Plans Emergency Measures To Control Beijing Air Pollution**

Beijing is to unveil unprecedented new rules governing how China’s capital reacts to hazardous air pollution, the official Xinhua news agency said, as deteriorating air quality threatens to become a rallying point for wider political dissatisfaction. The rules will formalize previous ad-hoc measures, including shutting down factories, cutting back on burning coal and taking certain vehicle classes off the roads on days when pollution hits unacceptable levels.

Recently, smog blanketed most of the city, prompting the government to warn people to reduce outdoor activities. On one day, an index measuring PM2.5 rose as high as 400 in some parts in the city. A level above 300 is considered hazardous, while the World Health Organization recommends a daily level of no more than 20. The reading was still lower than the previous weekend, when it hit a staggering 755.

The pollution has also deterred foreigners from living and working in “Greyjing”. Now it appears that the government has adopted a more transparent approach to addressing the problem than in the past.

Officials once tried to spin the city’s poor air quality by not including PM2.5 readings in reports and referring to smog as “fog” in weather reports. One official accused the U.S. embassy in Beijing of meddling in China’s internal affairs for publishing its own PM2.5 readings online. But this time around, state media appears to have been cleared to cover pollution as a major problem.

Vice Premier Li Keqiang, who is expected to take over as premier in March, said earlier that tackling pollution would be a long-term process.
Air Pollution Lingers in Shanghai

Residents cross the street in Pudong New Area with masks to filter out the pollution. Photo: Yang Hui/GT

The air pollution that has sullied the city over much of the last 10 days will persist for several more days, the Shanghai Environmental Monitoring Center reported recently. The city's Air Quality Index (AQI) peaked at 246, breaching the threshold for severe pollution and forcing authorities to advise residents to avoid spending time outdoors, according to the center.

During a recent episode, the AQI has shown good air quality on only two of 11 days. The air has been severely polluted on three of the days and lightly or moderately polluted during the other six. Like during past days of severe pollution, the lack of strong air currents allowed pollutants to accumulate in the city, said Zhao Qianbiao, a monitor with the center. The recent spate of morning fog also contributed to the pollution as the water vapor in the air prevented pollutants from dispersing.

The pollutant most responsible for the increase in the AQI was PM 2.5 Zhao told the press. PM 2.5 is especially dangerous because the size of the particles allows them to lodge deeply in the lungs, where they can cause or aggravate respiratory illnesses. Authorities warn residents to take precautions whenever the reading exceeds 75 micrograms per cubic meter. Authorities also advised residents with heart and respiratory illnesses to spend less time outdoors.

Beijing to Introduce Stricter Automobile Emission Rules

The capital will raise its automobile-emission standards on February 1st, making them the strictest in the nation in a move that the Beijing Environmental Protection Bureau said is expected to reduce auto pollution by 40 percent. "Beijing is the first city nationwide that has introduced the fifth phase of emission standards for automobiles," bureau spokesman Fang Li said. "The move is an attempt to better improve air quality in the capital."

Fang said Beijing is taking the lead in implementing stricter emission standards for automobiles as a pilot project, adding that the new emission standards will be the strictest nationwide. The city will implement the national standards when they are released.

Li Kunsheng, director of the bureau's department of motor vehicles, said that around 1,300 vehicle models already had met the stricter emission standards and that can meet the current market demand. A greater variety of vehicles will hit the market to meet the increasing demand, he said.

Li said that compared with the existing automobile emission standards, the stricter version will reduce emissions of nitrogen monoxide by 40 percent. The concentration of PM2.5, or particulate matter smaller than 2.5 micrometers in diameter, will also decrease.
According to the bureau, automobiles account for around 58 percent of total emissions of nitrogen monoxide in the city, and around 40 percent of the total volatile organic compounds. In addition, cars also account for 22.2 percent of the city's total PM2.5 emissions, it said.

Li said that considering the amount of automobiles in the city is now more than 5.2 million, and the figure is expected to reach 6 million by 2015, implementation of the stricter emission standards is important.

In addition, the bureau will also speed up the pace of scrapping old polluting vehicles. The bureau has come up with an initiative to rid the city of its aging and polluting vehicles by providing benefits to local motorists. According to Fang, the city got rid of 370,000 aging vehicles in 2012, and aims to get rid of another 180,000 in 2013.

The drive has turned effective in weeding out heavily polluting vehicles, and the bureau said it will continue to introduce more benefits to encourage aging vehicles off the road.

Li said Beijing is well prepared for the implementation of the new emission standards, as the city has started providing a cleaner supply of gasoline and diesel with a concentration of sulfur no more than 10 ppm since last May. Li said diesel automobiles meeting the stricter emission standards are all equipped with a particulate filter, which also requires a higher standard of fuel - with a sulfur content of no more than 50 ppm. Otherwise, the filter will be damaged and cause the vehicle to break down.

According to Li, despite the fuel supply with lower concentration of sulfur provided in Beijing, the quality of fuel supplement in neighboring cities still lags far behind the capital. Some cities around the capital are still providing gasoline with sulfur content around 150 ppm and diesel with a sulfur content of no more than 2,000 ppm, he said. "It's necessary that the capital, together with its neighboring cities, jointly deal with pollution," he said.

**Beijing Proposes New Regulations, Penalties to Deal with Record Levels of Air Pollution**

In response to recent record levels of air pollution, municipal authorities in Beijing are proposing new measures to control dust from construction projects, air pollutants from motor vehicles and non-road machinery, and airborne emissions from coal-fired power plants. On January 19th, officials in the Chinese capital released for public comment a draft update to regulations issued in 2000. The document includes details on maximum penalties for noncompliance.

Levels of fine particulate matter (PM-2.5), which measures less than 2.5 microns in diameter, have been extremely high in northern China in recent weeks. Beijing reached over 700 on a PM-2.5 index the weekend of January 12-13 and over 400 the weekend of January 19-20, with 300 considered hazardous by municipal authorities. Health experts consider PM-2.5 to be the pollutant most harmful to lung function.

On January 14th, the Beijing Municipal Government enacted a weeklong emergency response plan based on a provisional version introduced in October 2012. The emergency response plan forced 58 major businesses to halt production and 41 more to reduce production in order to decrease their emissions by 30 percent. The plan also ordered 30 percent of government vehicles off the roads.
Beijing's acting mayor, Wang Anshun, said during the opening of Beijing Municipal Congress meetings on January 22nd that the city plans to remove 180,000 older vehicles from its roads, replace coal-fired heating and cooking systems in 44,000 housing units with more environmentally friendly alternatives, reduce coal consumption by 1.4 million metric tons, close about 450 heavily polluting industrial facilities, and attempt to use more non-fossil fuel energy, according to a report from the state-run Xinhua news agency.

Beijing will strengthen its efforts to treat PM2.5 and slash the density of major air pollutants by 2 percent this year, the municipality's acting mayor has announced. The capital will promote clean energy autos among government departments, the public and the urban cleaning sector, which includes street cleaners and trash collectors, Wang Anshun said at the opening of a session of the Beijing Municipal People's Congress, the municipal legislature.

In the next five years, "Beijing will complete afforestation of 66,000 hectares to make the city's forest coverage hit 40 percent or above. Its total emissions of major pollutants will continue to be reduced," said Wang.

The city will also speed up the promotion of clean energy in rural areas and strictly control dust in construction projects, said Wang.

He vowed to strengthen air quality monitoring and analysis, as well as the release of such information.

Earlier this month, several consecutive days of smoggy weather choked Beijing, as readings for PM2.5, or airborne particles measuring less than 2.5 micrometers in diameter, far exceeded safe levels.

"The most important is the measures to handle the basic causes. One is the technological upgrading or closure of polluting companies. Another is the promotion of environmentally friendly public transport," said Wei Aimin, a lawyer and municipal lawmaker. "Vehicles contribute about 17 percent of pollution. We should try to reduce vehicle exhaust pollution by all means," Wei told Xinhua. "In this regard, both officials and individuals should make their own contributions."

The number of vehicles has increased to 5.18 million currently from 3.13 million in early 2008, according to the Beijing Municipal Commission of Transport. In 2011, the city began to adopt a license plate lottery system to curb the rapid growth of vehicles.

Over the past five years, Beijing built 300-km-long urban rail transit lines with nearly 190 billion Yuan (about 30.3 billion US dollars), said Beijing's acting mayor. The total length is 442 km in Beijing, which plans to complete 24 km more of such transit lines this year.

The proposed regulations specify maximum fines for various types of infractions, such as construction projects failing to prevent and treat particulate pollution, businesses exceeding their quotas for emissions of key pollutants, and businesses not reporting accurate emissions data.

The proposals include emergency measures for limiting the number of vehicles on Beijing roads during extreme air pollution days.

As part of the regulations, environmental impact assessments would have to be conducted for new projects or for expansions or renovations. Projects would be required to install air pollution
control and prevention equipment. Projects that proceed without proper impact assessments would be forced to halt or face fines of up to 100,000 Yuan ($16,000).

Industrial facilities that discharge air pollutants would have to install technology to reduce emissions of pollutants identified as “key” in the country's current Five-Year Plan, such as sulfur dioxide and nitrogen oxides, or face a warning with a maximum fine of 500,000 ($80,000). Industrial units that fail to report emissions data or that submit false reports would be issued a warning and face a maximum fine of 500,000 Yuan ($80,000) if they do not rectify the situation.

Businesses would be required to disclose data on emissions of hazardous pollutants during production processes to the Municipal Environmental Protection Bureau and publicly display the data on their websites or face fines of up to 100,000 Yuan ($16,000).

In severe air pollution emergencies, the municipal government would issue orders for part or full production shutdowns. Failure to comply with the orders could result in fines ranging from 50,000 to 500,000 Yuan ($8,000 to $80,000). Maximum fines of up to 100,000 Yuan ($16,000) could be imposed for repeated violations of the provisions of the regulations and criminal liability could be incurred for violations of the regulations that “cause serious pollution and are a crime,” according to the documents published by the municipal government.

The regulations set out various other lower-level fines and penalties for failure to comply with specific articles of the ordinance.

Meanwhile, on January 14th, China's Ministry of Environmental Protection released a second draft of tailpipe emissions limits for so-called China V passenger vehicles and calculation methods for those standards. The proposal would strengthen the previous draft by including limits on PM-2.5, according to the announcement. Comments will be accepted until February 18th.

Bad air quality is reportedly creating problems for companies in recruiting senior executives. According to an American Chamber of Commerce in China survey released in 2012, 36 percent of 244 companies polled said air pollution in Beijing was making it harder for them to recruit top management, a jump from 19 percent who said so in 2010.

"The core issue with Beijing's air quality is the growing population," said Jiang Yi, director of the Energy Saving Studies Center at Tsinghua University. "Currently, the population burden on Beijing's environment has reached maximum levels. Pollution treatment cannot go on without population control," said Jiang, who is also a political advisor attending the on-going annual session of the municipal political consultative body. Beijing's population reached 20.69 million by the end of 2012, an increase of 500,000 people year on year, the Beijing Municipal Statistics Bureau said. The population stood at 16.33 million in early 2008. The city should strictly control the expansion of manufacturing industries to reduce the inflow of workers, the expert suggested.

Wang Yingchun, deputy head of the Beijing Municipal Meteorological Bureau, said efforts to improve air quality require the coordination of relevant departments. "The pollutants in Beijing come not only from the emissions in Beijing, but also from those of neighboring cities. Thus, air quality forecasts and early warnings should be cross-regional," Wang said. Wang also advised environmental protection, medical and health and meteorological departments cooperate with each other and share air quality monitoring information.
The Beijing Municipal Air Pollution Control Regulation draft, which was released recently to elicit public comments, stipulated emergency measures for heavy pollution days, such as suspension of factory production, and reduction in the number of running vehicles. Violators will face hefty punishment.

In 2012, the density of major air pollutants in Beijing dropped by 3.8 percent on average, the Beijing Municipal Environmental Protection Bureau said. In response to public demand, real-time air quality monitoring data on PM2.5 intensity in China's 74 major cities, including Beijing, has been released since January 1st. Beijing has set up 35 stations for real-time air quality monitoring of PM2.5.

Beijing plans to reduce concentrations of four major pollutants by 2 percent each in 2013 and is on track to meet clean air targets set in 2012, according to an article from the Beijing Daily newspaper that appeared on the municipal government's website on January 9th. The city plans to cut concentrations of sulfur dioxide and nitrogen oxides, both air pollutants; chemical oxygen demand (COD), a measure of water quality; and ammonia nitrogen in wastewater by 2 percent compared with 2012 levels, according to Qiao Shufang, director of pollution control at the city's Environmental Protection Bureau, who was quoted in the article.

The city announced a long-term plan in 2011 to achieve more “blue sky days” by phasing out the use of coal-fired boilers and stoves, increasing the use of natural gas, tightening controls on vehicle emissions, and moving heavily polluting factories elsewhere. The government also vowed as of January 1st to suspend construction work, idle factories, and pull 30 percent of government cars off the road when air quality falls below a certain standard, according to a December 14th article from the state-run Xinhua news service.

Qiao said concentrations of coarse particulate matter (PM-10) were down 4.4 percent in 2012 compared to 2011 levels. Concentrations dropped 1.5 percent for sulfur dioxide and 5.5 percent for nitrogen oxides. The article noted that 377,000 old cars were taken off the road in 2012 as part of efforts to reduce air pollution.

China’s 12th Five-Year Plan (2011-2015) sets national targets for reductions in concentrations of the four so-called key pollutants—an 8 percent reduction in sulfur dioxide emissions and COD levels and a 10 percent reduction in nitrogen oxide emissions and ammonia nitrogen levels in wastewater by 2015, compared to 2010 levels.

Air Pollution Leaves China's Pearl River Delta Region Choking On Smog

Heavy smog has been smothering the Pearl River Delta, with air pollution readings in the region hitting their highest levels of the year. The lingering haze prompted the Guangzhou Central Meteorological Observatory to issue its first “heavy fog” warning of 2013 as visibility in Guangzhou fell to 700 meters.

Of the 62 air-quality monitoring stations in Guangdong, 70 per cent showed levels of PM2.5 particles exceeding national air-quality standards, China News Service reported. Eight of those stations rated the air as severely polluted - in the Shiqiao area of Guangzhou's Panyu district, Xiping in the Nancheng district of Dongguan, Jinjizui in the Shunde district of Foshan, two places in Zhongshan, and in the Xiqu, Beijie and Donghu areas of Jiangmen.

