CAR LINES

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1. **W. Europe Car Sales Up 5% in 2014; 3% Gain Seen For 2015**

New-car sales in Western Europe increased by 5 percent in 2014, the best result since 2009, but growth will slow this year, according to forecasters LMC Automotive. The region’s car sales grew to 12.1 million last year on a strong UK market and rebounds in Germany, Italy and Spain. "The UK market has been the star performer in western Europe," LMC said in a statement.

Western European car sales are still 2.7 million units below their 2007 peak, highlighting the scale of the contraction in sales in the region since the start of the financial crisis, LMC said.

The forecaster predicts that the region’s sales will grow by 3 percent to 12.4 million units this year. Some country forecasts:

- The UK, Europe’s second-biggest auto market, led Western Europe’s growth in 2014. UK sales increased by 9 percent to 2.48 million units, the market's best annual result since 2004. UK car sales have been boosted by cheap financing, especially in personal contract plans that encourage buyers to trade in their cars every three years. Pent-up demand from lower sales in the aftermath of the financial crisis is also fueling growth. The SMMT industry association expects UK growth to slow to 2 percent to 3 percent this year as pent-up demand starts to ebb and motorists also face the risk of higher taxes after May's national election.

- Sales in Germany, Europe's biggest market, were up 3 percent to 3.04 million last year, the first rise after two years of shrinking sales, but the market remains weak with low consumer confidence. Consultants EY forecasts growth of 1 percent to 2 percent this year.

- France, the region's No. 3. market, is largely missing out on the recovery as economic uncertainty continues to hit consumer confidence. French full-year sales increased by 0.3 percent to 1.8 million. The CCFA industry body expects the market to be flat this year.

- Italy’s car sales were up 4 percent to 1.36 million vehicles, the first rise in annual sales after a six-year slump, but the lack of economic growth is keeping the market low by historical standards. Automotive research group Centro Studi Promoto expects Italian car sales to rise 5 percent this year, boosted by a car replacement cycle. The number could easily be surpassed if the government introduced measures to spur demand, it said. Foreign carmakers’ association UNRAE sees sales increasing by about 3 percent.

- Spain’s auto market has been boosted by a scrappage program to encourage owners to trade in old cars. Full-year sales rose by 18 percent to 855,308 units, the strongest annual growth in 15 years. The market could reach 1 million units this year if the government extends the scrappage program throughout the year, industry association Anfac said.

2. **Carmakers Braced For European Crackdown on Diesel Vehicles**

The French government, which owns about 15 per cent of carmakers Renault and PSA Peugeot Citroën, has pledged to “progressively” ban from 2015 diesel vehicles — which account for two-thirds of car sales in the country and almost two-thirds of Renault and Peugeot’s European sales.
The November announcement by Prime Minister Manuel Valls — in which he admitted the promotion of diesel cars had been a “mistake” — was followed last month by a promise from Paris mayor Anne Hidalgo to ban these vehicles from the city by 2020.

France’s stance highlights a big shift taking place in the European debate over vehicle pollution. For a decade or more, policy makers have focused on targets to reduce carbon dioxide emissions, and this prompted carmakers to invest heavily in diesel vehicles because they emit less CO2 than the petrol equivalents.

But now the focus is turning to air quality, which raises far-reaching questions about the viability of diesel vehicles. This is because they emit harmful pollutants such as nitrogen oxide that can cause serious respiratory problems.

Cities are under pressure from the European Commission to tackle pollution. Studies from the International Council on Clean Transportation, a research body, and King’s College, part of the University of London, have highlighted the scale of emissions from diesel vehicles and linked them to as many as 60,000 deaths a year in the UK.

London has vowed to act on these findings. Under plans for an “ultra low emission zone” in the city, the capital’s traffic congestion charge would be almost doubled for older diesel vehicles by the end of the decade, and Islington council is set to introduce a parking fee for the most-polluting cars — “to encourage a move away from diesel vehicles”. (See below)

Cities in Norway have discussed similar anti-diesel measures.

The changing stance of European policy makers presents a big problem for the continent’s biggest carmakers, including the two French state-backed companies and the big three German manufacturers.

Most exposed are BMW and Daimler, whose “diesel mix” — those vehicles as a proportion of total sales — is 81 per cent and 71 per cent respectively in Europe. Volvo is even higher, at 90 per cent. These sales reflect how governments have long been pursuing policies that pushed manufacturers and drivers towards diesel vehicles.

In the UK, for instance, company cars — 50 per cent of sales nationwide — are taxed on the basis of their CO2 rating, making it beneficial to buy diesel vehicles. As recently as November, diesel vehicles added almost twice as many monthly sales as electric and hybrid equivalents in Britain.

Consumers like the high fuel efficiency and drivability of diesel cars, with the extra torque particularly useful in cities. Furthermore, diesel is cheaper than unleaded petrol in many European countries.

Diesel vehicles have become more environment-friendly, according to the UK’s Society of Motor Manufacturers and Traders. It says modern diesel vehicles now capture about two-thirds of nitrogen oxide emissions through certain filters.

Carmakers will be wary of any moves to phase out diesel vehicles, which would already add to the considerable burden of meeting CO2 targets set for the end of the decade and demand swifter take-up in the still uncertain market for hybrid and electric vehicles.
“This is a European industry concern,” says Ian Robertson, BMW's board member for sales and marketing. “Our position is, don’t rush into any targets on [diesel]... until there’s been an industry and societal view on what’s possible. Ninety per cent of the cars in Paris are diesel — that’s a massive shift.”

There is growing concern that the emphasis on diesel has encouraged European manufacturers to bet on a technology that is only really bought in their home continent. While Europe leads the world as the biggest market for diesel cars, there has been very little take-up in Japan and the US. “Unless the market in diesel takes off around the world — and that looks increasingly unlikely — the European manufacturers are effectively backing the wrong technology,” says Greg Archer, clean vehicles manager at Transport & Environment, a Brussels-based think-tank.

He also argues that the perceived CO2 benefits of diesel have been overstated if the overall “well to wheel” impact of using the fuel is taken into account. The fuel is more energy intensive to refine, and the types of diesel cars consumers purchase tend to be heavier than the petrol equivalents. “When you take all of these life-cycle factors into account, what you actually find is diesels are not lower CO2 than gasoline, they’re just more fuel-efficient at the tailpipe,” says Mr. Archer.

**Shadow Environment Minister: We Messed up Switching Motorists to Diesel**

Attempts made by the previous Labour government in the U.K. to get millions of people to switch from petrol cars to diesel vehicles in order to "save" the planet was a mistake, Barry Gardiner, shadow Environment Minister has admitted. "Hands up - there's absolutely no question that the decision we took was the wrong decision. But at that time we didn't have the evidence that subsequently we did have," Gardiner said during an episode of Channel Four's Dispatches, called "The Great Car Con."