The Southern Metropolis Daily reported that Guangdong was planning to release forecasts of air-quality-index readings this year.
Top Selling-Auto-Brands-China-2012/

One of the major topics in 2011 and 2012 for vehicle makers in China was the era of ‘slow growth’. Manufacturers had grown used to a decade of 30% year on year growth but that stopped in 2011 with the onset of the global economy which led to slower export sales but was also partly influenced by rising inflation in China and rising worker salaries as the labor pool grows smaller.

Total production of cars in 2012 reached 19.27 million whilst sales were at 19.30 million, an increase of 4.63% and 4.33% respectively. Passenger vehicles stood for just over 15.52 million and 15.49 million sales, an increase of 7.17% and 7.07%. Commercial Vehicles sales were down year on year with production reaching 3.74 million and sales 3.81 million, a decrease of 4.71% and 5.49% respectively.

The pace of growth is still higher than 2011’s 2.5%, which shows there is some elasticity remaining in the market.

Over 10.76 million passenger cars, including sedans and hatchbacks, were produced whilst 10.74 million were sold in 2012, an increase of 6.22% and 6.15%. 491,900 MPV’s were produced and 493,400 were sold, a decrease of 2.84% and 0.87%. SUV’s remained the bright side of the market with production reached 1.99 million and sales breaching 2 million, an increase of 24.67% and 0.87%. Fork lift trucks are also included in the official stats, with 2.26 million being production a 2.25 million being sold, an increase of 1.20% and a decline of 0.07%.

Chinese vehicle exports reached just over 1.06 million in 2012 and are expected to be strong again in 2013 with the renewed economic activity in key markets such as the Middle East and South America.

Top Selling Brands in December 2012

1. Volkswagen – 140,014
2. Hyundai – 60,593
3. Chevrolet – 54,570
4. BYD – 52,890
5. Ford – 49,077
6. Toyota – 45,816
7. Chery – 45,754
8. Buick – 44609
9. Nissan – 42,619
10. Kia – 37,701

Bottom Selling Brands

1. BAIC – 3158
2. Everus (Honda) – 2786
3. Mitsubishi – 2034
4. Ciimo (Honda) – 1717
5. Cadillac – 939
6. Riich – 917
7. Trumpchi (GAC) – 749
China’s Carbon Intensity Falls Over 3.5 Percent in 2012: Official

China’s carbon intensity, or its emissions relative to economic output, fell more than 3.5 percent in 2012, outperforming its average annual target, China’s chief climate change official said recently. China aims to cut carbon intensity by 17 percent during the 2011-2015 period, which means an annual average target of around 3.5 percent. Intensity is the amount of carbon dioxide emitted per unit of gross domestic product.

"The situation last year was relatively good. Based on a preliminary estimate, China could achieve a more than 3.5 percent fall in carbon intensity," said Su Wei, director general of climate change department of National Development and Reform Commission.

Cutting carbon intensity allows China to meet international demands for it to curb emissions and also keep its priority that development must come first while many Chinese still live in poverty.

The government is currently drawing up a national plan on climate change till 2020, which is expected to be finalized soon, Su said. China recently published a new industrial carbon emissions plan. Steel, nonferrous metals and petrochemical sectors are required to cut CO2 intensity by 18 percent by 2015 compared with the 2010 level.

By 2020, China aims to cut its carbon intensity by 40 to 45 percent versus the 2005 level, a target that is stimulating a sharp increase in investment demand in energy efficiency and renewable energy.

Its efforts to control emissions are also paving the way for creation of a carbon market, which requires accurate measurements of the carbon emitted. China’s biggest listed steelmaker, Baoshan Iron and Steel, is among the industrial companies that must participate in a pilot carbon trading scheme in Shanghai, the local government said last month.

China will need 1.24 trillion Yuan ($199.2 billion) in energy conservation investments in 2011-2015, an increase of 50 percent from the level in 2006-2010, according to a research report released by Tsinghua University. The investment in China’s renewable energy sector in 2011-2015 will increase 37.5 percent to 1.8 trillion Yuan, the report showed.

52. Hong Kong Raises Bar for Vehicles to Qualify for ‘Environment-Friendly’ Tax Break

Hong Kong’s Environmental Protection Department has issued lists of private and commercial vehicle types that meet updated standards to qualify as “environment-friendly” and receive first registration tax concessions starting April 1. Qualified private vehicles are eligible to receive a first registration tax reduction of up to 45 percent, capped at $75,000 Hong Kong dollars ($9,673). Reductions of the first registration tax for qualified commercial vehicles will range from 30 percent to 100 percent, depending on “vehicle-class-specific caps per vehicle,” the Hong Kong Special Administrative Region department said in a January 14th statement.
The standards for gasoline-powered private vehicles set limits on emissions of hydrocarbons and nitrogen oxides and require fuel efficiency at least 40 percent better than the average for the vehicles' weight classes.

The department said the latest standards require reductions in emissions of 75 percent compared to existing emissions limits. The department noted that better fuel efficiency also means lower carbon dioxide emissions. Only 26 of the current 139 private vehicle models that qualify for tax concessions will be able to qualify after April 1, the department said.

“There is a need to tighten the qualifying standards to restrict the tax incentive to those vehicles with outstanding environmental performance,” as recent advances in technology have led to a nine fold increase in the number of eligible models since the scheme was introduced in 2007, an unidentified EPD spokesman said in the statement.

For commercial vehicles, the qualifying standards have been slightly tightened to between Euro V and Euro VI levels. Because “the supply of Euro VI commercial vehicles is very limited,” the department “has thus benchmarked the tightened qualifying standards against the performance of vehicle models that are available to the local market” instead of directly benchmarking to Euro VI, the statement said.

Light-duty commercial vehicles weighing less than 3.5 metric tons will be required to emit at least 50 percent less than statutory emission limits to qualify, while the emissions performance for heavy-duty vehicles “should be better than the average emission levels,” the statement said. The new standards will reduce the number of commercial vehicles qualifying for the tax concession from the current 567 to 185 as of April 1.

New standards for the schemes will come into effect in April 2014 if the Environmental Protection Department further tightens them in its annual review, according to the statement.

53. Volunteers in Hong Kong Shipping Industry Renew Low-Sulfur Pledge

Seventeen operators of ocean-going shipping vessels have renewed a pledge to voluntarily switch to low-sulfur bunker fuel when in Hong Kong waters but warned that if there is “no substantial progress” on making such actions mandatory for all oceangoing vessels by the end of 2013, they will “cease their voluntary fuel switching actions.” The pledge, which has been ongoing since 2010 and is known as the Fair Winds Charter, requires vessel operators to switch to fuel with a 0.5 percent sulfur content or less at berth in Hong Kong.

Supported by the Hong Kong Liner Shipping Association (HKLSA), the Hong Kong Ship-owners Association (HKSOA), and the citizen think-tank Civic Exchange, the actions of the Fair Winds Charter have helped push the government of the Hong Kong Special Administrative Region (HKSAR) to get serious about tackling shipping emissions, the groups said at a January 25th press conference.

In his policy address on January 16th, HKSAR Chief Executive CY Leung proposed that the switch to 0.5 percent sulfur content fuel be made mandatory. In October, the government introduced a scheme that would reduce port dues by 50 percent for operators who switch if legislated. The proposal for mandatory switching should be introduced to the Legislative Council (LegCo) by the fourth quarter of 2014, but Undersecretary for the Environment Christine Loh cautioned that it would take some time for that legislation to run its course.
Sticking points could be how much financial assistance the government will provide for fuel switching, whether smaller ship operators can handle multiple fuels, and how fast similar action can come in neighboring Guangdong province or potentially create the possibility some ships will berth at mainland ports instead of Hong Kong to cut costs.

Tim Smith, HKLSA chairman and chief executive for shipping line Maersk in Asia, said it costs around $1.5 million to $2 million a year for Maersk to voluntarily switch in Hong Kong. Smith said that the reduction in port fees “doesn’t cover all the costs, but it does help” in easing the burden.

“A reason we want these regulations in place is that lines are making themselves less competitive by switching [voluntarily],” Arthur Bowring, managing director of the HKSOA, said. Bowring said that “awareness has increased” within the international shipping industry in the last 10 years to 15 years on the need to curtail emissions and urged the government of Hong Kong to develop regulations in line with international regulations “sooner rather than later.”

Smith said the owners are “pleased that the government has taken action on subsidies” and they are talking with the government about how “to streamline ways to claim subsidies to make them more effective.” Smith said there “is talk” that some shipping could divert to other ports and that it was something that needed to be addressed but felt “the risk is small.”

Loh said it would likely take time to convince counterparts in mainland China to develop similar regulations but said Hong Kong officials have approached the Ministry of Transportation in Beijing and authorities in Guangdong about mandatory fuel switching. Hong Kong authorities also have discussed a long-term goal of an emissions control area (ECA) for the Pearl River Delta region, which includes Hong Kong and Guangdong province, particularly important ports in Shenzhen and Guangzhou, Loh said.

Secretary of the Environment Wong Kam-sing said the Environmental Bureau and Environmental Protection Department would soon be introducing a “Clean Air Plan” for Hong Kong and will work closely with the Guangdong government for “improvement over time” in regional air quality.

54. Hong Kong Bodies to Outline Air Quality Initiatives before Legislative Council

On January 28th, two Hong Kong governmental bodies plan to present to a Legislative Council panel a set of proposals focusing on air quality, waste management, nature conservation, greenhouse gas emission reductions, and engaging with the public to create a more “green community” to garner support for future legislation. The Environment Bureau and Environmental Protection Department said in documents released on January 18th that their proposals expand on initiatives laid out by CY Leung, chief executive of the Hong Kong Special Administrative Region, in a January 16th policy address.

The Environment Bureau is an executive level body headed by the secretary of the environment, while the Environmental Protection Department is a government agency that handles day-to-day environmental affairs.

On an issue of top importance to Hong Kong residents, the governmental bodies said they expect to release in the first quarter of 2013 a plan for reducing roadside air pollution and
emissions from ships. They will make their presentations to the Legislative Council's Panel on Environmental Affairs.

In his address, Leung said the government would devote the equivalent of about $1.2 billion to subsidize replacement of about 80,000 pre-Euro IV commercial diesel vehicles. The Environment Bureau and Environmental Protection Department estimated this would reduce total emissions of particulate matter by 80 percent and nitrogen oxides by 30 percent from all vehicles on Hong Kong roads. The bureau and department said the government proposes to offer a payment of up to 30 percent of the taxable value of a new vehicle to owners who replace pre-Euro IV commercial diesel vehicles. The payment could also be given to owners who scrap their pre-Euro IV vehicles but do not replace them.

Licenses would not be renewed for pre-Euro IV commercial diesel vehicles in phases, starting with pre-Euro and Euro I vehicles as of Jan. 1, 2016, Euro II on Jan. 1, 2017, and Euro III on Jan. 1, 2019. The bureau and department proposed a statutory limit of 15 years for new registrations of commercial diesel vehicles to ensure a “continued upgrading” of emissions standards for commercial fleets.

Responding to concerns that truck drivers would be pushed out of business, Secretary of the Environment Wong Kam-sing told reporters on January 21st that the phase-out plan is “increasing the options” for owners of commercial diesel vehicles by helping to fund the replacement or retiring of trucks. Wong said the government “would like to work with them to work out the details so that the benefits, in terms of the allowance, would be of maximum benefit to the owners rather than the suppliers” of vehicles.

The Environment Bureau and Environmental Protection Department reported that a trial program for retrofitting Euro II and III buses has been completed and will be separately reported to the Legislative Council. The trial’s findings will be used to support policies for retrofitting buses with selective catalytic reduction devices to reduce emissions of nitrogen oxides. They also stated a trial program for bus companies to use hybrid models purchased with government support will start in 2014, with six such buses already ordered by the companies.

For taxis and light public buses, the government is now inviting tenders to help owners of LPG taxis and public light buses to replace their catalytic converters on a one-off basis for reducing emission. After the completion of the replacement program, they will deploy remote sensing devices to identify those vehicles which emit excessively. The sensors will also be able to identify high emission petrol vehicles. The aim is to start the deployment of remote sensing devices in 2014.

The Environment Bureau and Environmental Protection Department said a plan to require oceangoing vessels berthing in Hong Kong waters to switch to cleaner fuel will be submitted to the Legislative Council after consultations with maritime industry organizations, likely late in 2013. The bureau and department will also consult with authorities in mainland China’s Guangdong province about the feasibility of requiring fuel switching for ships berthing in Pearl River Delta area ports, with the long-term aim of establishing an Emission Control Area under the International Maritime Organization.

A study is under way on the feasibility of reducing allowable sulfur content in marine diesel from 0.5 percent to 0.05 percent. It is expected to be released in the first quarter of 2013, with a legislative proposal to be released toward the end of the year, the bureau and department said.
The two governmental bodies said they will seek funding for onshore power facilities at the new Kai Tak Cruise Terminal that will begin operations in June to reduce emissions of cruise ships at berth.

The two bodies also said they will propose injecting the equivalent of $644 million into the Environment and Conservation Fund “as a capital-reserved endowment fund to generate investment income” to help raise awareness, promote research, engage the public, and facilitate the creation of a green community.

55. Taiwan Legislature under Pressure to Authorize Environment Ministry

Taiwan's government in 2013 will continue to press the legislature to create a legal basis for forming a Cabinet-level Ministry of Environmental Resources while tackling greenhouse gas emissions reductions, air quality control, and land-use planning. Passage of several bills is required to form the new ministry, which would handle issues ranging from pollution prevention to water resource management to biodiversity conservation. The government had planned to launch the ministry on January 1, 2012, but is still awaiting the legislature's green light. The current legislative session ends in late January. Legislators will reconvene February 25th.

Taiwan's Environmental Protection Administration (TEPA) is also calling for legislative passage of a Greenhouse Gas Reduction Act that would require the central government to develop programs to cut emissions. However, the question of whether clear targets for emission reductions will be included in the act remains unsettled. TEPA currently runs a voluntary program emissions reduction program.

In the meantime, TEPA announced in 2012 that major emitters of six greenhouse gases will be required to report emissions starting in 2013 under a draft regulation it proposed in accordance with the Air Pollution Control Act. Targeted industries would include cement, steel, electricity generation, semiconductor, and thin film transistor liquid crystal display. According to TEPA's Office for Greenhouse Gas Reduction Management, an estimated 180 such companies will have to report their emissions starting in April.

Yen-rui Hsieh, director-general of TEPA's Department of Air Quality Protection and Noise Control, said that if the Greenhouse Gas Reduction Act is approved, the six gases would be regulated under it rather than the Air Pollution Control Act. These gases are carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

When President Ma Ying-jeou was re-elected for his second four-year term in early 2012, the administration vowed to tackle environmental issues, including carbon emissions reduction and climate change adaptation, in the next decade.

According to the government, installed renewable energy capacity will total 12,502 MW by 2030, accounting for 16.1 percent of Taiwan's total generation capacity. That includes hydropower, biomass, and geothermal energy in addition to wind and solar.

56. Large Companies Required to Improve Energy Efficiency in Singapore

The government of Singapore this year will implement a law that requires certain large-consuming companies to take steps to improve energy efficiency. The Energy Conservation Bill, which parliament passed in April 2012, specifies energy management practices and standards for Singapore's industrial sector, which accounts for about 60 percent of the country's energy
consumption. It also includes minimum efficiency standards for energy-consuming technology such as air conditioners and refrigerators and requires energy labeling for such products.

Companies consuming more than 15 gigawatt-hours annually will be required to comply with its provisions as of April. Singapore has a goal to reduce its energy intensity—or use per unit of gross domestic product—by 35 percent by 2030 compared to 2005 levels.

The law will require industry to appoint energy managers to monitor and report energy use, greenhouse gas emissions, and energy efficiency improvement plans.

The law also consolidates existing energy efficiency-related requirements into a single law. These include measures establishing a Fuel Economy Labeling Scheme for passenger vehicles and small commercial vehicles and a Mandatory Energy Labeling Scheme and a Minimum Energy Performance Standard for household appliances.

Singapore also has a goal to reduce greenhouse gas emissions by 16 percent below a projected “business as usual” scenario for the year 2020. The country's National Climate Change Secretariat said 2013 steps toward this target will include enforcing the Energy Conservation Bill, increasing forest coverage, and implementing green building standards.

**57. India Aims for $4 Billion Investment by 2020 In Electric Vehicles**

India's government would provide the equivalent of $2 billion in investment for the development and promotion of electric vehicles in the country in the period ending 2020 under a plan announced on January 9th by Prime Minister Manmohan Singh. The National Electric Mobility Mission Plan 2020 encourages the private sector to match the government in spending on research and development of e-vehicles for a total of $4 billion. The aim is to have 7 million e-vehicles on the road by 2020, according to a government statement issued on August 29, 2012, after the first meeting of the National Council for Electric Mobility.

"This is a very important milestone in our country's efforts for a cleaner and greener transport system for the future," Singh said, adding that e-vehicles can reduce the transportation sector's dependence on expensive imported oil, which is also highly polluting. Such vehicles, including hybrids, "have the potential of contributing substantially to our efforts for mitigating the adverse impact of economic development on the environment," he said.

A Jan. 9 government statement said if 6 million to 7 million e-vehicles—including two-, three-, and four-wheeled versions—are on the road by the target date, it will result in liquid fuel savings of 2.2 million to 2.5 million metric tons and substantially lower vehicle emissions of pollutants and carbon dioxide.

India has only a nascent electric and hybrid vehicle industry. In 2012, the government withdrew a subsidy of up to $100,000 per e-vehicle that had been announced in the budget for 2011-12. As a result, sales were halved, according to industry reports, while three to four product launches were put on hold.

**58. Government Authorizes OMCs To Periodically Hike Diesel Prices**

The government recently announced that it is authorizing Oil Marketing Companies (OMCs) to hike diesel prices from time to time. This in effect translates into a partial deregulation of diesel prices. Oil Minister Veerappa Molly said that the oil companies have been permitted to raise
diesel prices by a small quantum periodically till such time that they are able to cover Rs 9.60 per liter loss they incur on the fuel. Refusing to provide details of diesel price increase, Moily said the raise may take place soon.

OMCs are currently losing Rs 9 per liter on the sale of diesel at a subsidized price. This amounts to an Rs 94,000 annual loss on subsidized diesel.

Oil Secretary G C Chaturvedi also said that state-run oil marketing companies have been authorized to raise diesel prices in small increments "over a period of time", but did not give a time-frame or quantity for such price increases. Along with this Oil Minister Veerappa Moily also announced a hike in the cap of subsidized LPG cylinders from 6 to 9.

Commenting on the government's move, RS Sharma, ex-Chairman ONGC said that both the decisions are economic and not political in nature. "In future there could be more price correction happening," he added. The finance ministry is keen to reduce the subsidy burden. Oil companies have estimated that if they had sold fuel at international rates they would have gained additional revenue of Rs 1.63 lakh crore in the current fiscal year.

Moily said the government was committed to ensure smooth supply of cooking gas to consumers. To ensure this, the government will launch a system of rating gas dealers on the basis of time taken to deliver cylinders, and allowing customers to switch dealers.

59. South Korea Steps Up Policy Drive to Encourage Environment-Friendly Vehicles

On January 21st, South Korea’s Ministry of Environment said that the promotion of environment-friendly vehicles will remain a high priority in 2013, citing quick progress in putting more electric vehicles and hybrid cars on the roads. The ministry said roughly one out of every 30 new cars sold in South Korea in 2012 had electric-car technology.

South Korea launched a subsidized hybrid car program in 2004 and switched to tax breaks for hybrid car buyers in 2009. Hybrid car sales in South Korea jumped from 50 in 2004, to 6,312 in 2009, and 35,830 in 2012, according to ministry data. The government's 2013 plan to promote environment-friendly vehicles calls for 40,000 hybrid cars to be sold this year alone.

The first all-electric vehicles for public-sector customers arrived in 2011 and 2012. The ministry plans to add 1,000 more pure electric vehicles for its own use and build 1,100 more charging stations in 2013 to expand demand to the private sector.

Electric car buyers will get subsidies to cover 50 percent of the price differential from comparable internal combustion engine vehicles. Long-term lease and rental programs and car-sharing schemes will be developed to make electric cars more affordable and more accessible to businesses and consumers.

Hybrid car buyers will continue to get tax breaks worth up to 3.1 million won (about $3,000). Hydrogen fuel cell cars will be added to the mix of environment-friendly vehicles in 2013 with Hyundai Motor Co. ramping up the production of its first hydrogen car model.

In addition, the existing natural gas vehicle program, mainly designed for the changeover of diesel-engine city buses and utility trucks to natural gas engines, will continue to expand clean fuel use for large-size vehicles.
60. Recent Developments in China - February

Along with the launch of the Year of the Snake, a great deal of activity has been underway in China in the last month. Key items are summarized below:

China Adopts New Fuel Standards

On February 6th, China’s State Council issued a timetable for its program to upgrade fuel quality, aiming to implement a strict standard nationwide by 2017 in its latest bid to cut pollution. The country will issue the “5th-phase” standard for automobile petrol, with sulfur content within 10 ppm (parts per million), before the end of the year. There will be a grace period until late 2017, according to an executive meeting of the State Council chaired by Premier Wen Jiabao. When a grace period comes to an end, it means the standard will be in practice nationwide, Xinhua reported.

Beijing is the only city in China to have adopted such a standard, equal to Europe’s Euro V vehicle emissions cap of sulfur content below 10 ppm.

The “5th-phase” standard for automobile diesel, with sulfur content within 10 ppm, will come before June this year, with a grace period before the end of 2017, the statement said. The “4th-phase” standard for automobile petrol, namely no more than 50 ppm of sulfur content, has already been issued two years ago but the deadline for national implementation was then set for 2014.

According to the statement, the General Administration of Quality Supervision, Inspection and Quarantine and the Standardization Administration will soon issue the “4th-phase” standard for automobile diesel with sulfur content within 50 ppm and the transitional time will expire at the end of 2014.

Domestic oil refiners should upgrade their equipment to ensure that they can provide qualified products following the timetables, it said.

Gas prices should be fixed properly and subsidies should be given to disadvantaged people and non-profit organizations, the statement continued.

The Sinopec Corp. said last week it is upgrading desulphurization facilities and will supply cleaner oil products that meet national standards for pollutant emissions in 2014.

China’s developed regions, including Shanghai, Jiangsu and Zhejiang, use the national “4th-phase” standard of 50 ppm or below. Yet most parts of China still use the National III standard, which allows sulfur content of up to 150 ppm for gasoline and 350 ppm for diesel. The current standard in Europe for both gasoline and diesel is 10 ppm and in the US the restriction is 30 ppm for gasoline on average and 15 ppm for diesel. Some areas of China even still allow the National II diesel standard that caps sulfur content at 2,000 ppm.

But cleaner fuel may also mean higher prices. Sinopec Corp, China’s biggest oil refiner, recently said that it will invest about 30 billion Yuan a year to improve fuel quality. By the end of this year the company will upgrade desulfurization technologies at 12 of its refineries. When Beijing and Shanghai switched from the national “3rd-phase” standard to the stricter national “4th-phase” one five years ago, petrol prices rose by 0.2 to 0.3 Yuan ($0.03 to 0.05) per liter. The possibility
of price hikes has stirred much discussion about who will bear a rise in petrol prices, which are already held by many to be too high. "The statement shows that the gas price hikes will be shared by the government, enterprises and consumers together," according to Gao Shixian, a researcher with the Energy Research Institute under the National Development and Reform Commission. "Environmental protection is a public issue and it is reasonable for the government to provide certain compensation so that nobody shoulders the pressure alone," said Wang Zhen, deputy head of the China University of Petroleum's China Energy Strategy Research Institute.

Market data shows that diesel trucks account for about 25% of China's motor vehicles, but they generate nearly 80% of the total pollutants. Though Beijing has now adopted the strictest fuel standards in the nation, experts warn that the poor quality diesel used in the surrounding cities will hinder the capital's efforts to improve air quality. According to local media reports, the average number of commercial trucks - many of them low-tech diesels registered in areas with lower emission standards - that enter Beijing each night can hit 140,000.

In addition to cleaner fuel, improved car powertrains are also important, analysts said. The push for quality fuel will affect the entire consumer chain, as higher gasoline prices will boost demand for energy-saving vehicles, said Cao He, an auto analyst with China Minzu Securities. The move would force out small producers that are technically and financially unprepared for the upgrade, Cao said.

Analysts say foot dragging by China's highly influential state oil companies, which will need to upgrade refining equipment to meet the new standards, has contributed to the pollution problem. Bureaucratic fighting between the environment ministry on the one hand and China National Petroleum Corp (CNPC) and Sinopec Group on the other has thwarted stricter emission standards for diesel trucks and buses -- a main cause of air pollution blanketing dozens of China's cities.

To be sure, many sources contribute to air pollution levels that hit records in January, but analysts say the oil companies' foot-dragging and disregard of environmental regulations underscore a critical challenge facing a toothless environment ministry in its mission to curb air pollution.

With widespread and rising public anger changing the political calculus, it also poses a broader question of whether the incoming administration led by Communist Party chief Xi Jinping will stand up to powerful vested interests in a country where state-owned enterprises have long trumped certain ministries in the quest for economic growth at all costs. "I think the Communist Party's new government should weaken CNPC and Sinopec," said Wang Yukai, a professor from the National School of Administration. "These interest groups have too much power."

Delays in implementing stricter emission standards are rooted in money -- chiefly, who should pay for the price of refining cleaner fuels? By some estimates, auto emissions contribute as much as a quarter of the most dangerous particles in Beijing's air.

Sinopec chairman Fu Chengyu, quoted in state news agency Xinhua last week, acknowledged that China's refineries are one of the main parties that should bear responsibility for air pollution. Even so, he added that was not because fuel failed to meet standards but rather because fuel standards were not sufficient.
Frustrated by the repeated delays in enforcing existing environmental standards, China's deputy environment minister, Zhang Lijun, called a meeting in late 2011 with officials from the country's two biggest oil companies. In unequivocal statements, he sought to lay down the law: The ministry was not going to further delay the cleaner China IV emission standard for trucks and buses, despite reluctance by CNPC and Sinopec to supply the fuel that would cost more to produce. "If the sulfur content in your oil is too high and does not meet the standards, and if cars break down, it'll be your responsibility. The environment ministry will have nothing to do with it," Zhang said, according to Tang Dagang, director of the Vehicle Emission Control Center, who was present at the meeting.

The officials from the oil companies responded by promising to supply the cleaner fuel after the Lunar New Year in 2012, a traditional holiday that fell in January that year. But a few months later, a spot check by the environment ministry showed the companies were still supplying ordinary diesel, said Tang, whose policy research group is affiliated with the ministry.

With media focusing on a sudden worsening of the air quality in Beijing at the start of 2013 -- 21 days in January recorded "heavily polluted" levels or worse -- urban residents are increasingly impatient with the political wrangling.

The environment ministry, however, faces formidable odds in the face of China's complex bureaucracy and weak enforcement of laws. At least 10 government entities such as the powerful National Development and Reform Commission (NDRC) and the Ministry of Industry and Information Technology (MIIT) shape policies that affect the environment.

Unlike the U.S. Environmental Protection Agency, the environment ministry has no power to set fuel emission standards, and sometimes it is not even consulted on decisions taken by other government departments that would affect the environment. For example, when the MIIT and the NDRC held a meeting to deliberate on a policy subsidizing energy-saving cars, they never contacted the environment ministry, said Ding Yan, deputy director of the Vehicle Emissions Control Center. As it turns out, some of these cars are actually relatively heavy polluters.

In 2008, China promoted the State Environmental Protection Administration to a full ministry in a bid to give it more weight in the country's fight against pollution. Yet the ministry still lacks the authority to force big state-owned enterprises and local governments to toe the line. "Even a powerful environment minister is of no use," Ding said. "You need the highest leaders like Xi Jinping and Li Keqiang to really value the work of the environment ministry."

Excessive pollution levels have already prompted the Beijing government to roll out a series of temporary emergency measures such as shutting down 103 heavily polluting factories and taking 30 percent of government vehicles off roads, but the capital's air has remained hazardous.

It remains unclear whether Xi will restrain the influence of the oil firms, but with public anger rising, and with a normally compliant media joining in the calls for action, political pressure is growing.

The problem for oil firms such as PetroChina, the listed arm of CNPC, and Sinopec is that central planners set prices at the pump, even when global energy costs remain high. Tang said both CNPC and Sinopec have told the environment ministry that they would have supplied the fuels "if they had gotten a reasonable price".
Jiang Kejun, research professor at the NDRC's Energy Research Institute, says it is unreasonable to demand that CNPC and Sinopec bear the cost of refining cleaner fuels. "I'm an environmentalist and I also hate the actions of CNPC and Sinopec," Jiang said. "But we have to tell the public: energy prices will rise significantly. To enjoy both low energy prices and also fresh air, there's no way you can have both."