At least ten million Britons are driving diesel cars, a trend which was encouraged by tax breaks by Gordon Brown back when he was Chancellor of the Exchequer. Brown said back in 1998 that diesel vehicles will attract less vehicle tax than petrol options due to their "better CO2 performance." Brown reduced vehicle tax for all vehicles with low CO2 emissions in 2001, giving company car buyers, responsible for half of new purchases, a reason to make the switch.

"We also (expected) cleaner diesel engines, which we thought meant that any potential problem was a lower-grade problem than the problem we were trying to solve of CO2," Gardiner added.

In 2014, more than half of all new vehicles sold were diesels, according to The Telegraph. While diesel cars may have lower CO2 emissions than petrol cars, they emit a higher amount of deadly pollutants, like nitrogen dioxide and sooty particle matter, both of which have contributed to high levels of air pollution resulting in deaths of 29,000 people every year.

The policy was a response to the 1997 Kyoto treaty, which was created to cut greenhouse gases. "It was right to move away from vehicles that push out CO2, but the impact is a massive public health problem," said Gardiner. "The real tragedy is after we set up the committee on the medical effects of air pollution and it reported back in 2010 we've had five years that this government has done nothing about it."

Government ministers were warned more than 20 years ago of the risks, according to Professor Roy Harrison, professor of environmental health at the University of Birmingham. "I chaired an advisory committee in 1993 who was advising government on urban air quality issues and we
recognized that there might be future problems associated with the increasing uptake of diesel passenger cars,” said Harrison, according to The Independent.

The documentary will also show how drivers are exposed to higher levels of diesel pollutants than cyclists and pedestrians. “When people are in cars if they’ve got windows closed and the air conditioning on, they probably think that they are actually immune from the emissions from the vehicles in front of them and in reality that's not the case because the gases penetrate so easily that they will get into the cabin of the vehicle and depending on the ventilation of that cabin they may actually build up to much higher concentrations,” said Professor Frank Kelly, Chair of the Committee for the Medical Effects of Air Pollution, according to The Independent.

In London local councils are already pushing back against diesel engines, with plans in Islington and Hackney for a surcharge on parking permits for diesel vehicles. Islington council has been using its emission-based parking system to encourage a shift to diesel cars since 2007, but now diesel car owners will have to pay an extra £96 a year. (See below)

Elsewhere in the capital, diesel drivers in Camden and Kensington and Chelsea already pay up to £18 extra a year for older diesel vehicles. The Major Boris Johnson also plans to raise the congestion charge for diesel cars by £10.

The British car industry has reacted with dismay to the “blanket” clampdown on diesel by local councils. One source close to Ford, which recently opened a new £190m diesel engine plant at Dagenham, said the firm and wider industry viewed it as the start of a “demonization of diesel”

Mike Hawes, the chief executive of the Society of Motor Manufacturers and Traders (SMMT), said: “Blanket polices which fail to distinguish between modern clean [diesel] vehicles and decades-old technologies are not the solution.” He added: “The decision to impose new financial penalties on diesel owners who bought their cars in good faith is unreasonable and demonstrates a concerning lack of understanding about the huge technological advances that are already making diesel vehicles cleaner.”

But Alan Andrews, ClientEarth, told The Independent on Sunday: “Legal limits for air pollution are being broken by huge margins in towns and cities up and down the country and that’s largely down to diesel.”

In a statement, a government spokesperson said: “This government has invested heavily in measures to help tackle the issue of air quality, committing £2 billion since 2010 to increase ultra-low emission vehicles, sustainable travel and green transport schemes, as well as promoting walking and cycling. We are working with businesses and the public health sector to promote understanding and encourage action to further reduce exposure.”

**Diesel Drivers to Be Hit By Parking Surcharge**

Islington council is to hit residents who own diesel cars with a surcharge of almost £100. The fee will be levied on diesel owners who apply for a parking permit and is expected to be introduced in April. Residents currently pay between £15.50 and £434 for an annual permit depending on engine size and carbon dioxide emissions. The move is an attempt to cut deadly Nitrogen Dioxide (NO2) and diesel particulates. Poor air quality is said to contribute to the deaths of more than 4,000 Londoners every year.
We’re committed to improving air quality in Islington, and diesel fumes are a major cause of air pollution. Pollutants in diesel exhausts have been linked to heart and lung diseases, which are major causes of serious and long-term health issues and even death in Islington, and the surcharge will encourage a move away from diesel."

Two other London councils levy a diesel surcharge but far lower than the £96 proposed by Islington. Camden residents pay an extra £10.30, while in Kensington and Chelsea, the owners of older diesel vehicles face a charge of £18.

**Will Lorries Be Banned To Cut Air Pollution?**

Lorries could be banned from a town center during the rush hour in a bid to reduce pollution. This is just one of a number of actions East Leigh Borough Council is looking at to tackle an ongoing problem. High levels of nitrogen dioxide have been detected and a recent survey showed efforts designed to reduce it had failed with levels remaining above national guidelines. So the council is looking at a new action plan to address air pollution, which is caused by vehicle fumes, including stopping access to the town center by HGVs.

Councilors are being asked to approve the new action plan to reduce transport emissions, improve public transport, work with taxis and local haulage companies, create travel schemes and increase public awareness.

As the worst spot for pollution Southampton Road is heavily used by HGVs to access industrial estates and for town center deliveries, council bosses are looking at restricting HGVs’ movements at peak times into the town center or re-routing them to reduce congestion.

The council is also looking at parking and waiting restrictions and weight limits. But this is just part of a raft of measures being considered, which also include a park-and-ride scheme. Others include ensuring drivers turn their engines off at Eastleigh Bus Station and at the taxi rank, improving bus services, more incentives to use buses, working with local firms to make haulage lorries’ engines more efficient, improving the cycle network and even planting more trees.

**New Diesels Compared To Old Diesels**

The Euro 6 entered into force in September 2014 and hit the European automotive market - particularly diesel-oriented - stronger than most. According to the new regulations, the level of nitrogen oxides (NOx) pollutants and fine particulate matter should be significantly reduced, which requires all new vehicles sold in EU member states to follow stringent rules on tailpipe emission. It is worth mentioning that diesel particulate filters and other after-treatment systems have been required in the U.S. since 2008. The final goal of Euro 6 is to make diesel cars as clean as gasoline ones (although the diesel NOx standards in Euro 6 remain more lenient than for gasoline cars).

Many countries such as France saw in Euro 6 an opportunity to cut down on high emissions such as emitted by old diesel vehicles. Around 70% of cars on French roads use diesel and most of them don’t meet the current diesel emission restrictions. In order to limit city access for the dirtiest cars, the government will launch in the beginning of this year a car identification system that will rank vehicles by the amount of pollution they emit. Also, the government will raise the TICPE excise tax on diesel by 2 euro cents per liter which won’t make diesel the “cheaper option”. By doing so the state hopes to push citizens towards more ecological choices.
The small gas engines, that are drastically improving, are highly competitive with diesel in the cities. Small, diesel powered vehicles are beginning to disappear, replaced by compact, turbocharged gasoline engines. For this reason, even if people finally decide to change their city cars, many speculate that they would most probably buy a gas engine powered one.

Significant automotive technology suppliers are not ready to give up on diesel and its advantages compared to gas. Key players as Bosh, Delphi, Continental and others have invested and are still investing a lot in the development of better diesel engines. The diesel common rail direct injection system has been continuously improved and any possible common rail problems were reduced to the minimum for even better vehicle performance and long engine life. All leading companies have improved their diesel technologies in order to meet the Euro 6 requirements and all say that there won’t be any significant impact on the final price. And even if many automotive technology manufacturers and suppliers have stopped producing diesel engines for small cars, almost none of them want to deny the benefits of a high-quality diesel engine in a large, luxurious car for long road trips.


One of the busiest roads in the City of Westminster and an ever-popular destination for shoppers and tourists alike, London’s Oxford Street has breached its legal limit for air pollution per annum in just the first four days of this year. Clean Air in London - a London action group campaigning to achieve full compliance with World Health Organization (WHO) air quality guidelines as sustainably as possible, has reported that the levels of nitrogen oxide (NO₂) surpassed the legal limit set by the EU by January 4 this year.

Founder of Clean Air in London, Simon Birkett told The Independent that NO₂ levels must not exceed 200 micrograms per cubic meter for more than 18 hours in an entire year in compliance with the EU and UK regulations.

Since announcing the Ultra-Low Emission Zone (ULEZ) two years ago - a zone where almost all the vehicles running during working hours are either zero or low emission, Simon Birkett believes that Mayor of London, Boris Johnson has taken a number of backward steps. "The gap between what the Mayor says and what he needs to do and actually does has never been wider.

Clean Air in London is calling for a ban on diesel in the most polluted areas of London by 2020, saying that the
Mayor’s ‘love affair’ with diesel must come to an end.

City Hall claims that the Mayor is driving the most “ambitious and comprehensive package of measures in the world” in order to improve the air quality in London. A Mayor of London spokesperson said: “At the heart of his plans is the world’s first Ultra Low Emission Zone in central London from 2020, and already, progress is being made. The oldest and most polluting vehicles have been taken off the streets, and around Oxford Street alone, the Mayor’s measures have reduced emissions by a third in two years.

"Unlike many cities, London has met EU rules on particulate matter. The number of Londoners living in areas above NO2 limits has halved since 2008. Under this Mayoralty, emissions of NOx (nitrogen oxides) are down by 20 per cent and PM10 by 15 per cent. Furthermore, the Mayor has set out how, with government and EU support, London can meet targets for nitrogen dioxide (NO2) emissions by 2020, ten years ahead of government predictions."


The authorities imposed restrictions on the licenses of 155 cars which were not submitted for emission tests after reports made by SMS over the past 22 months. Another 38 cars failed the test. Transport Minister Joe Mizzi told Marthese Portelli (PN) in reply to a parliamentary question that 22,183 SMS emissions reports were received by Transport Malta between March 9, 2013 and January 21 this year.

TM issued 681 notifications for cars to be submitted for emission testing, including second notifications.

5. Ethnic Minorities and Deprived Communities Hardest Hit by Air Pollution

Air pollution levels are linked to many forms of ill health, including higher risk of respiratory and cardiovascular diseases, especially for more vulnerable groups such as children and the elderly. Researchers at Imperial College London and the National Institute for Public Health and the
Environment in the Netherlands examined data on two types of air pollution: particulate matter (PM10) and nitrogen dioxide (NO2). They compared air pollution exposures for small areas in England and the Netherlands with population characteristics including deprivation, ethnic makeup, and proportions of children and elderly people.

The EU Ambient Air Quality Directive set limits of 40 micrograms per cubic meter (µg/m3) at monitoring stations for both PM10 and NO2 pollution. Concentration averages across all neighborhoods in England and all but two neighborhoods in the Netherlands were within this limit for PM10, but 11 per cent of neighborhoods in England and nine per cent in the Netherlands exceeded the NO2 limit, accounting for an affected population of 5.4 million and 2.7 million respectively.

In England, the most deprived 20 per cent of neighborhoods had higher air pollution levels than the least deprived neighborhoods - 1.5 µg/m3 higher PM10 and 4.4 µg/m3 NO2 after adjusting for other factors – but this was not the case in the Netherlands. The biggest differences in air pollution levels according to socioeconomic status were in London.

The worst air pollution levels were seen in ethnically diverse neighborhoods, defined as those where more than 20 per cent of the population are non-white. Even after allowing for the fact that some of these neighborhoods are more deprived, in England, this difference was 3.0 µg/m3 for PM10 and 10.1 µg/m3 for NO2. In the Netherlands, differences were lower, with 1.1 µg/m3 higher PM10 and 4.5 µg/m3 NO2.

The findings are published in the journal Environmental Pollution.1

The lead researcher, Dr Daniela Fetch from the School of Public Health at Imperial College London, said: "The study highlights the fact that inequalities in exposure to air pollution are mainly an urban problem, suggesting that measures to reduce environmental air pollution inequality should focus on cutting vehicle emissions in deprived urban neighborhoods."

The reasons for the associations between ethnic minorities and air pollution are unclear. "England and the Netherlands have a long history of immigration. It's possible that immigrants settled in particular areas may tolerate poorer air quality for the benefits of living close to friends and family, even when their communities become less deprived," said Dr Fetch.

The study used data from 2001, which was the most recent year for which high resolution data were available for both countries. "Pockets of deprivation tend to be quite stable, and air pollution levels haven't fallen dramatically in this time, so it's likely that the relationships we observed are still present," said Dr Fetch.

6. EP Unable To Vote Support Green Policy Proposals

Most MEPs want to maintain air and waste proposals threatened with withdrawal, but political squabbling left the European Parliament unable to take a formal stance on the issue in a recent debate. The Parliament failed to adopt a resolution on the European Commission’s 2015 work program. The work program, announced in December, includes controversial plans to amend a

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1 Fetch, D. et al. "Associations between air pollution and socioeconomic characteristics, ethnicity and age profile of neighborhoods in England and the Netherlands," Environmental Pollution (2014), dx.doi.org/10.1016/j.envpol.2014.12.014
proposal on air pollution limits and replace a proposal to set ambitious new waste and recycling targets.

The voting showed that a majority of MEPs want both proposals, which were tabled by the current Commission’s predecessors, to remain on the table. But MEPs’ negotiations on a common position broke down, leading to each political group’s position being separately voted on and rejected.

The socialists, liberals and Greens found common ground in opposing the Commission’s plans on air quality and waste. But the center-right EPP group – the Parliament’s largest – did not want a resolution. The EPP’s counter-proposal made no reference to the air and waste files and supported the approach of “clearing the decks to avoid wasting resources on obsolete or inadequate legislative proposals”.

Green MEP Bas Eickhout said the vote was “a shambles”. But the Commission should take home the message that “a clear majority of MEPs expressed their support” for continuing to work on the existing air and waste proposals.