With no supply of cleaner diesel fuel, Beijing had to delay the implementation of the China IV emission standard for diesel trucks and buses twice -- first in 2011 and then later in 2012, when it was extended to this July. The new standard aims to cut emissions of particulate matter and nitrogen oxides -- two key components of urban smog -- from trucks and buses by 80 percent and 30 percent, respectively, said Vance Wagner, a senior researcher at the International Council on Clean Transportation.

"Diesel vehicles, especially trucks and buses, are a disproportionately large source of emissions," Wagner said in emailed comments. He cited environment ministry data that showed large trucks comprise only about 5 percent of China's vehicle fleet, but emit over 60 percent of particulate matter emissions.

In response, China's finance ministry has stepped in to negotiate preferential tax policies with the oil firms to help offset the higher costs of producing cleaner diesel fuel, say people close to the environment ministry.

Yue Xin, head of the vehicle fuels and emissions lab at the Chinese Research Academy of Environmental Sciences, has spent more than three years sparring with CNPC and Sinopec on a committee that sets fuel standards. Yue is one of two members representing the environment ministry on the panel while about 70 percent of the representatives are from the oil firms.

Now, Yue, whose group is affiliated with the environment ministry, is lobbying for the oil firms to put "detergents" in its gasoline, which will burn fuel cleanly. The oil firms oppose it because of the costs, Yue said.

**China Net Diesel Exports Rose in January to Highest in 27 Months**

China, the world's second-biggest oil consumer, boosted net diesel exports to the highest level in 27 months in January as domestic stockpiles increased. Overseas sales of the fuel exceeded imports by 309,273 metric tons, according to data e-mailed by the General Administration of Customs. That's 22 percent higher than December and the most since October 2010, according to data compiled by Bloomberg.

Overseas diesel sales rose at the same time commercial inventories of the fuel jumped 18 percent at the end of January from a month earlier, a report from Xinhua News Agency's China Oil, Gas & Petrochemicals newsletter said on February 21st. That's equivalent to 9.48 million tons, the highest since June, according to Bloomberg calculations.

Diesel exports last month rose threefold from a year ago to 379,583 tons, while imports increased 38.5 percent to 70,310 tons, the data show. Gasoline exports climbed 12 percent to 315,345 tons, while imports were at 15 tons.

China's imports of natural gas through the Central Asia pipeline, mostly from Turkmenistan, rose 45 percent to 1.49 million tons last month while liquefied natural gas imports gained 16 percent to 1.51 million tons.
Crude imports from Iran fell 36.9 percent from a year earlier to 1.32 million tons, according to the data.

**China Increases Gasoline, Diesel Pump Prices as Crude Costs Rise**

China, the world’s second-biggest oil consumer, increased fuel prices for the first time since September after the cost of imported crude rose. The maximum that gasoline can be sold to motorists will advance by 300 Yuan ($48) a metric ton and diesel by 290 Yuan a ton, the National Development and Reform Commission said in a statement on its website. The pump price of 90-RON, China III gasoline in Beijing will rise 3.1 percent to 10,030 Yuan a ton, or $4.60 a U.S. gallon, NDRC data show. The China III specification is similar to the Euro III fuel standard.

Brent oil, the benchmark price for more than half the world’s oil, has gained 4.6 percent to $113.91 a barrel since China cut fuel prices on November 16th.

“The price increase is good news for Sinopec which has been enjoying positive refining margins in recent months,” Neil Beveridge, a senior research analyst at Bernstein in Hong Kong, said in an e-mailed report.

Gasoline and diesel prices are set by the NDRC under a system that tracks the 22-day moving average of a basket of crudes comprising Brent, Dubai and Indonesia’s Cinta. The government may adjust fuel rates when the measure changes more than 4 percent from the last modification. Crude gains have met the threshold since the November cut, the NDRC said.

PetroChina (857)'s refining operations lost 30 billion Yuan in the first nine months of 2012, the company said on October 30th. Sinopec didn’t give a figure for its crude-processing unit.

China may let oil companies set fuel prices according to guideline rates posted by the government as part of planned reforms, the official Xinhua news agency has reported, citing Peng Sen, a former vice chairman at the NDRC. The new system may also shorten the pricing cycle to 10 days from 22 days and replace Indonesia’s Cinta with New York-traded West Texas Intermediate oil, China Petrochemical Corp., the parent company of Sinopec, said in its online newsletter.

“We expect the government to announce the oil product pricing reforms post the National People’s Congress in March,” Beveridge said in the report. “This should improve sentiment towards refiners and reduce losses.”

The increase threatens to boost the consumer price index, according to Nomura Holdings Inc. Inflation was 2.5 percent in December from a year earlier, the most in seven months, according to government data. China must be alert to imported inflation and changes in price expectations, the People’s Bank of China said on February 6th. “We estimate the weight of gasoline in the CPI basket to be around 0.5 percent, so the direct impact of this hike on CPI inflation will be limited,” Zhang Zhiwei, the chief China economist at Nomura in Hong Kong, said in an e-mailed report. “But if further price hikes are in the pipeline, which we believe to be the case, then the combined effect on CPI inflation would be visible.”

**Beijing, Shanghai Air Quality 'Can't Be Compared'**
Claims that Shanghai's air may be more harmful than Beijing's have been dismissed by environmental experts who say air quality in the two cities can't be compared. Recent media reports noted that Shanghai's air contained more organic chemicals and heavy metals than Beijing's, raising concerns that it was more harmful to health as the yearly density of PM2.5 particles, which are small enough to enter deep into the lungs, was almost the same in both.

However, experts say you can't compare the two cities based simply on one or two pollutants. Zhuang Guoshun, an environmental researcher at Fudan University, told the Shanghai Evening Post that the composition of haze in the two cities was different and the content of harmful particles in the air was also different. In different seasons, the two cities' air also showed a bigger difference, he said, adding that Beijing so far hadn't started monitoring nitrogen particles, a major harmful content in the air.

The yearly density of PM2.5 in Beijing is between 50 to 70 micrograms per cubic meter, while in Shanghai it is about 40 to 70 micrograms per cubic meter. China introduced a new air quality evaluation system this year and included monitoring of PM2.5 particles. According to the Shanghai Environmental Monitoring Center, the average density of PM2.5 in the second half of last year in the city was 48 micrograms per cubic meter, 37 percent higher than the nation's yearly limits. The daily limit of PM2.5 is 75 micrograms per cubic meter and yearly limit 35.

Qian Hua from Shanghai Academy of Environmental Sciences also said the air in Beijing was different from that in Shanghai. "The air in Beijing is drier than in Shanghai and its pollutant discharge is also different from Shanghai," Qian said. "The major sources of pollutants in Beijing are vehicle exhausts, coal burning for heating in winter and sandstorms from February to April, while Shanghai's are vehicle exhausts and industrial pollutants."

"The two cities' temperature, humidity and geographic location are quite different, so chemical changes and meteorological conditions also differ."

He said it was meaningless to compare which city had the worse air quality but it was important for all cities to study the sources of different pollutants and how they lead to secondary pollution after chemical changes caused by the weather.

"Using clean energy, controlling vehicle exhaust emissions and improving industrial procedures to reduce pollution discharges are all effective to lessen air pollution," he said.

**Smog That Shrouded Beijing a Brew of Deadly Chemicals**

THE heavy smog that affected north China in January contained a heavy concentration of deadly organic compounds, according to the Chinese Academy of Sciences. Wang Yuesi, an academy researcher, said the smog that shrouded Beijing and other cities in the region contained chemicals that were present in London's Great Smog of 1952, in which about 12,000 people died, and the photochemical smog in Los Angeles from 1940 to 1950 which killed about 800 people.

The academy's study found that the source of the air pollution was vehicle and industrial emissions.

In Beijing, vehicle emissions were the biggest problem, making up about a quarter of the air pollution, the study found. This was followed by the burning of coal and dust and sand blown in from outside the city which each made up about a fifth of the pollution.
The academy's experts said coal burning should be controlled and attention paid to emissions by diesel vehicles and the quality of the fuel they used.

Recently, smog again disrupted traffic and flights in Beijing, with moderate or serious air pollution reported and visibility down to 500 meters during the early morning, the Beijing Environmental Protection Monitoring Center said. At one point, visibility at the Beijing Capital International Airport fell to 5 to 10 meters, causing flights to be delayed, Xinhua news agency reported.

Meanwhile, fireworks caused PM2.5 readings to skyrocket in many cities during the Spring Festival holiday, the Ministry of Environmental Protection said. Figures released by the ministry showed that 42.7 percent of 74 cities reported higher-than-normal readings of the dangerous particles measuring 2.5 microns or less in diameter, Xinhua said.

The highest average reading in a single day was 426 micrograms per cubic meter, or 5.7 times the country's standard. North China's Tianjin hit 577 on lunar New Year's Eve, the highest of all cities. Some cities also saw excessive readings for PM10 and sulfur dioxide, Xinhua said.

"To improve the air quality and create a favorable environment for you and your family members, please set off fewer fireworks or no fireworks, in order to reduce emissions of pollutants," the official Xinhua news agency cited an unnamed official with the Beijing Office of Fireworks and Firecrackers as saying just before the New Year.

The city's three main fireworks retailers have reduced to 750,000 the number of cartons of fireworks in stock for this year's festivities, down from 810,000 last year. The number of shops approved to sell fireworks in has also been cut to 1,337 from 1,429, Xinhua added.

Pollution in Beijing regularly exceeds 500 on an index that measures particulate matter in the air with a diameter of 2.5 micrometers. Above 300 is considered hazardous, while the World Health Organization recommends a daily level of no more than 20. Last month pollution hit a record, 30-45 times above recommended safety levels, blanketing the city in a thick, noxious cloud that grounded flights and forced people indoors, and prompting emergency measures such as factory closures.

**Taking Control of Air Pollution – Learning From Australia**

As China searches for ways to clear the smog from its cities, it need look no further than Australia, its Asia-Pacific neighbor, as a leader in air quality management. Australia has some of the cleanest air in the world, thanks to legislation and management strategies working to reduce emissions and improve air quality since the 1960s. Over the last 15 years in particular, government controls on industry, motor vehicles and fuels, as well as backyard burning, have made a positive difference in cleaning up the cities’ air. Today, air in Australian cities is generally better than in cities in most parts of the world.

"We certainly are leaders in the world in good air pollution management control approaches and procedures," Professor Howard Bridgman, president of the Clean Air Association of Australia and New Zealand (CASANZ), told Xinhua. "I've been working on air pollution problems in Australia since I came here in 1977, and over those years I've seen lots of positive developments in air pollution management," he said.
However, the nation also has one of the highest per capita emissions rates from burning fossil fuels. In 2011, Australia recorded 17.3 tons of carbon dioxide emissions per person, on par with the United States.

To cut fossil fuels and other harmful emissions -- fighting both climate change and city smog in the process -- Australia is encouraging its citizens and industries to further reduce their contribution to air pollution levels. The Gillard government recently signed up to a second period of the Kyoto commitment, legally binding Australia to its target of cutting greenhouse emissions by at least 5 percent by 2020. Perhaps the most controversial step towards this goal in 2012 was the introduction of a price on carbon emissions -- to become a fully-fledged emissions trading scheme (ETS) in 2015.

London's Air Pollution Policies May Help Beijing

The Chinese capital Beijing recently suffered serious air pollution which gathered headlines across the world. The problems that Beijing and Chinese cities suffer has parallels with pollution problems faced in previous decades, and still faced, in cities in developed countries. London suffered serious smog in the past and has radically changed policies as a result. It still faces public health challenges, which it seeks to tackle through promoting a better environment.

Murad Qureshi, chair of the London Assembly health and environment committee which oversees the work of the London mayor, talked about the city's history of smogs and how they led to a new approach. Qureshi said "In 1952 we had a particularly bad few weeks of sulfur oxide pollution which literally meant Londoners were dropping dead from intense smog."

Dr. Gary Fuller, senior lecturer at the Environmental Research Group in King's College, London, told Xinhua, "The 1952 smog is thought to have killed between 4 and 12,000 over just four or five days; this was a disaster." "It was not the first smog, there had been smogs in industrial towns before in Belgium and the U.S., but the London smog is famous because of the number who died over such a short period," said Dr. Fuller. He added, "Since 1952 London's air pollution has changed, we have moved away from burning coal to heat our homes -- using natural gas -- but London still has many pollution problems. But today our problems come mainly from road transport."

But the burning of solid fuel in London in 1952 and in Beijing and its surroundings now is a similarity between the two. Lessons can be learned by Beijing from London.

Dr. Fuller said that like all big European cities London has problems with nitrogen dioxide pollution and with PM10, PM2.5 from traffic (particles in the air which when breathed in may cause damage to humans. PM 2.5 is smaller, and can cause more damage because they can be drawn deeper into the body).

Dr. Fuller said, "There are two priorities -- you can seek to manage air pollution all of the time, or you can seek to be responsive and try to manage air pollution at times when it is higher. This leads to two different approaches. In Beijing if you look at the average pollution concentrations, the PM2.5 in Beijing, it contains a lot of old stale coal smoke; this is coming from industry quite a long way away. So, this requires a solution that comes from outside the city."

"If we look at the type of conditions that Beijing experienced recently, this is where settled air sits over the city so that the problems it experienced came from pollution sources within the city," he added. He continued, "If you wish to tackle extreme smog events then the chances are
that priority has to be given within the city; if you wish to tackle the longer term exposure then you have to look outside the city to industry around."

"You have to control both, but emphasis has to be place on controlling air pollution all of the time rather than responding to air pollution episodes," said Dr. Fuller.

Like Beijing and other big cities, said Dr. Fuller, London's size means that by the time air reaches the center it has already passed over suburban areas where it picks up pollution. In addition, a recent period of poor air quality in London had been caused by pollution which may had originated mainly in Poland, but was brought to the city on easterly winds.

This had lessons for China. "Solving a big mega-city's air pollution problems is not simple. It involves action at a local level to look at abating traffic, and it requires action in the region around us which is the source, if you like, of long range air pollution," said Dr. Fuller.

Diesel engines are a real problem, and a source of increased pollution in recent years. Dr. Fuller explained, "We have seen a huge change in the cars in London. If you go back 10 or 12 years fewer than 20 percent of new cars would have been diesels and now we are approaching 50 percent. Diesel engines produce a lot more nitrogen oxide and PM10 and PM2.5 particles; many of the benefits that we are getting from newer and supposedly cleaner vehicles on the road is offset by the increase in diesel vehicles," he said.

Qureshi agreed, "It is something which one can certainly learn from London. Our experience has been that when the emphasis has been to reduce carbon, exempting diesel cars from those targets adversely adds to the local pollution problem."