7. EU Presses On With Anti-Pollution Law After Commission U-Turn

European Union president Latvia will push ahead with a law to clamp down on air pollution after the European Commission’s plan to withdraw the proposals was rejected by many lawmakers. Air pollution from traffic and industry is responsible for about 400,000 premature deaths per year in the European Union, according to Commission data. Still, the EU executive had proposed to scrap draft proposals on cleaning up the air, which it said did not fit in with its broader plans for smarter, streamlined legislation.

An angry backlash from some member states and many in the European Parliament forced the issue back onto the agenda.

"We are glad the Commission has decided to keep the NEC (National Emissions Ceiling) directive on the table," said Alda Ozola, a deputy state secretary in the environment ministry of Latvia, which holds the rotating EU presidency until end-June. It was a complex issue and a deal between the parliament and member states would take time but Latvia would advance the talks as far as possible, Ozola told a debate at the assembly.

Marianne Wenning, a director in the environmental department of the Commission, said the row about whether to go ahead with national limits on various pollutants was now "behind us". The executive was working on bringing the EU closer to standards laid out by the World Health Organization by 2030, she said.

Many member states break existing EU air quality rules that fall short of pollution levels the WHO says are safe. Some industrial sectors say they are struggling to be competitive and that EU regulation risks driving them out of Europe.

Any EU law that entails national limits has also stirred up Eurosceptic sentiments, especially in Britain where it has become an election issue in the run-up to polls in May. But advocates say costs are offset by reduced public health bills and a drop in sick day numbers.

Elliot Treharne, air quality manager from the Greater London Authority, said London was working towards bringing London's air into compliance with existing EU standards, but it could not succeed
alone as air pollutants cross borders. "Without it (EU-wide law) the burden will be left to cities who are already doing as much as possible," he said.

8. **Ricardo-AEA to Develop Prototype European Platform for Air Quality and Smog Indices**

Ricardo-AEA will be responsible for reviewing Member States’ existing air quality information systems and proposing a harmonized air quality index for all of Europe, including a prototype data platform to ensure that the information is easily accessible to the public. The air quality index will be accompanied by a list of fuel-using products assessing their performance in relation to air quality. This ‘smog index’ for various products will include road passenger vehicles as well as other small scale combustion machinery, such as petrol lawnmowers, helping consumers to understand their environmental impact in terms of their level emissions of air pollutants.

In 2010 the World Health Organization estimated that 406,000 people died prematurely as a result of the effects of air pollutants. The prototype air quality platform will help to identify periods of high pollution and deliver health advice mitigating this risk. The prototype is also being developed in response to a recent European report, which highlighted that 59% of Europeans still feel poorly informed about air quality issues.

The work builds on Ricardo-AEA’s experience delivering air quality information platforms such as the United Kingdom’s ‘uBreathe’ and Scotland’s ‘Air Quality in Scotland’ applications, which provide the public with information on air quality in their area together with health advice.

The prototype for the Europe-wide air quality platform is likely to be finalized in 2016 before being reviewed by the European Commission.

9. **Lead MEP Calls for Stronger Biofuel Reform**

The MEP leading work on the EU’s contentious biofuel reform has called for a tighter limit on the use of food-based fuels than that advocated by member states. Biofuels derived from crops such as maize should only be allowed to meet up to 6% of the EU’s 10% target for renewable energy in transport, according to Nils Torvalds, a Finnish member of the liberal ALDE group. The Council of member states wants a 7% cap.

If Mr. Torvalds’ position is backed by MEPs it would put the European Parliament on a collision course with nine countries including France, Poland, Spain and Bulgaria, which have threatened to scupper negotiations if the 7% cap is lowered.

Denmark and Luxembourg, meanwhile, have made it clear that they will support a push by MEPs to strengthen the legislation.

The last Parliament already backed a 6% cap in 2013. But the new Parliament must agree a new ‘second-reading position’ because Mr. Torvalds’ predecessor as rapporteur failed to gain a mandate to negotiate with member states.

Mr. Torvalds has also proposed to keep the 2.5% target for the use of advanced biofuels in transport in 2020 supported by the last Parliament. The Council wants to ditch this goal in favor of allowing member states to set their own goals, using 0.5% as a reference.
“It is very doubtful whether such a low level of ambition, in combination with the other changes introduced by the Council, will lead to any meaningful incentives for the necessary transformation towards cleaner fuels,” Mr. Torvalds said.

Elsewhere, he has proposed that member states should require fuel suppliers to report on the estimated indirect land use change emissions (ILUC) of biofuels and that this data should be passed on to the Commission. The Council is not in favor of this.

The Commission should review the section of the legislation that will set out the estimated ILUC emissions of various biofuels by 30 June 2016, to check if these remain accurate, Mr. Torvalds said.

And the reform should come into force a year earlier than asked for by member states.

In a non-binding amendment to the legislation’s preamble, Mr. Torvalds calls on the Commission to consider adding ILUC emissions to the biofuel sustainability criteria from 2021.

MEPs on the environment committee have until 27 January to table amendments to the new draft.

10. Refineries, Carmakers Slam New French Biodiesel Law

Industry associations warned that a French government decision to allow a higher blending rate for biodiesel could endanger the supply of high quality fuels across the EU. A French ministerial order entering into force on 3 January authorized an 8% fatty acid methyl esters (FAME) – or biodiesel – content in diesel. The decision stems from a national 7.7% biodiesel incorporation target to boost renewable energy use in transport.

Car manufacturers’ association ACEA and refineries group FuelsEurope said the decision deviates from limits set in EU legislation and could lead to a fragmentation of the EU fuel market if other countries follow suit or introduce different diesel grades.

The EU’s Fuel Quality Directive sets a 7% limit for biodiesel in diesel in compliance with the relevant European standard. But it allows member states to permit diesel with a higher content of FAME to be placed on the market provided that they ensure consumers are informed about the fuel’s biodiesel content.

The industry groups urged member states to consider more targeted actions to reach national targets such as introducing higher biodiesel blends for captive fleets of dedicated vehicles rather than as general market fuels.

11. Countries Question Ship CO2 Plan

Several countries have expressed reservations about the EU’s new ship CO2 monitoring rules, which were recently adopted in Brussels. Environment ministers approved a political agreement struck with the European Parliament last month on the monitoring, reporting and verification (MRV) of CO2 emissions from ships. It requires all ships over 5000 gross tones travelling to and from EU ports to report on their emissions from 2018.

The legislation was put forward as a first step to reducing shipping emissions in the absence of an international agreement to tackle the sector’s climate impact. The Commission will review the law in the event of a deal in the International Maritime Organization (IMO).
But some countries said the EU rules will not help the international process.

Greece and Malta issued a statement saying that the discussions within the IMO “follow a less complex and easy to implement approach” than collecting data on fuel consumption. Some data required under the EU law is not relevant for the purpose of monitoring CO2 emissions and the focus should have been on fuel consumption and distance travelled, they argued.