**Shanghai Car Plate Prices Expected to Remain High**

The average bid for an automobile license plate in Shanghai is expected to remain high at the latest monthly auction. A total of 9,000 auto plates will be up for auction, the same number as last month, according to Shanghai Commodity International Auction Co. The average plate price in January was 75,332 Yuan ($12,070), almost 6,000 Yuan more than the previous month and a record high for a seventh consecutive month, according to the auction company.

Feng Shiming, an auto analyst of Menutor Consulting, expects the average plate price this month will be a little higher than in January. "China's auto sales rose 46% in January to a monthly record and Shanghai has played a big role, which means more car buyers will join the auction," he said. But the rise will not be dramatic because many car owners will buy plates from other provinces, mainly from Zhejiang and Jiangsu, as the city has no strict policy to limit car plates from other provinces, Feng said.

Yao Ming, general manager of a Shanghai Volkswagen 4S store, estimates that the plate price will be more than 70,000 Yuan, but does not believe it will be as high as in January. "In January, a lot of car buyers rush to bid for a plate so they can drive during the Spring Festival, which pushed the price to a peak," Yao said. A salesman surnamed Zhang from Shanghai Hongchi Auto Sales said the number of clients hiring the company to bid for a plate is less than last month.

Secondhand car plates in Shanghai have reached about 81,000 Yuan, the Shanghai-based Dragon TV reported.
The city began auctioning auto plates in 2000 to control the number of cars, but prices keep rising. Last July, the municipal government extended the holding period for a plate from one year to three years, trying to curb speculative bidding. New energy vehicle buyers are offered plates for free.

**Shanghai New-Energy Buses to Hit the Road**

Shanghai is to introduce 200 new-energy buses in a bid to cut emissions and reduce noise, Xinhua News Agency reported on February 20th. A new-energy bus, using electricity rather than petrol, could run for nearly 10 hours, or 150 kilometers, even if it is fully loaded with the air-conditioner working, said Wang Binfeng, deputy general manager of the Shangnan branch under Pudong Public Transport. Meanwhile, remote Monitoring will prompt alerts if the battery has problems.

Shanghai, which suffers from dense haze, will follow Beijing in implementing a tighter National-5 vehicle emission standard this year, which is equivalent to Euro-5, Zhang Quan, director of the Shanghai Municipal Environmental Protection Bureau, said earlier.

In addition, Shanghai is considering a draft to compulsorily suspend official vehicles when the Air Quality Index exceeds 300, according to Zhang.

**Draft Rules Open to Public For Comment**

The draft version of a new set of policies to control fine particle pollution is open for public comment until March 4th, according to the Environmental Protection Ministry. It consists of suggestions to manage PM2.5 pollution - particles smaller than 2.5 microns in diameter that can go deep into the lungs - from all kinds of sources, including industry, agriculture and automobiles. "It is more like a guide to all levels of government bodies on the detailed measures, technologies and management approaches to deal with PM2.5," Feng Bo, an official from the ministry's science, technology and standards department.

One suggestion that attracted media attention is to enact laws to make barbecues in open air illegal in heavily polluted cities. "Such activities have certain impacts on the PM2.5 level in the environment, that's why we made this proposal," said Feng.

The draft also highlights the urgency to start research on and control the total amount of PM2.5 emitted, and emphasizes that energy utilization and planning for urban construction are key methods to combat PM2.5.

It set the goal to build city-level efficient emissions monitoring and evaluation systems by 2015, with detailed targets for the government and enterprises. By 2020, a regional monitoring, assessment and control system is expected to be formed, with PM2.5 levels dropping significantly.

**Vehicle Demand May Reach 20.8 Million**

China's total vehicle demand consists of 16.8 million passenger cars, 8.5% more than that in 2012, and 385,000 commercial vehicles, an increase of 1%, the Economic Information Daily reported, citing China Association Auto Manufacturers. The total demand is calculated by the total Chinese vehicles sales plus the number of imports and subtracting the export volume, said Shi Jianhua, deputy secretary-general of China Association Auto Manufacturers.
The passenger cars sales volume is expected to grow 8.5% to 16.8 million. The passenger cars market will maintain a steady growth, and the sales volume may reach 11.55 million, with a 7.5% year-on-year growth. The sales volume of SUVs may reach 490,000, with a 23% growth.

The MPV sales volume may maintain the similar level as in 2012 at about 490,000. Demand for crossover passenger vehicles may grow by 2% to about 2.3 million.

The commercial vehicles market, including cargo trucks and buses, may witness a 1% increase to 3.85 million. The sales of cargo trucks may grow one percent to 3.3 million, and the bus market may increase to 520,000 with a growth of 5%.

In 2013, the imported cars demand may continuously slow to 25% and reach 1.45 million, but export may grow by 24% to 1.30 million.

**Electric Cars Sales Sag**

Although the government has launched several measures trying to boost the purchases of electric cars, they have so far failed to ignite sales. A recent survey by the China Association of Auto Manufacturers on e-cars in Beijing and Changchun shows that during the past two years, the sales of electric cars for private use are close to none.

Dong Yang, executive vice-chairman of China Association of Auto Manufacturers, said, “There are only a few people who spend their money on new energy cars. Here's the thing, the central government approved the subsidies, but the local governments' subsidy distribution system got delayed. Besides, the infrastructures for e-cars, like battery charging piles, are not keeping up with the government's promise.”

Ideally, battery-driven electric cars can save 6,000 Yuan a year when you compare to fuel-driven cars. No need to mention that they contribute to a greener environment. But the battery's maintenance is a relatively big expense, compared with the price of an e-car. Li Jie, potential car buyer, said, "If I spend between 70,000 to 80,000 Yuan to replace a new battery, it would be very difficult to accept this, as a subsidized e-car only costs 120,000 Yuan."

Another BIG hurdle for e-car sales is that there are far less battery chargers available than gas stations, and there are only a few public spaces around to charge the batteries, especially in urban areas. Li Jie, potential car buyer, said, "The battery charging sites are much fewer than gas stations." Xu Weihan, e-cars dealer of Evbuy, said, "In urban areas, especially in old cities, it's hard to set up a battery charge network, there will be bottlenecks, as there are no parking places for battery charging, basically."

Some car dealers say the lack of infrastructure for e-cars remains the biggest issue that blocks the green cars from becoming popular among consumers.

**Energy Conservation, Emission Reduction Goals Set for Combustion Engines**

China’s State Council has released a policy document regarding implementation of future requirements related to energy savings and emissions for the manufacturing of internal combustion engines to conserve oil resources and improve air quality, according to an announcement appearing on its website on February 17th. The forthcoming requirements would set limits on oil consumption in combustion engines running on gasoline and diesel fuel as well
as provide technical standards such as calculation methods for energy savings and emission reductions.

The policies would affect internal combustion engines used in transportation, construction, agriculture, marine vessels, military equipment, and other power equipment, the statement said.

By 2015, China hopes to lower the oil consumption rate in internal combustion engines by between 6 percent and 10 percent, compared with 2010 levels, and estimates that this would save 20 million metric tons of oil, and cut carbon emissions by 62 million metric tons, according to the calculations released by the State Council.

The statement said nitrogen oxide emissions from internal combustion engines could be reduced 10 percent by 2015 compared to 2010 levels, if all of the strategies are implemented.

The policy document states that further measures, standards, technical specifications, and subsidy policies will be released to guide industry toward these policy goals.

The State Council hopes to direct the focus of research and development in key technology for electronically controlled fuel injection systems and a wide range of other technology used in internal combustion engines, as well as to improve technology for exhaust system after-treatment, such as catalytic reduction devices, filters, and recirculation systems.

By 2015, all diesel passenger vehicles should have high-pressure fuel injection systems and aim to reduce fuel consumption by 5 percent to 8 percent compared to 2010 levels, the document states. By 2015, between 30 percent and 40 percent of new passenger vehicles powered by gasoline should have engines with direct injection fuel systems, and lower fuel consumption rates by between 8 percent and 10 percent compared to 2010 levels.

The document also says industry should aim for further energy savings in the manufacturing process, as well as explore alternative fuel products for use in internal combustion engines.

Japan Proposes Consultations on Stemming Influx of Air Pollutants from China

The Japanese government has proposed consultations with China about what it calls increasingly serious air pollution wafting across the East China Sea and Sea of Japan, according to a Japanese Ministry of the Environment official and Japan's Ministry of Foreign Affairs. Japan is particularly concerned about levels of particles less than 2.5 microns in diameter (PM-2.5), which have been linked to respiratory illness.

China is believed to be releasing more PM-2.5 than other countries in part because it is distributing high-sulfur diesel and heating oil, he said. Japan reportedly proposed that diesel particulate filters be required on Chinese diesel vehicles, adding that they are currently not mandatory.

On February 8th, the Japanese Foreign Ministry told China through the Japanese embassy in Beijing that Japan was “closely watching the situation” as China's air pollution could affect Japanese people in China as well as in Japan.

Since China's industrialization took off in the 1980s, increased deposits of dust and sand have been reported in much of the Japanese archipelago including Tokyo and other big cities. Over
the past decade, at times in winter, yellowish dust covered buildings, ground, and vehicles and induced coughing in asthma patients.

Japan itself does not have national laws and regulations to limit PM-2.5 on its home turf. The Atmospheric Environment Division official admitted, "We do not have any regulations on PM-2.5." While the city of Tokyo introduced PM-2.5 emissions regulations in the late 2000s, other municipalities and the central government have yet to follow suit.

**Tokyo, Beijing to Cooperate Over China Air Pollution Menace**

Tokyo and Beijing have agreed to promote technical cooperation and to explore further measures for dealing with the dangerous air pollution levels in and coming from China, a Japanese government official said. At working-level talks in Beijing, Japan expressed eagerness to cooperate on tackling the pollution, noting it not only affects people in China but has been worsening Japan’s environment, the official said.

China outlined its measures for fighting the pollution and said it will look into how Japan can pitch in, according to the official. Beijing also said it seeks to forge trilateral cooperation over the issue with South Korea, which is geographically closer to China, the official said.

The talks were held at Japan’s urging to consider measures against PM2.5 air pollution, or hazardous particulate matter 2.5 microns (2.5 thousandths of a millimeter) in diameter or less that can cause health problems. Japan hopes its technology can be used to help trace the origins of PM2.5 and to predict how it will spread, the official said.

In January, a thick blanket of toxic smog covered a large part of China, stoking fears over its spread to Japan.

The meeting was attended by officials from Japan’s Foreign, Environment and industry ministries, as well as representatives from the Chinese environment ministry. Chief Cabinet Secretary Yoshihide Suga said in a morning press conference that the government intends to compile provisional measures this month to deal with the air pollution originating from China. The steps include strengthening monitoring at the municipal level and issuing public warnings when pollutants in the air reach an unsafe level, Suga said.

**Beijing Air Pollution Said Worse Than Japan's Ever Was**

Air pollution in Beijing is worse than anything Japan ever experienced, according to a medical attaché at the Japanese Embassy in Beijing. Speaking at the Japanese School of Beijing on February 21st, Kayoko Hirano said pollution levels in the Chinese capital were worse than in the Japanese cities of Kawasaki and Osaka around 1970, when the problem was at its most severe.

About 50 parents and guardians attended the presentation, as concerns continue to rise over the impact of air pollution on children's health.

Hirano presented data showing how air pollution in Beijing intensifies between November and March, when residents use boilers for heating purposes, and how respiratory functions are affected accordingly. She also likened the air pollution from sulfur oxides and the resultant health impact in Beijing to the well-known case of pollution-triggered asthma in the Japanese city of Yokkaichi, Mie Prefecture, around the 1960s.
Health experts are raising particular concerns about PM 2.5, or particulate matter of up to 2.5 micrometers in size, which is believed to cause asthma and lung cancer. Japanese School officials said the concentration of PM 2.5 exceeded 250 micrograms per cubic meter, the level defined as hazardous by the U.S. Embassy, on 15 days between January 7th and January 31st.

"We had to refrain from gymnastics and other outdoor activities on about half of all days in January," said Kenichi Tada, principal of the Japanese School of Beijing, which uses the U.S. Embassy standard. Tada added that it would be impossible to hold outdoor classes in Beijing if the Japanese environmental standard of 35 micrograms per cubic meter were applied.

The Japanese Embassy is recommending the use of professional-grade face masks such as those worn by dust removal workers, but few such masks are available for children. Hirano recommended that Japanese businesses stationing employees in China provide face masks and air purifiers to those employees and their family members and conduct regular health checkups on them.

**MEP To Push Tighter Emission Standards in Key Air Pollution Control Areas**

China is set to implement stricter emission control policies in key regions as set out in a plan released by the Ministry of Environmental Protection (MEP) in December, according to a report from China Environmental News, the official news agency of MEP, appearing on the ministry's website on February 19th. The report chronicles a meeting chaired by MEP head Zhou Shengxian that discussed implementation of the plan for emissions limits in 13 key areas in 19 provinces, mainly centering on regions of serious pollution, including the Beijing-Tianjin-Hebei area in northeast China, the areas around the Yangtze River and Pearl River Deltas, and several other highly industrialized areas.

According to the report of the proceedings, starting March 1, any proposed projects in industries such as thermal power, iron, steel, petrochemicals, chemicals, nonferrous metals, cement, and coal-fired industrial boilers within these key control areas must have environmental impact assessments that take into account the emissions limits laid out in the plan. Existing facilities within the industries outlined above will have to comply with special emissions limits on soot by July 1, 2014, and will have to comply with further limits on particulate matter and volatile organic compounds by Jan. 1, 2015.

Specific guidelines on emissions limits for these pollutants and for key air pollutants, such as sulfur dioxide and nitrogen oxides, for these industries are still being formulated and will be announced once they are finalized, Zhou said.

**Law Amendment Urged To Combat Air Pollution**

Citizens wait to cross the road at an intersection in Shijiazhuang, capital of north China's Hebei Province, Feb. 16, 2013. [Xinhua]

A proposed law amendment aims at
controlling the level of atmospheric pollution in major urban areas, and has the support of the general public. The third amendment to the prevention and control of atmospheric pollution needs to accelerate and add provisions such as measures on air pollution emergency incidents, regional joint prevention and control mechanism and fuel quality control, experts say.

The Chinese “Clean Air Act” was first put into effect in 1987, and its most recent edition was adopted in 2000. A newly revised draft copy was submitted by the Ministry of Environmental Protection (MEP) to the Legislative Affairs Office of the State Council in January 2010, but a copy has not yet been submitted to the National People's Congress, the Economic Observer reported.

Excessive air pollution during the Spring Festival holiday generated public outcry and many citizens are urging the government to adopt the new legislation.

Figures released on February 17th by the MEP show that 42.7 percent of 74 surveyed Chinese cities reported higher-than-normal PM2.5 reading. The highest average reading in a single day was 426 micrograms per cubic meter, or 5.7 times the country's standard of 75 micrograms, Xinhua News Agency cited.

“These rare, high-intensive, large-scale and long-lasting heavy pollution incidents lead to introspections over air pollution prevention and control efforts, and the economic and social development status in China, stimulating deeper discussions on amending air pollution laws,” said Chai Fahe, deputy head of the Chinese Research Academy of Environmental Sciences, in an exclusive interview with CnDG.

"Emission intensity per unit GDP (100 million Yuan) in China has declined in recent years. However, the total emission volume has risen due to GDP growth," he said.

International Council on Clean Transportation founding chairman Michael P. Walsh pointed out several outstanding changes. “One of the important changes is the adoption of the PM 2.5 standard which didn't exist 13 years ago, as well as the shift from coal-based air pollution to vehicle-based pollutants,” he said. "Since vehicles by their nature are mobile, it creates the need for a national provision to ensure fuel quality."
China overtook Europe in vehicle sales in 2012 and the US in 2009.

China new vehicle sales and production chart from 1994 to 2010.

Carbon monoxide, nitric oxide, nitrogen dioxide and other pollutants emitted by motor vehicles are among the major contributors to air pollution problems that frequently occur in Chinese cities.

In response to the above-mentioned problems, the State Council issued a timetable to upgrade fuel quality, aiming to implement a strict standard nationwide by 2017 in its latest bid to reduce pollution. The country will issue a '5th-phase' standard for automobile petrol, with sulfur content within 10 ppm (parts per million) before the end of the year. There will be a grace period until late 2017, according to an executive meeting of the State Council chaired by premier Wen Jiabao in February, Xinhua reported.

Beijing and Shanghai PM 2.5 source pie charts show that motor vehicles contribute over 20% of PM 2.5 pollution.

Higher standard to clean air

The revised air quality standard includes index PM2.5, and will be implemented nationwide by January 1, 2016, Xinhua reported.

The government monitors PM2.5 in four municipalities, 27 provincial capitals and three key regions -- east China's Yangtze River Delta, south China's Pearl River Delta and the northern Beijing-Tianjin-Hebei area beginning last year.

Mr. Chai believes that this new standard also brings more challenges. "Air quality in over 80 percent of China's 118 major cities holds to the old standard," he said. "The situation is grim." Mr. Chai believes that this law should play a greater role in ensuring people's good health from pollution as well as safeguarding their environmental rights.

More expectations

Professor Hao proposed in a report that an independent bureau should be established to manage air quality issues, similar in scope to the National Nuclear Safety Administration. "There
are many departments involved in this field. What we need is to deal with this problem more effectively and collectively," he said. "We should attach the same level of importance to air pollution as nuclear safety."

"The latest statistics from the Beijing Health Bureau show that lung cancer morbidity rates have surged 56 percent between 2001 and 2010 in Beijing. Air pollution is one of the primary causes. A sound and powerful law will showcase government’s sincere heart to protect air and environment," wrote an editorial from the Beijing News newspaper.

Guomao area near Beijing's Eastern 3rd Ring Road is enveloped with heavy smog on January 12.

Background information: Top 10 legislative highlights

1. Basic goal: Improve air quality levels to protect people’s health
2. Forecast, early warning and emergency measures of heavy pollution incidents
3. Regional joint prevention and control mechanism will be settled through legal channels
4. Multi-pollutant coordinating control will combat complex air pollution problems
5. Supervision and assessment mechanisms of local government’s responsibility in air pollution control will be settled; environmental quality will be added as a standard to assess local officials.
6. Total Emission Control is bound to be extended from two control zones (zones designated by the State Council for the control of acid rain and sulfur dioxide) to nationwide with more targeted pollutants.
7. No pollutant emissions will be allowed without air pollution permits.
8. Tougher rules on mobile source pollution, including higher fuel quality, in-use vehicle environmental protection logo, etc., securing MEP’s bigger say in rule making.
9. Toxic and harmful gas will be included.
10. Stiffer punishment for law violations: revise regulations on maximum fines regarding air pollution accidents from 500,000 Yuan (US$ 80,100) to no upper limit.

61. Partial Diesel Decontrol in India to Have Small Impact on Inflation
The government says the impact of partial deregulation of diesel prices on inflation and common man would remain "small and muted". "Since the increase would be small, its impact on retail customers and inflation would remain small and muted," Minister of State for Finance Namo Narain Meena said in a written reply to the Lok Sabha.

The government had last month allowed oil companies to make small hikes in the price of diesel from time to time following which they raised the price twice by small margin. Inflation in January fell to a three year low of 6.62 per cent. However, the impact of increase in prices of diesel and petrol on February 15th will get reflected in the inflation number which will be available next month.

While petrol price was hiked by Rs 1.50 per liter, diesel was raised by 45 paise on February 15. Earlier on January 17, diesel price was raised by 50 paise a liter.

Meena said although steps have been taken in the first year of the 12th Plan (2012-17) to adjust diesel prices and to cap the subsidy on LPG, this has not eliminated the under-recovery of oil companies. "The increase in under-recoveries of OMCs is adversely affecting the financial position of OMCs and may affect mobilization of funds for new projects during the 12th Plan period," Meena said.

The government in December obtained Parliament approval for raising the oil subsidy bill by Rs 28,500 crore over and above the amount earmarked in the Budget for 2012-13. With the additional allocation, the total oil subsidy bill in the current fiscal will soar to Rs 72,260 crore.

SOUTH AMERICA

62. Study Finds Andean Glaciers Melting At "Unprecedented" Rates

Climate change has shrunk Andean glaciers between 30 and 50 percent since the 1970s and could melt many of them away altogether in coming years, according to a recent study published in the journal The Cryosphere. Andean glaciers, a vital source of fresh water for tens of millions of South Americans, are retreating at their fastest rates in more than 300 years, according to the most comprehensive review of Andean ice loss so far.

1 "Current state of glaciers in the tropical Andes: a multi-century perspective on glacier change". A. Rabatel1, B. Francou2, A. Soruco3, J. Gomez4, B. Cáceres5, L. L. E. Cevallos6, R. Basantes2,7, M. Vuille8, J.-E. Sicart2, C. Hugel9, M. Scheel9, Y. Lejeune10, Y. Arnaud2, M. Collet2,7, T. Condom2, G. Consoli2, V. Favier1, V. Jomelli11, R. Galarraga7, P. Ginot11,12, L. Maisincho5, J. Mendoza13, M. Ménégoz1, E. Ramirez13, P. Ribstein14, W. Suárez15, M. Villacis7, and P. Wagnon2. 1UJF-Grenoble 1/CNRS, Laboratoire de Glaciologie et Géophysique de l'Environnement (LGGE) UMR5183, Grenoble, 38041, France, 2IRD/UJF-Grenoble 1/CNRS/Grenoble-INP, Laboratoire d'étude des Transferts en Hydrologie et Environnement (LTHE) UMR5564, Grenoble, 38041, France, 3UMSA, IGEMA, Calle 27, Cota Cota, La Paz, Bolivia, 4ANA, UGRH, Huaraz, Peru, 5INAMHI, Iñaquito N36-14 y Corea, Quito, Ecuador, 6IDEAM, Carrera 10 N20-30, Bogotá DC, Colombia, 7EPN, DICA, Ladrón de Guevara E11-253, Quito, Ecuador, 8Department of Atmospheric and Environmental Sciences, University at Albany, Albany, NY, USA, 9Department of Geography, University of Zurich, 8057 Zürich, Switzerland, 10CEN, CNRM-GAME, Météo-France/CNRS, Saint Martin d'Hères, France, 11UPPS-Paris 1/CNRS/UVM-Paris 12, Laboratoire de Géographie Physique (LGP) UMR8591, Meudon, 92195, France, 12IRD/CNRS/IFSTTAR/Météo-France/UJF-Grenoble 1/Université de Savoie/Grenoble-INP, Observatoire des Sciences de l'Univers Grenoble (OSUG) UMS222, St Martin d'Hères, 38400, France, 13UMSA, IHH, Calle 30, Cota Cota, La Paz, Bolivia, 14UMPC/CNRS/EPHE, Sisyphe UMR7619, Paris, 75252, France, 15SENAMHI, av. Las Palmas s/n, Lima, Peru
The study included data on about half of all Andean glaciers in South America, and blamed the ice loss on an average temperature spike of 0.7 degree Celsius (1.26 degrees Fahrenheit) over the past 70 years.

"Glacier retreat in the tropical Andes over the last three decades is unprecedented," said Antoine Rabatel, the lead author of the study and a scientist with the Laboratory for Glaciology and Environmental Geophysics in Grenoble, France.

The researchers also warned that future warming could totally wipe out the smaller glaciers found at lower altitudes that store and release fresh water for downstream communities. "This is a serious concern because a large proportion of the population lives in arid regions to the west of the Andes," said Rabatel.

The Chacaltaya glacier in the Bolivian Andes, once a ski resort, has already disappeared completely, according to some scientists.

**MIDDLE EAST**

**63. Israeli Ministry Fines Additional Car Importers**

On January 13th, Israel's Environmental Protection Ministry announced a second wave of fines on vehicle importers for failure to include complete air pollution data in their car advertisements. Two of the importers, who also incurred violations in May and are repeat offenders, will face doubled fines, the ministry said. The Clean Air Law of 2011 requires all new-car advertisements to include information on fuel consumption and emissions "so that the buyer can choose the cleanest and most fuel efficient vehicle," the ministry said. The new wave of fines totals 1.55 million shekels ($415,550), more than half of which was imposed on two repeat offenders: Mayer's Cars and Trucks, this time for a website advertisement for the Jaguar XF omitting pollution levels, and Shir Shlomo, for an Opel Corsa ad that included neither air pollution nor fuel consumption data. Three first-time offenders were fined $59,450 each: Universal Motors for a newspaper ad for the Cadillac SRX Crossover and CTS coupe, Sigma Motors for a bus stop ad for the Chevrolet Cruze Turbo, and Mediterranean Cars for a newspaper ad for the Alfa Romeo Alfa Giulietta, the ministry said.

**64. Tel Aviv Confronts Transportation Ministry over Diesel Traffic Ban Downtown**

Israel's Transportation Ministry is preventing a 15 percent improvement in Tel Aviv's air quality by blocking a plan to bar diesel vehicles from entering the city's center, local environmental officials say. The ministry says it does not object to the plan in principle, but that its current format would wreak havoc with public transportation.

The Tel Aviv municipality launched a wide-ranging program to improve air quality about five years ago, Moshe Blasenheim, director of the city's Environmental Authority, told reporters on February 25th. "Those steps are succeeding," he said, noting that air quality has improved dramatically in the past two years and pollution levels already meet targets set by the Environmental Protection Ministry for 2015. The city mainly measures fine particulate matter and nitrogen oxides. "We've done everything we can thus far, with the approval of the Environmental Protection Ministry, the Forum of Ministry Directors-General, and even the police."
But no one has been able to sway the Transportation Ministry to let us implement the last major component," he said. "This is it. There are no more original ideas."

The municipality, he said, is fully prepared to implement a one-year pilot program banning vehicles with diesel engines from entering the city center, patterned after European precedents. But the Transportation Ministry, responsible for a nationwide process to replace public buses with greener models, says the move comes too soon for Tel Aviv, Israel's largest metropolitan area. Of the city's fleet of 1,100 diesel-fueled buses, about 700 meet current environmental standards while the rest are in line for an upgrade, Blasenheim said.

In a written response, the Transportation Ministry said that it "does not oppose the plan to limit the entry of polluting vehicles into central Tel Aviv, except that the plan prepared by the Tel Aviv municipality would severely impede public transportation and does not provide a solution for public vehicles." The ministry "invests great effort in reducing air pollution emitted by motor vehicles throughout Israel," it added. "In this framework, it allocates hundreds of millions of shekels to the purchase of new buses with the strictest air-quality standards existing today."

There is simply more to be done, Blasenheim said. "The ministry can't just do what it wants, regardless of the public interest. Implementing this plan would reduce air pollution by another 15 percent. If necessary, the government should invest more money to increase the number of clean buses."

Other municipal moves have kicked in meanwhile, according to the Environmental Authority's Tamir Kovach. "Ninety percent of the time the nitrogen oxide levels in Tel Aviv are 50 percent lower than the national standard," he said, adding that the city's nitrogen oxide levels exceeded national standards during only seven hours in 2012.

According to Blasenheim, the air quality improvements stem from the conversion of a municipal power station from coal to natural gas; relocation of the wholesale produce market out of the city, which reduced the number of trucks entering Tel Aviv; better enforcement of business licensing and new regulations on gas station emissions; and the municipality's installation of catalytic converters in half of its trucks.

### 65. Recent Developments in Israel

This January an important government resolution regarding oil alternatives was adopted. The Israel Alternative Fuels Initiative is interesting due to the recent natural gas findings off shore Israel. The country is in the middle of an M15 (15% methanol in gasoline) experiment that includes emission tests done at Ispra, Italy (using NEDC). It is also consider promoting a large GTL plant that will produce high quality diesel and gasoline. The Environment ministry is mostly interested in CNG urban public transportation but due to some safety and security concerns there are still some barriers along the way.

**The Israel Alternative Fuels Initiative**

The Alternative Fuels Administration aims to implement government policy and support for the establishment and nurturing of a homegrown fuel alternatives industry, with the ultimate goal of reducing the world's dependence on oil in transportation. The Initiative's activities are wide-ranging and encompass cooperation with several government departments. The Administration's goals are:

- Reduction of Israel’s oil consumption while serving as a role model for the world.
• Establishing Israel as a center of academic and industrial know-how in the field of fuel alternatives.
• Dissemination of Israel’s vision and expertise throughout the world and acceleration of the world's progress in the field of fuel alternatives for transportation, both through communicating Israel’s policies and experience and through collaboration with global leaders in the field of fuel alternatives.

**Government Resolution 5327**

Government resolution 5327 from January establishes a national goal of reducing Israel’s oil consumption for transportation by 30% by the year 2025, and by 60% by the year 2030, while reducing the cost of living (lower fueling costs), encouraging green economic growth, simplifying regulatory processes for businesses, and introducing more flexibility and security for transportation. Amongst other points, the resolution also directs various government ministries to work together to formulate a tax policy outline for a range of energy sources for transportation and for vehicles, taking into consideration their oil consumption.