Cyprus said it would have preferred a broader international MRV system. It argued that requirements to publish information on ships’ energy efficiency will require operators to disclose commercially sensitive information and distort competition.

A Polish statement stressed that “any legislative solutions should be of a global rather than a regional nature”. Poland argued that decisions in the IMO have the advantage of not risking reactive measures against unilateral EU decisions and said the agreed law will not facilitate a global agreement.

Meanwhile, Sweden, Finland and the Netherlands also issued a statement to request a ship’s ice class to be added to the monitored data to level the playing field for ships operating in cold conditions. They also want further work done on the energy efficiency calculation method.

**12. Clearing Up Europe’s Air Pollution Hotspots Challenging**

Europe cannot achieve the WHO air quality guidelines without strictly controlling emissions from coal and wood burning for home heating, road traffic, and other sources such as industrial-scale factory farming, according to new research.

Modelled annual mean PM10 concentrations around Europe for the year 2030 under the current legislation scenario.

Current air quality legislation in Europe will lead to significant improvements in particulate matter pollution, but without further emission control efforts, many areas of Europe will continue to see air pollution levels above the limits of the EU and the World Health Organization. Strict control of vehicle emissions alone will not be sufficient to achieve the limit values.

Under current legislation, air pollution hotspots will remain in Eastern Europe, Southern Poland and major European cities such as Warsaw, Paris, and Milan, according to a new study published in the journal Atmospheric Chemistry and Physics by researchers at the International Institute for Applied Systems Analysis (IIASA) and colleagues around Europe.²

"This is the first time that we have analyzed particulate matter at individual monitoring stations across Europe, from regional background to urban streets, exactly where it's important to know if air quality limits will be met. We show the potential and the need for further emission controls to achieve safe levels of air quality -- current legislation will not do the job," says IIASA researcher Gregor Kiesewetter, who led the study.

Air pollution has a major impact on human health, contributing to lung and heart disease. Exposure to particulate matter was linked to as many as 400,000 premature deaths in 2011 in Europe, according to the European Environment Agency.

EU legislation sets limit values on ambient concentrations for particulate matter of less than 10 microns in diameter (PM10). While new policies in Europe have contributed to significant decreases in air pollution over the past several decades, an estimated 80% of Europe's population is still exposed to PM levels above WHO air quality guidelines, and a significant proportion of the region still exceeds the air quality limit values set by EU law.

Such pollution comes from a number of sources, including power plants, agriculture, domestic heating, and city traffic. IIASA's GAINS model has been used for years to provide estimates of emissions and air pollution levels to support policymakers in Europe and around the world. In particular, the model has been employed in the ongoing revision of the EU air quality legislation.

The new study also uses the GAINS model, and improves the estimation of ground-level PM levels by adding in air quality data collected on the ground at monitoring stations across Europe. "We are now able to explicitly identify the different sources contributing to ambient pollution levels. Some cities clearly have a local problem that may be tackled by local measures. In many others, like Vienna, the majority of measured concentrations comes from sources outside the city or even outside the country," explains Kiesewetter. He adds, "Approaching the WHO guideline value will require emission reductions from various sources, two of which were often overlooked in the past. Especially in Eastern Europe, emissions from solid fuels used for home heating are dominating. In many European regions we also see an important contribution of secondary inorganic aerosols, which are steered by agricultural ammonia emissions."

Using the improved model, the researchers explored two scenarios for how air pollution levels could develop across Europe by 2030. Assuming that current legislation is successfully implemented, average air pollution levels would decrease substantially. However, the study shows that a substantial proportion of the European population would still be exposed to PM10 concentrations exceeding EU standards in 2030, in particular in southern Poland, the Czech Republic, Slovakia, northern Italy, and Bulgaria, as well as in a number of major cities.

In a second scenario, the researchers examined what would happen if the most efficient air pollution control technologies that are currently available were implemented across Europe. In this case, they found that by 2030, 99% of monitoring stations would see air pollution levels reduced below EU limits.

"A mix of EU-wide and local measures will be needed to bring PM concentrations below limit values. We show that coordinated EU-wide action could eliminate a large part of the problem," explains Kiesewetter.
Indeed, even in the second scenario the researchers say that challenges will remain in Eastern Europe. Switching to cleaner heating fuels and local traffic management are additional measures that could make a difference.

13. UK Government Rejects Calls for Higher Diesel Tax to Cut Pollution

The British government has rejected calls to raise taxes on diesel vehicles to reduce air pollution but said it will consider a national network of low-emission zones. Britain has consistently failed to meet European Union limits on nitrogen dioxide, which is produced by diesel engines and is harmful to respiratory systems, as well as another pollutant, diesel particular matter.

In December, the parliamentary Environmental Audit Committee published a report on air quality in which it called for a less favorable tax regime for diesel vehicles to discourage the emission of pollutants. It also urged the government to introduce without delay a national framework for low emission zones and a certification scheme for vehicles that meet particular air quality standards.

In its response the government said it had announced in 2013 that there were no plans to change vehicle excise duty and fuel duty has been frozen for the remainder of the parliamentary term, which ends this year.

It said low emission zones, which would restrict or charge diesel vehicles for entry, could be included as part of its air quality plans which are due to be submitted to the European Commission at the end of 2015. London Mayor Boris Johnson has already announced plans to create such a zone in central London by 2020.

"This was an opportunity for the government to pledge decisive action to cut air pollution, thought to be killing nearly as many people in the UK as smoking," said committee chairwoman Joan Walley, a member of the opposition Labour party. "We have been warning that urgent action is needed for the last five years and while this government has accepted that there is a problem it has repeatedly failed to take the tough decisions necessary to sort it out," she said in a statement.

The British Supreme Court is due to make a final ruling on making the government to comply with EU air quality rules this year. Separately, European courts are expected to rule next year on Britain's constant breaches of EU nitrogen dioxide limits.

Diesel was once considered more environmentally-friendly than petrol because it produces less carbon dioxide, but recent surveys have suggested that it is more harmful for the health because of the pollutants emitted by diesel engines.

14. Industry Calls for Non Road Machinery Pollution Law Delay

The European Commission proposed tighter emission limits and an extended scope for the Non-Road Mobile Machinery (NRMM) Regulation that will replace the existing NRMM Directive. The Commission's September 2014 proposal targets a large variety of combustion engines, including those in construction and agricultural machinery, railcars and barges.

Manufacturers’ associations want MEPs and member states to extend the transition period for the new rules, arguing that the given 12 months is too short for redesigning their machinery. Potential delays in obtaining engines from external manufacturers, as well as complex research and development processes will require more time, they say.
The European Agricultural Machinery Association (CEMA) is pushing for a six-month extension of the proposed transition period. The European Materials Handling Federation (FEM) is calling for an additional year to adjust, with a minimum of three years for mobile cranes.

Member States are at an early stage in their debate on the Commission’s proposal. In a draft paper dated 29 January, the Council both strengthens and weakens particulate matter emission limits for inland waterway vessels’ engines, depending on their power range.

The European Parliament’s draft position is expected in March 2015. Elisabetta Gardini of the European People’s Party was recently appointed rapporteur on the issue.

Elsewhere in the Commission proposal, manufacturers producing fewer than 50 machines annually would get an extra 12 months for production and placing on the market. But CEMA calls for increasing that limit to at least 100 machines per year, to help small businesses.

The industry also wants policymakers to clarify the rules on replacement engines in old machinery.

NRMM generates about 15% of NOx and 5% of particulate matter emissions in the EU, according to the Commission.

15. Poland Pledges National Action on Air Pollution

The Polish government has pledged to step up action against air pollution, particularly from low-quality heating equipment. The government will table a national air quality protection plan in the coming weeks and will make improving air quality a priority for this year, the environment ministry said.

“The chief source of pollution is low-quality heating equipment in Polish households, where old heaters are fuelled with low quality coal or even waste,” the environment ministry said.

Its air protection plan will be a “strategic document” that local authorities should take into account. Air pollution is currently regulated through 54 local and regional plans. According to a report from the state audit body in December, these programs have been ineffective and too expensive. The audit body recommended that the government draw up a national plan against which local plans could be measured.

The ministry said it was in contact with the European Commission with regard to non-compliance with EU air quality standards, but emphasized that there was no “threat of punishment” at this stage over air pollution. The audit body had warned that Poland could eventually face EU penalties if it did not improve air quality.

Particulate matter and benzo(a)pyrene pollution are particularly problematic in Poland. Kraków and Zabrze are the most polluted cities in Europe for PM2.5.

16. Experts Criticize EU Clean Freight Transport Scheme

The EU's attempt to stimulate short-sea shipping through funding 'motorways of the sea' has had a limited impact and needs to be significantly improved, according to experts. Motorways of the sea, a concept proposed in 2001 that is also prioritized under the current Connecting Europe
Facility (CEF), has failed to engage the relevant economic sectors and make short-sea shipping competitive with other means of transport, consultants for the European Parliament say.

Funding motorways of the sea under the CEF and earlier EU financing instruments is supposed to cut CO2 emissions by taking freight transport off the roads. But in spite of hundreds of millions of euro in EU money being spent on stimulating such a change, the relative share of freight transport using short sea shipping relative to other modes remained roughly the same over 2001-11, Buck Consultants International said. They analyzed funding decisions over 2004-13 and highlighted several concerns:

- The sea motorways initiative was unknown or unclear to some port authorities, with elaborate calls for proposals and discouraging red tape.
- Ports’ eligibility was limited by the amount of freight they handle.
- Funding was too focused on the volume of freight covered by a project rather than on business sustainability. More analysis is needed of what will happen to projects when EU money runs out.
- Although short-sea shipping was supposed to improve access to island regions, this did not happen as only projects between two member states rather than within one member state were eligible.
- The program was too targeted at individual ports, ignoring their role in the bigger supply chain with inland connections and their sustainability.

To stimulate a shift to short-sea shipping, financial incentives should be given to users of this transport mode, the consultants recommend. And projects that make the short sea shipping sector more competitive should be prioritized for support. Not only port authorities, but also shippers and operators need more information on EU initiatives to promote short sea shipping.

Over 40 short sea shipping projects received more than €365 million in TEN-T funding by the end of 2013. The Marco Polo program, scrapped in 2013, financed 4 other projects.

17. German Road NO₂ Pollution Exceeds EU Limits

NO₂ air pollution levels exceeded annual EU emission limits in more than half of monitoring stations on busy roads in Germany in 2014, the country’s environment agency has warned. The recorded levels infringed the 40µg/m³ cap required by under the EU’s ambient air quality law, UBA said in a report on preliminary pollution estimates.

The Euro 6 car emissions standards that came into force last year must help to cut NO₂ emissions in reality, not just in laboratories, the head of the UBA, Maria Krautzberger said.

Particulate matter (PM₁₀) levels are also of concern, the agency added. Although concentrations were lower than in 2005-13, EU limits were exceeded at 10% of traffic-related monitored sites. Almost 50% of all stations exceeded the World Health Organizations’ recommended PM₁₀ annual average, which is tighter than the EU level.

The share of PM₁₀ emissions from household wood combustion is increasing and exceeded emissions from road transport in 2014. Solid fuel heaters are popular in Germany.

Since March 2010, nationwide pollution limits for combustion plants with heat outputs above 4KW have been in place to reduce domestic heating PM emissions.
18. Italy's Greenhouse Gas Emissions Fall Again in 2014

Italy's greenhouse gas emissions fell nearly 7 percent in 2014 compared to the previous year and are now 20 percent below 1990 levels, according to data an Italian environmental advocacy group has gathered. The Fondazione per lo Sviluppo Sostenibile said greenhouse gas emissions have fallen or held steady for seven consecutive years. Edo Ronchi, the organization's president, told reporters that the decrease was tied in large part to the country's anemic economic growth rates; Italy's economy has contracted for the past three years and six of the past seven. Still, the "carbon intensity" of Italy's gross domestic product—the measure of carbon dioxide produced per unit of GDP—has improved, Ronchi said.

19. Air Pollution: Italian Air Quality Called Worst Ever for Month

Air quality in Italy in January was the worst ever for a single month, the Italian environmental lobby group Legambiente said on February 3rd, with more than 10 days exceeding the minimum safe levels for particulate matter in the air in 32 of 88 provincial capitals. "Already, 2015 is on pace to be among the worst years on record in terms of previous air quality," Legambiente president Vittorio Cogliati Dezza said at a briefing in Rome. Legambiente also reported that 2014 was the worst-ever year in terms of previous air quality in 33 of 88 provincial capitals. All 33 showed at least 35 days beyond the maximum threshold for PM$_{10}$. The worst was the central Italian city of Frosinone, south of Rome, with 110 days above the maximum threshold. Most of the worst cities are in the Po River Valley, a large flat stretch of land that goes from Turin in the northwest corner of Italy to the Adriatic Sea on the central part of the eastern coast of the country.

20. France Plans to End State Aid for Exports of Fossil-Fuel Power Plants That Lack CCS

The French government plans to end credits and other state financing for exports to developing countries of coal-fired power-plant equipment not equipped with carbon capture and storage, it said. The measure figures among 74 described in the government's environmental roadmap for 2015 and beyond, including plans and aspirations for sustainable transport, climate change mitigation, renewable energy, chemicals, biodiversity and other measures.

France’s Prime Minister, Manuel Valls, and its minister of ecology, sustainable development and energy, Segolene Royal, presented the document, which grew out of the national environmental conference last November, to the weekly Council of Ministers on February 4th.

The plan, which the council approved the same day, vows that France will make the international Paris climate conference (known as COP 21) in December "a grand national cause." To provide a strong example for climate negotiators, the roadmap said France this year will finally pass its frequently stalled draft bill for the Energy Transition Related to Green Growth. The bill sets out a framework for reducing nuclear energy's share of France's total electricity consumption, cutting fossil fuel use 30 percent by 2030 and halving energy consumption by 2050 compared with 2012 levels, and slashing energy-related carbon dioxide emissions by 40 percent by 2030 and by "a factor of four by 2050," or by 75 percent.