**The Alternative Fuels Co-Investment Fund**

This new program is aimed at encouraging investments in Israeli companies specializing in developing and implementing technologies in the field of alternative fuels for transportation. The government has designated a budget of 400 million NIS for this program, to be utilized by 2020. The program also grants an additional 50% funding in the form of a government loan for a qualifying private investment. The scope of investment is a minimum of 1.5 NIS (~400k USD) and maximum of 60 million NIS (~16 million USD) of private investments in the company during the lifetime of the program (by 2020).

**The Electric Buses and Natural Gas-Based Transportation Seminar**

On January 14th the Holon Institute of Technology hosted a special seminar on Electric Buses and Natural Gas-Based Transportation (EB/NG). The seminar, co-produced by the Prime Minister's Office, the Ministry of Transport, National Infrastructures and Road Safety and the Ministry of Industry, Trade & Labor, brought together Government, EB/NG international businesses, Israeli companies in the public transport sector, freight truck fleet operators, and importers.

The seminar's different lectures and programs showcased the multilayered options of alternative mobility to the major transport players in the Israeli market, and provided marketing opportunities for both the local and global companies in this sector.

**Eilat-Eilot Conference**

A large segment of the Eilat Eilot Renewable Energy Conference this year was dedicated to Alternative Fuels for Transportation. Among the topics presented and discussed at the conference were the government strategy to reduce oil dependence and promote innovation in the field, different aspects of natural gas as an alternative transportation fuel, and energy security through fuel choice.

In addition, the latest developments in oil substitute’s technologies and innovation in the field of biofuels and bio-jet fuels were presented.
• Eyal Rosner, Chairman and Director of the Administration of the Alternative Fuels Initiative, gave an overview of the Alternative Fuels Administration - Reducing Oil Dependence - Vision and Goals.

• Sagi Dagan, Deputy Director of the Administration, hosted a panel on Energy Security Through Fuel Choice with Dr. Gal Luft, Executive Director of the Washington, DC-based Institute for the Analysis of Global Security (IAGS), Klaus Bonhoff from NOW GmbH, responsible for implementing the German government’s EV strategy in Germany, and Itzik Ben Israel, Director, National Council for R&D.

• Dr. Anat Bonshtien hosted a panel on “Electric Transportation Israel as a Role Model”. The panel reviewed several solutions and aspects of electric transportation in Israel such as Electric Vehicles, Electric City Cars and Personal Mobility Solutions, Electric Buses, and Electric Personal Rapid Transit.

Each panel member gave an overview of a different application and vision as well as relevant possibilities and opportunities in Israel.

Bi-national Investment Funds

MATIMOP, the executive agency of the Office of the Chief Scientist (OCS), of the Ministry of Industry, Trade and Labor of Israel (MOITAL) is the official National Agency for industrial R&D cooperation in Israel, charged with promoting highly supportive policies to build Israel’s industrial infrastructure, and nurturing industrial innovation and entrepreneurship.

MATIMOP is the government agency that generates and implements international cooperative industrial R&D programs between Israeli and foreign enterprises.

The China - Israel Industrial R&D Cooperation Framework in MATIMOP, is aimed at fostering joint technological R&D cooperation projects between Chinese and Israeli industries in all technological sectors. This platform offers to the Israeli industry a variety of platforms through which Israeli companies can apply for funding with their Chinese partners.

GENERAL

66.2012 Was Among 10 Warmest Years In Global Record: NASA/NOAA

Last year was among the top 10 warmest in the modern global record, two U.S. climate-watching agencies have reported, less than a week after 2012 was declared the hottest ever in the contiguous United States. The U.S. space agency NASA and the National Oceanic and Atmospheric Administration jointly issued two reports on 2012 world temperatures. NASA ranked last year the ninth-warmest since record-keeping began in 1880, while NOAA found last year was the tenth-warmest. The difference in the two rankings may be due to NASA’s extrapolation of temperatures in areas with no weather stations, particularly near the poles, according to James Hansen, director of NASA’s Goddard Institute for Space Studies in New York.

The 2012 global surface temperature, including land and water, was 1 degree F (.56 degree C) warmer than the 1951-1980 average. That was enough to increase extreme high temperatures last year, Hansen reported.
Last year was also the 36th consecutive year with a global temperature hotter than the 20th century average, scientists from the two agencies told a media briefing.

Senator Barbara Boxer, a California Democrat who chairs the Senate environment committee, said the reports "make clear that the Earth is warming, and the trend is going in the wrong direction. We cannot afford to ignore these warnings and must make plans to address this serious threat. The health and well-being of our communities and families depends on it."

And while the moving five-year mean temperature for the globe has been flat for a decade, that doesn't mean global warming has stalled, according to Hansen, a longtime advocate for action to curb greenhouse gas emissions that contribute to climate change. Noting that each of the last three decades has been warmer than the one that preceded it, he said an "apparent standstill" in global warming could be due to weak El Nino patterns, which would normally heat up things in many places, and strong La Nina patterns, which have a corresponding cooling effect. Hansen said it also might be due to fast-developing countries like China and India, where increased particulate air pollution from fossil-fueled vehicles and industries can reflect sunlight and keep temperatures lower.

Despite evidence that human activities that emit carbon dioxide contribute to climate change, some skeptics maintain that the rise in global temperatures is due to natural variability or other non-human factors. Others question whether temperatures are in fact rising.

NOAA said in its report that most parts of the world were hotter than average over the course of 2012, including most of North and South America, most of Europe and Africa and western, southern and far northeastern Asia. Most of Alaska, far western Canada, Central Asia, parts of the eastern and equatorial Pacific, southern Atlantic and parts of the Southern Ocean around Antarctica were cooler than average, according to NOAA's National Climatic Data Center.

The two agencies also issued their report on global snow and ice cover, finding that the Northern Hemisphere had its 14th largest winter snow cover in 47 years of record-keeping. By spring, though, Northern Hemisphere snow cover shrank to the sixth-smallest size on record, NOAA said. Arctic sea ice - an important global weather-maker - shrank to its smallest size ever in 2012, 49 percent below the average and 293,400 square miles (760,000 square km) below the previous record smallest, set in 2007. By contrast, Antarctic sea ice was above average for most of 2012.

67. Soot Is Warming the World Even More Than Previously Thought

A new study finds that soot is warming the climate about twice as fast as scientists had estimated. With roughly 8 million tons of soot produced each year by burning everything from coal in power plants to oil in ship's boilers, that's bad news for the planet. And the same study for the first time points policymakers to the soot sources that will make the best targets for climate regulations.

Scientists began the 232-page study,published in the Journal of Geophysical Research: Atmospheres—4 years ago following a meeting in London organized by the International

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Council on Clean Transportation to focus scientific attention on the subject. Soot particles roughly 100 nanometers in diameter were obviously absorbing solar energy and passing it on to the atmosphere, adding to the warming caused by greenhouse gases. But "there wasn't a deep scientific basis" for reducing soot emissions, says the paper's lead author, atmospheric scientist Tami C. Bond of the University of Illinois, Urbana-Champaign. "There was promise, but the science was not completely examined."

That shortcoming has now been remedied. Under the auspices of the International Global Atmospheric Chemistry Project, 31 researchers from nine countries in a range of disciplines came together to assess the climate effects of soot. Working from published field observations, the authors looked at all the effects of soot on the planet's retention of solar energy as well as the effects of other products of soot-producing combustion. They then tried to understand why different researchers got different answers from their climate models. "It's a deeper view," Bond says.

The new, deeper view—which drew 600 comments from 20 peer reviewers—finds a prominent role for soot in global warming. All the ways soot can affect climate—among them by absorbing sunlight, shrinking cloud droplets and thus brightening clouds, and darkening ice and snow—add 1.1 watts per square meter (W/m²) to the climate system, the study concludes. "That's a big number," Bond says. It puts soot second behind the dominant agent forcing warming, carbon dioxide, which accounts for 1.66 W/m². All human-generated climate agents combined—both those that cool climate and those that warm it—account for only an added 1.6 W/m². Soot's contribution to the warming is roughly twice as large as estimated in the 2007 assessment made by the Intergovernmental Panel on Climate Change.

But all soot is not created equal, which makes reining in the current warming by reducing soot emissions tricky. Coal burning can produce soot, but it also releases sulfur that goes on to reflect additional sunlight back into space. That tends to cool the planet. Forest and brush fires produce soot, but they also produce microscopic bits of unburned "organic carbon" that can brighten clouds and cool climate. So spending a lot of money to clean up efficiently burned coal—which produces cooling sulfur but not much warming soot—or to reduce agricultural burning might net little or no reduction in warming. "The findings are both exciting and sobering," Bond says. It is now clear that "you can't just turn off black carbon."

Helpfully, the study points to which soot sources should be cleaned up for the maximum cooling effect on climate. "Diesel engines seem to be at the top of everyone's list," Bond says. Next is coal burned under less than optimum conditions in homes and small industries. But although the 4 billion people burning wood, grass, and dung for energy are clearly endangering their health, much of that burning produces so much organic carbon that cleaning it up probably would not have a dramatic effect on climate.

For soot itself, the remaining work is considerable. The uncertainties calculated in the study are still large. That is due largely to the dearth of data from the major soot-producing regions and to the poorly understood interaction of all kinds of particles with clouds. But then clouds have been the bugaboo of climate scientists for half a century.

Because black carbon only lasts in the atmosphere a matter of days, compared to carbon dioxide's atmospheric endurance of centuries, addressing it could be prime target for curbing global warming, the report said.

"This new research provides further compelling evidence to act on short-lived climate pollutants, including black carbon," Achim Steiner, chief of the United Nations Environment Program, said in a statement. Steiner pointed to efforts under way to cut black carbon emissions from heavy-duty diesel vehicles, brick production and municipal waste disposal as part of the international Climate and Clean Air Coalition. The United States was one of the coalition's founders last year.

The new assessment found black carbon emissions caused significantly higher warming over the Arctic and other regions, could affect rainfall patterns, including those of the Asian monsoon system, and have led to rapid warming in the northern United States, Canada, northern Europe and northern Asia.

Vehicles drive on the Third Ring Road on a very hazy winter day in Beijing January 12, 2013. Photo: Jason Lee

The sooty particles that make up black carbon can be a major component of urban air pollution like that now blanketing Beijing, said Durwood Zaelke, president of the Washington-based non-profit Institute for Governance and Sustainable Development and a reviewer of the study before its publication. "Black carbon is not only more important for climate than we thought, it also kills over a million people every year who contract deadly respiratory diseases by breathing air polluted by black carbon," Zaelke said in a statement.

68. PwC’s Autofacts Forecasts High Growth in Global Automotive Light Vehicle Assembly

PwC's automotive analyst group, Autofacts, has announced that it expects 2013 global light vehicle assembly will exceed 83 million units, an increase of 5.1 percent from 2012’s total. Autofacts expects the global market to remain positive overall, while the European Union and Japan will continue to be areas of concern.

Megatrends driving the global automotive industry:

- European Union. The European outlook remains a significant concern for the automotive industry, both in terms of its regional importance as well as the threat of a global contagion scenario. While there continues to be fluctuation below the topline, the region as a whole is expected to see a further, albeit slower, decline in 2013. Most markets will
likely see a depressed first half of 2013 with some territories realizing a slight recovery as economic conditions begin to improve toward the end of the year. With this in mind, Autofacts is forecasting EU assembly of 15.6 million units in 2013, a decline of 200k units compared to 2012.

- North America. While 2012 was a boom year for the region, sales and assembly growth are expected to taper in 2013. Pent-up demand continues to exist in the market with the average fleet age in the U.S. at approximately 11 years. U.S. sales are expected to reach 15.3 million units in 2013, up from 14.4 million units in 2012. In terms of assembly for the region, Autofacts is forecasting 15.8 million units for 2013, up from 15.4 million units in 2012.

- BRIC Recovery. After a relatively slow growth year in 2012, BRIC markets are expected to start heating up again in 2013. As expected, China will lead the way with 2013 assembly forecasted to reach 18.9m units, up from 16.4 million in 2012.

- Global Emission Standards. Increasingly stringent emission standards continue to drive innovation around improving vehicle efficiency. Improving existing technologies, while exploring new opportunities are playing a significant role across multiple industry sectors.

69. Study Says Biofuels Cause Pollution, Not As Green As Thought - Study

Green schemes to fight climate change by producing more bio-fuels could actually worsen a little-known type of air pollution and cause almost 1,400 premature deaths a year in Europe by 2020, according to a recent study. The report said trees grown to produce wood fuel - seen as a cleaner alternative to oil and coal - released a chemical into the air that, when mixed with other pollutants, could also reduce farmers’ crop yields.

The report, in the journal Nature Climate Change, looked into the impact of a European Union scheme to slow climate change by producing more biofuels.

Poplar, willow or eucalyptus trees, all used as fast-growing sources of renewable wood fuel, emit high levels of the chemical isoprene as they grow, the study said. Isoprene forms toxic ozone when mixed with other air pollutants in sunlight. The report estimated that ozone from wood-based energy to meet the European Union’s 2020 goal would cause nearly 1,400 premature deaths a year, costing society $7.1 billion.

The European plan would also reduce the annual value of wheat and maize production by $1.5 billion since ozone impairs crop growth, the study added.

Siting new biofuel plantations far away from polluted population centers would help limit ozone formation, the study suggested. Genetic engineering might be used to reduce isoprene emissions, it said.

Ozone can cause lung problems and is blamed for killing about 22,000 people a year in Europe. Overall air pollution, mainly from fossil fuels, causes about 500,000 premature deaths in Europe a year, according to the European Environment Agency.

The United Nations’ World Health Organization estimates global warming has caused more than 140,000 deaths annually worldwide since the 1970s. The biggest impact was recorded in developing nations where the floods, droughts and other disasters blamed on climate change left millions suffering from diarrhea, malnutrition, malaria and dengue fever.
Burning biofuels is viewed as neutral for climate change because plants soak up carbon when they grow and release it when they burn or rot. Fossil fuels, on the other hand, add carbon to the atmosphere from underground stores millions of years old.

Biofuels are often blamed for causing food price spikes by competing for cropland. Responding to such criticisms, the European Commission said last year it aimed to limit crop-based biofuels - such as from maize or sugar - to five percent of transport fuels.

70. C40 Cities, World Resources Institute Partner to Promote Transportation Initiatives

A network of 59 cities around the world and the World Resources Institute have joined forces to promote sustainable transportation initiatives to cut greenhouse gas emissions, the organizations said on January 17th. WRI’s center for sustainable transport, EMBARQ, and the C40 Cities Climate Leadership Group will contribute to sustainable transit and urban planning in the 59 cities that are members of the C40 group. The organizations will work together to support projects in C40 cities, with an emphasis on rapid transit bus systems, bike paths, and bike-sharing systems.