The Ministry of Ecology is to publish by October 15th a national low-carbon strategy and carbon budgets for three four-year periods to 2028, after consulting industry and other affected parties. And it plans to release, by 2016, a strategy based on a study of the environmental and economic impacts of its financial aid to developing countries.
As part of its climate development strategy, France plans to gradually reduce aid to developing countries for projects that use fossil fuels, according to the roadmap. In addition to dropping its own financing for exports of coal-fired boilers without carbon capture and storage, France will push the European Investment Bank and other multilateral development banks to “prioritize” aid for development of renewable energies and energy efficiency. Aid should finance coal-fired plants “in rare and exceptional” circumstances, such as when these projects represent the only viable economic alternative, and they must “conform to the best environmental standards,” it said.

For investment in general, France will encourage credit rating agencies to take climate impacts into account in their analyses, and it will promote creating innovative financing vehicles that will attract investment into projects low in carbon emissions, that promote biodiversity or adapt to climate change.

The roadmap said France will create a system in 2015 for identifying vehicles based on their polluting emissions, which national and local regulators can use to develop policies on traffic and parking. It also plans a study on the environmental and social impact of reducing speed limits on highways.

The government intends to offer a 10,000 euro (about $11,400) grant to individuals who replace a diesel-driven vehicle with an electric vehicle, as well as aid for conversion of the most polluting diesel vehicles to cleaner burning systems. It also aims to produce measures to boost use of rail and river-borne freight and reduce use of road transport.

The ministry plans to “study” the idea of creating a carbon label for the wood industry and for agriculture, and to create the first national map showing historical evolution of erosion of the French coastline. It also expects to put some 35,000 hectares (86,487 acres) of mangroves under national protection in time for the COP 21 conference, it said.


The mayor of Paris has published a calendar for her plan to gradually turn the city into a “low-emission zone,” beginning with a daytime ban from central Paris for the “most-polluting” heavy trucks and buses.

Starting July 1, Mayor Anne Hidalgo wants older and more polluting gasoline- and diesel-powered trucks and buses to stay out of central Paris from 8 a.m. to 8 p.m. daily. The daytime ban would cover trucks registered under the French Class 1 designation, which includes vehicles weighing more than 7.5 metric tons when loaded that were built under the Euro I and Euro II pollutant emission standards. The ban would apply to most such vehicles built before 2000.

The French Class 1 category applies to only about 17 percent of Paris buses and 16 percent of heavy trucks. But the city plans to gradually expand the ban, year by year, to categories including later-model trucks and buses, as well as cars and small trucks, capped by a total ban on diesel-powered vehicles in 2020. The idea is to give companies and individuals time to switch to cleaner machines, said the mayor's office.

Environmental groups welcomed the plan, but said Paris lags other major European Union cities in clamping down on vehicle-related pollution. They noted the plan does not apply to the busy
periphery freeway that circles the city, or to roads in the two forests that bookend it east and west, or to the greater Paris metropolitan area.

Hidalgo's statement said Paris wants to implement the proposed measures in anticipation of the framework bill for Energy Transition Related to Green Growth that Parliament is considering (see above article) , and which, among other things, is aimed at slashing France's use of fossil fuels, and at cutting carbon dioxide and particulate matter emissions.

A spokeswoman for the mayor's office told the press that Hidalgo plans to present her proposals for approval to the Paris council meeting. The Ministry of Ecology, Sustainable Development, and Energy, also must approve many of the measures, she said.

The Paris plan proposes subsidies to businesses that want to replace their older fossil-fuel burning vehicles with natural gas-powered or electric vehicles, as well as subsidies for individuals that want to switch to cleaner running vehicles, or bicycles.

It would create introductory subscriptions to electric-car and bicycle-sharing programs for people under 25 and those getting rid of older vehicles and create new vehicle-free zones.

Road traffic—particularly diesel vehicles—is responsible for 66 percent of nitrogen oxide emissions and 56 percent of particulate matter of 10 micrometers in diameter and under (PM-10) in the French capital, the mayor's office said.

France's national health watch institute reported in January that increased air pollution from PM-10 is linked to "significant" rises in nonaccidental and cardiovascular deaths in French cities, even when pollution levels are below the European Commission's safety threshold.

**22. Germany Boosts Onshore Wind Capacity by Record Amount In 2014**

Germany's newly installed onshore wind power capacity rose by a record 4,750 megawatts (MW) in 2014, industry groups said, marking what is likely to be a peak annual gain as the country gears up for a nuclear-free future. Representing additional energy production roughly equivalent to one nuclear plant, the increase was 58 percent bigger than in 2013.

Reckoning with new land resources made available following Japan's Fukushima nuclear disaster in 2011, engineering group VDMA and wind energy association BWE said new capacity may range between 3,500 and 4,000 MW in 2015 before a likely decline in 2016.

The country is moving away from using fossil fuels and relying increasingly on renewable energy as part of a program to completely phase out nuclear power by 2022. However, renewable capacity can only run at around a quarter to a third of the time on average while conventional thermal capacity can produce power without interruption.

The new installed total at the end of December was 38,116 MW, up 13 percent. The new volume included 1,148 MW of repowering, or replacing turbines at existing sites.

Germany's long-running green energy drive, which originated in a wish to pursue climate targets and become more independent of energy imports, picked up speed after Fukushima highlighted nuclear technology risks.
The latest figures show the boom continues unabated, despite legislative changes last August that capped renewable subsidies and accelerated the timetable for green operators to join the wholesale power market.

Renewable energy accounted for 25.8 percent of the country's power production mix in 2014 and is set to grow to 40-45 percent by 2025 and to 80 percent by 2050.

Though still tiny by comparison, Germany's offshore wind capacity more than doubled by last year to 2,350 MW, VDMA data showed earlier this month.

**23. Europe's Green Transport Set For Protection from Oil Price Fall**

Europe's green transport sector, still in its fledgling stages, is set to receive more regulatory support as the slump in oil prices tempts drivers back to gas guzzlers.

Renewable power, such as wind and solar, is an increasingly established technology, competitive with conventional fuel and no longer affected by movements in the oil market, analysts say. The alternative transport sector is comparatively tiny, and more exposed as about 90 percent of transport is fueled by conventional oil. A roughly 50 percent drop in the international oil market since June lessens consumers' incentive to buy electric and hybrid vehicles.

EU sales of electrically chargeable vehicles in the last quarter of 2014 fell to 24,548 from 26,607 in the final quarter of 2013, a nearly 8 percent drop, figures from the European Automobile Manufacturers’ Association revealed. Over the whole year, provisional figures showed a nearly 37 percent increase.

Industry analysts caution that the market is so small, it is difficult to declare a clear trend and say that in Europe high taxes on motor fuel deadened the impact of the oil price fall in the second half of 2014. Average fuel taxes in the European Union are 48-55 percent, according to industry figures, compared with 14-17 percent in the United States.