The C40 group includes New York City, Rome, Madrid, Istanbul, Paris, Barcelona, Washington, D.C., Chicago, San Francisco, and Los Angeles. Member cities have committed to implementing sustainable climate-related actions that will help address climate change.

The two organizations signed a memorandum of understanding in which they agreed to:
- support climate mitigation and adaptation measures through sustainable transportation policies in C40 cities,
- use C40 networks to develop and share integrated transit and urban development planning in and among C40 cities, and
- collaborate to support and promote low-carbon urban development in C40 cities, with particular attention on rapid bus transit and non-motorized transport, such as bike-sharing systems.

Cities in the C40 network outperform the overall average in several climate change-related criteria, according to a June 2012 study by the Carbon Disclosure Project. C40 cities are more likely to identify economic opportunities from climate change than cities not in the network, with 84 percent of C40 cities reporting economic opportunities, compared with 79 percent of non-C40 cities, according to Measurement for Management: CDP Cities 2012 Global Report.

C40 cities are also engaging with their supply chains at a higher rate than non-C40 cities, the study states. Fifty-one percent of C40 cities report engaging with their supply chains on climate change-related issues, compared to 39 percent of non-C40 cities, according to the study. Also, all of the C40 cities reported implementing a range of carbon emission-reduction activities, while 80 percent of other cities said they did so, the study says.

71. Meta-Analysis Links Air Pollution, Chemicals With Harm to Babies During Pregnancy

A study analyzing 16 scientific papers that each reviewed multiple human studies of environmental risk factors and pregnancy outcomes found air pollution, chemicals, and other
exposures associated with stillbirth, low birth weights, and possibly additional adverse effects on babies. The study by a team of Spanish researchers, “Environmental Risk Factors of Pregnancy Outcomes: A Summary of Recent Meta-Analyses of Epidemiological Studies,” was released January 15th in Environmental Health, an online, peer-reviewed journal focusing on environmental and occupational medicine and related studies in toxicology and epidemiology.

The team of Spanish epidemiologists, led by Mark Nieuwenhuijsen of the Center for Research in Environmental Epidemiology in Barcelona, evaluated 16 meta-analyses and concluded they found statistically significant associations between environmental tobacco smoke, air pollution, chemicals, and pesticides to stillbirth, low birth weight, and “possibly some congenital anomalies.”

The number of individual studies in each of the 16 meta-analyses varied from five to 76. Due to the small number of meta-analyses, the authors concluded more research is needed. Nevertheless, the results of the small number of meta-analyses were consistent and robust and “could provide a further insight into and/or better understanding of the association, improvement of methodology and, ultimately, to better risk management and policy making,” Nieuwenhuijsen and his colleagues wrote.

72.New Global Convention Calls for Phase-out Of Mercury in Products, Ban on Mining

A new convention agreed to by negotiators from about 140 countries will lead to the global phase out of mercury in a variety of products and processes over the next decade, eventually ban primary mining of mercury, and promote the use of new technologies in controlling emissions and releases from various industrial sources. The agreement was reached early on January 19th after more than six days of intensive negotiations.

The agreement, which was concluded after a feud over financing was papered over, was hailed by negotiators and U.N. officials as a major achievement.

The agreement, officially titled the Minamata Convention on Mercury, will be opened for signature at a diplomatic conference in Japan in October. The convention is named after the southern Japanese town where industrial dumping of mercury in a nearby bay more than half a century ago poisoned thousands of people and has still not been fully cleaned up. The convention will enter into force once 50 countries have ratified it. Officials predicted it would take three to four years to reach that threshold.

Participants said differences between donor and developing countries over financing of technical assistance to implement the convention's obligations threatened to derail the negotiations in the late stages. Negotiators agreed on a compromise under which the Global Environment Facility (GEF) will be the designated funding mechanism for the convention. However, they also agreed that an additional “GEF-plus” financing conduit—based on either a new or an existing funding mechanism—would be set up, with the details to be decided at a future meeting of parties to the convention.

The convention will require the phase out of the manufacture, import, and export by 2020 of certain products that use mercury. Among the listed products are batteries (except for “button cell” batteries used in implantable medical devices), most switches and relays, certain types of compact fluorescent lamps, and mercury in cold cathode fluorescent lamps and external electrode fluorescent lamps. Also scheduled for phase out by 2020 are mercury used in
thermometers, barometers, and other non-electric measuring devices (except for high-precision instruments for which no mercury-free alternatives are available), cosmetics such as skin lightening soaps and creams with a mercury content above one part per million, and pesticides, biocides, and topical antiseptics. The convention will also require parties to “phase down” their use of mercury in dental fillings, or amalgams, and to adopt at least two of nine listed measures to achieve reduced use.

In addition, mercury use in certain processes will eventually be eliminated, such as chlor-alkali production, for which a 2025 phase out date was fixed after Brazil and Russia lobbied for additional time. However, on the insistence of China, an exception will allow continued use of mercury in vinyl chloride monomer, which is an input in the production of PVC plastic. China is one of the few countries with a coal-based VCM production industry in which mercury is used to spark the chemical reaction.

The convention will also lead to a ban on primary mining of mercury 15 years after the treaty enters into force. According to the U.S. Geological Survey, most primary mining takes place in only two countries, China and Kyrgyzstan.

According to a United Nations Environment Program report issued on January 10th, artisanal and small-scale gold mining (ASGM) has surpassed coal burning as the world's major source of mercury emissions, with some 10 million to 15 million people active in such mining. The convention will require countries with ASGM to draw up national action plans within three years of the treaty entering into force to reduce and, if possible, eliminate the use of mercury. But the convention would require countries to take action only if they determine that their ASGM is "more than insignificant," giving governments plenty of leeway to avoid any obligations in this area.

On air emissions, the convention will require parties to install best available technologies on new facilities such as coal-fired power plants, waste incineration plants, and cement factories and to draw up plans to reduce mercury emissions from existing plants.

73. Nicholas Stern: 'I Got It Wrong On Climate Change – It's Far, Far Worse'

Lord Stern, author of the government-commissioned review on climate change that became the reference work for politicians and green campaigners, now says he underestimated the risks, and should have been more “blunt” about the threat posed to the economy by rising temperatures. In an interview at the World Economic Forum in Davos, Stern, who is now a crossbench peer, said: “Looking back, I underestimated the risks. The planet and the atmosphere seem to be absorbing less carbon than we expected, and emissions are rising pretty strongly. Some of the effects are coming through more quickly than we thought then.”

The Stern review, published in 2006, pointed to a 75% chance that global temperatures would rise by between two and three degrees above the long-term average; he now believes we are "on track for something like four ". Had he known the way the situation would evolve, he says, "I think I would have been a bit more blunt. I would have been much more strong about the risks of a four- or five-degree rise."

He said some countries, including China, had now started to grasp the seriousness of the risks, but governments should now act forcefully to shift their economies towards less energy-intensive, more environmentally sustainable technologies.
“This is potentially so dangerous that we have to act strongly. Do we want to play Russian roulette with two bullets or one? These risks for many people are existential.”

Stern said he backed the UK’s Climate Change Act, which commits the government to ambitious carbon reduction targets. But he called for increased investment in greening the economy, saying: “It’s a very exciting growth story.”

Stern’s comments came as Jim Yong Kim, the new president of the World Bank, also at Davos, gave a grave warning about the risk of conflicts over natural resources should the forecast of a four-degree global increase above the historical average prove accurate. “There will be water and food fights everywhere,” Kim said as he pledged to make tackling climate change a priority of his five-year term.

Kim said action was needed to create a carbon market, eliminate fossil-fuel subsidies and “green” the world’s 100 megacities, which are responsible for 60 to 70% of global emissions. He added that the 2012 droughts in the US, which pushed up the price of wheat and maize, had led to the world’s poor eating less. For the first time, the bank president said, extreme weather had been attributed to man-made climate change. “People are starting to connect the dots. If they start to forget, I am there to remind them.

**74. Childhood Brain Tumors Echo Parent’s Occupational Exposure To Diesel Exhaust**

UWA study has found parental occupational exposure to diesel exhaust during key time periods may increase the risk of childhood brain tumors (CBT). The study, coordinated by the Telethon Institute for Child Health Research, found the risk of CBTs increased with exposure to diesel exhaust before a child’s birth and around the time of a child’s conception.

Lead author and WA Institute for Medical Research Assistant Professor Susan Peters says CBTs are a highly fatal disease, being the leading cause of cancer mortality in children. Prenatal exposure and early postnatal factors may be involved in CBT causation, since most CBTs are being diagnosed before five years of age.

“Diesel engine exhaust has recently been classified as a human carcinogen by the International Agency for Research on Cancer (IARC),” A/Prof Peters says. “Moreover, exposure to diesel exhaust is widespread and therefore may affect many people.”

Findings from the study show more fathers than mothers were exposed to diesel exhaust at the workplace. “For paternal exposure it appeared that exposure around the time of conception was associated with the highest risk,” A/Prof Peters says. “For maternal exposure the risk was increased with exposure any time before birth, but we were not able to specify the most relevant time period.”

She says the research was carried out as a case-control study, where parents of each newly diagnosed case in Australia between 2005 and 2010 were asked to participate. For each case whose parents consented, three controls were recruited, matched by age, sex and state of residence. “In total we included 306 cases and 950 controls in these analyses,” A/Prof Peters says.

“We asked all parents detailed questions about their occupational history. “Based on this information we assessed exposure to engine exhausts for each job and each parent.
“Information used to assess the exposure was, amongst others, the type of vehicles they drove and how they were powered, whether they worked near diesel powered equipment, if these machines were running while they were working and if this was indoors or outdoors, if they drove on major metropolitan roads most of the time.”

A/Prof Peters says the paper, published in the International Journal of Cancer is just one study showing an association between parental exposure to diesel exhaust and the risk of childhood brain tumors. “More studies should be done to see whether the observed association is real,” she says.

75. ICAO Seen ‘Most Likely’ to Opt for Mandatory Offsetting Scheme to Curb Emissions

Of the three market-based mechanisms that the International Civil Aviation Organization (ICAO) is considering as a potential policy to help reduce greenhouse gas emissions from the aviation sector, the most likely option is a global mandatory offsetting scheme, according to the head of an Asia-Pacific based international airlines organization. Under such a scheme, airlines would offset the carbon emissions they are responsible for by funding projects that help reduce the amount of carbon in the atmosphere, such as new renewable energy facilities or forest restoration.

The other two market-based mechanisms (MBMs) under consideration—the same offsetting scheme but with an additional revenue raising mechanism, such as a tax payable by each participant for every offset transaction, and a global emissions cap-and-trade system—are more politically contentious, Andrew Herdman, director general of the Association of Asia Pacific Airlines, said on February 19th. Herdman spoke as part of a panel discussing the “Prospects at ICAO for a Global MBM Scheme” at an “Aviation Carbon 2013” conference organized by Aviation Carbon Events and held in London on February 19-20.

The High-Level Group on International Aviation and Climate Change is working toward agreeing on one of the three MBMs by the next ICAO Assembly meeting scheduled for Sept. 24-Oct. 5.

The aviation sector emitted 676 million metric tons of carbon dioxide in 2011 and represents about 2 percent of the world’s total greenhouse gas emissions, Paul Steele, executive director of the Air Transport Action Group said at the introduction of the panel. The Air Transport Action Group is a lobby group that encompasses a variety of aviation-related members, including airlines, airports, engine manufacturers, and air navigation service providers.

Herdman said that one of the MBM options—a global emissions cap-and-trade system—would require commitments from all countries to join, a challenge that seems huge, given the problems the European Commission is facing in implementing its own regional trading system.

Herdman said the second option—an offsetting scheme that includes a provision to raise revenues from all participants to be distributed to members who most require help with climate mitigation projects—would raise questions about which nations should benefit from the revenues.

With the international aviation industry committed to a “fair and equal opportunity” for all nations, the issue of “who makes transfer payments and what nations need to be taken care of” requires a difficult to achieve “political consensus,” Herdman said.
Speaking at the same panel, ATAG's Steele, who is also director, aviation environment for the International Air Transport Association, said the three MBMs under consideration are not necessarily “mutually exclusive.” Steele said he could foresee the ICAO initially agreeing on option one: a global mandatory offsetting scheme that is similar in concept to the passenger voluntary offset schemes run by major airlines, whereby passengers can pay an additional fee to help fund projects that offset the carbon emissions from the flights they take. Once the scheme was working globally, Steele said there would be more time for nations to agree on including ways of raising revenues from airlines to support climate mitigation projects.

Robin Smale, a director at consultancy Vivid Economics, agreed it would be necessary to use mandatory offsets as a “stepping stone,” as alone they are “at best a temporary solution.” Asked which options the European Commission would prefer, Philip Good, a senior climate change policy officer at the Commission, said, “We are keeping an open mind, and the three systems are pretty comparable.”

76. Arctic Environment Ministers Call for Action on Black Carbon

Environment ministers and high-level officials from the eight Arctic nations called for action on black carbon emissions and voiced concern about declining biodiversity and ocean acidification, ahead of the release of two major environmental assessments this spring. Officials from Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden, and the United States issued a statement on February 6th after meeting in Sweden under the banner of the Arctic Council. The ministers last met in 2010.

Arctic countries should submit inventories for black carbon under rules being developed through the Convention on Long Range Transboundary Air Pollution, the officials agreed. Black carbon was added as a pollutant covered by the convention in 2012, and the first submissions to the United Nations’ planned black carbon inventory are expected in 2015.

“Ministers concluded that decisive action on black carbon and other [short-lived climate forcers] is needed,” the statement said.

Russian Minister for Natural Resources and Environment Sergei Donskoi presented a report on short-lived climate forcers at the meeting and told participants that his country needs other nations and the Arctic Council to provide experience and technology to address the pollutants, according to a February 7th ministry statement.

The Swedish environment minister voiced concerns about a report noting a reduction in the number of sea birds, saying the Arctic is the heart of many species’ migration patterns. “Decisive action should be taken to help protect biodiversity and sustain valuable ecosystem services,” the statement said. The Arctic Biodiversity Assessment, a work group under the Arctic Council involving hundreds of scientists from various countries, will detail the current state of Arctic biodiversity in a major report scheduled for release this spring.

The ministers also expressed concern about worsening climate change and ocean acidification and noted that the only way to mitigate acidification—and a key way to address climate change—is by reducing carbon dioxide released to the atmosphere. The latest scientific evidence shows that the Arctic Ocean is acidifying more rapidly than other oceans, according to the Arctic Monitoring and Assessment Program, a working group of the Arctic Council.