European policymakers, meanwhile, plan more regulatory incentives as they seek to cut dependency on imported fossil fuel and to limit carbon emissions. Electric vehicles are an environmental solution provided they use renewable power.

Drivers of conventional vehicles are likely to travel longer distances now fuel is cheaper. The U.S. government's Energy Information Administration in late January reported a 4.2 percent rise in U.S. petroleum product demand compared to the same four-week period a year earlier. In Europe, overall oil demand in the final quarter of 2014 fell 2 percent compared with the previous year, IEA figures show.

**24. EU Policy-Makers Seek To Make Electric Transport a 'Priority'**

Electric vehicles should be "a high priority", the European Commission says in a discussion paper that maps out its vision for a single energy union based on improved power and gas connections and the free flow of fuel across the European Union. "Electrification of transport should be a high priority, with full integration of electric vehicles in urban mobility policies and in the electricity grid," the Commission memo seen by reporters says.

Attempts to increase the share of biofuels to reduce emissions from transport have foundered after research showed the early biofuels could be worse for the planet than conventional transport
More sophisticated biofuels, which do not cause rainforest clearance or fight with food supply, are still far more expensive than conventional fuel.

Advocates of electric vehicles say that, provided the electricity is from renewable sources, they are a better solution to decarbonize transport, which accounts for about a third of EU fuel use. Currently the transport sector is almost entirely dependent on fossil fuel.

Some business interests, including major utilities, such as E.ON, as well as environmental groups, have been pushing for more focus on electric vehicles. A group of organizations, including Eurelectric, which represents EU utilities, and environment campaign group Transport & Environment, make the case for including electric transport in discussion of improved cross-border energy links in a February 1st letter sent to all the EU commissioners.

Reducing dependence on imported fossil fuel from nations such as Russia is one of the main drivers of the latest EU push for a single energy union which will be the subject of talks bringing together EU energy ministers and commissioners in Riga. The debate will be followed by formal publication of the Commission's energy union strategy at the end of the month.

Many member states provide tax incentives to encourage electric and hybrid vehicles, although for private cars the share of the overall vehicle market is still very small and hybrids, rather than pure electric plug-in vehicles that require grid infrastructure, have dominated. Toyota Motor Europe, which leads the European hybrid market, said its sales of Toyota and Lexus hybrid vehicles rose to over 178,000 in 2014, up 13 percent versus 2013.

25. EU On Track for Green Energy Goal but UK, Dutch Lagging

EU nations are on track to meet a target to get one fifth of their energy from renewable sources by 2020, even though Britain, the Netherlands and Luxembourg are lagging behind, the European Environment Agency (EEA) said recently. The EEA, which provides analysis to EU policymakers, said energy from sources such as wind and solar had become much cheaper. As a result, alternatives had displaced coal and gas, cut carbon emissions and improved energy security.

Without green energy, coal use would have been 13 percent higher and 7 percent more natural gas would have been consumed in 2013, at a time when EU gas reserves are dwindling, the EEA said in its latest progress report.

Overall, the European Union should meet its 2020 goal of getting 20 percent of energy from renewables.

Some member states are further ahead than others. In Austria, Finland, Sweden and Latvia, renewable energy made up more than one third of energy consumption in 2013, while at the other extreme, Britain, Luxembourg, Malta and the Netherlands got less than 5 percent from green sources.

However, the EEA predicts the laggards will catch up. Britain in particular has made strides in offshore wind.

Energy choices are sensitive as EU nations insist on their right to decide which fuels they use. Britain is investing in nuclear generation, which is emissions-free, and has sought to limit any national renewable targets for the future.
A compromise agreed in October set a 2030 renewable target of 27 percent, which environmental campaigners said was not a sufficient increase on the 2020 goal. EU long-term forecasts say the EU needs to increase renewable sources to 55 percent to 75 percent of energy by 2050.

EEA Executive Director Hans Bruyninckx said renewables were becoming "one of Europe's great success stories". "We can go even further: if we support innovation in this area it could become a major motor of Europe's economy, bringing down emissions while creating jobs," he said.

But some renewable energy is flawed. Around 60 percent of the EU's renewable energy comes from biomass, which is environmentally sound when made from waste, but can result in the clearing of forests to make wood pellets to be burnt instead of coal. Environment campaigners say U.S. forests are being plundered to make pellets for export to Europe. They are calling for limits on how much energy can come from biomass along the lines of a cap already being negotiated for biofuels.

NORTH AMERICA

26. Shell Affiliates Fined for Breaking Vehicle Fuel Rules

Three companies affiliated with Shell Oil Company will pay a total of $900,000 for selling gasoline and diesel fuel that violated U.S. federal standards. Equilon Enterprises LLC, doing business as Shell Oil Products US, Motiva Enterprises LLC, and Deer Park Refining Limited Partnership, has agreed to pay the $900,000 civil penalty to resolve alleged violations of the Clean Air Act at refining, distribution, and retail facilities around the country.

The U.S. Environmental Protection Agency alleges that these companies violated the Clean Air Act by selling gasoline with elevated levels of ethanol, transgressing the gasoline volatility and sulfur standards and the diesel sulfur standards, and committing recordkeeping, reporting, sampling and testing violations.

The result has been excess emissions of harmful air pollutants from motor vehicles, which threaten public health and the environment, the agency said. “Fuel standards established under the Clean Air Act play a major role in controlling harmful air pollution from vehicles and engines,” said Cynthia Giles, assistant administrator for EPA’s Office of Enforcement and Compliance Assurance.

“If unchecked, these pollutants can seriously impair the air we breathe, especially during summer months when they can reach higher levels,” said Giles. “This settlement makes clear that if companies fail to produce fuels that comply with federal standards, they will be held accountable.”

The EPA alleged that:

- Shell sold mislabeled diesel fuel – fuel labeled ultra-low sulfur diesel that was actually low sulfur fuel – at two gas stations in Northern Virginia. Low sulfur diesel fuel contains up to 500 parts per million of sulfur; ultra-low sulfur diesel may not exceed 15 parts per million of sulfur. EPA inspectors discovered the violations at the stations, one of which came after receiving a complaint from a consumer.

- Shell sold over 4.2 million gallons of gasoline that exceeded a fuel standard for volatility, known as the Reid Vapor Pressure level, that helps control ground-level ozone, or smog, during summer months. Gasoline with higher volatility results in increased emissions of
volatile organic compounds, which contribute to the formation of ground-level ozone. Breathing ozone can trigger health problems, particularly for children, the elderly and people who have lung diseases such as asthma.

- Shell distributed about 700,000 gallons of gasoline from its Sewaren, New Jersey terminal that contained elevated levels of ethanol. Excess ethanol in gasoline can harm emission control components on some vehicles and engines.

The Reformulated Gasoline Survey Association, an organization that works to improve industry compliance with Clean Air Act fuel standards, identified the fuel with excess ethanol after surveying Shell retail stations in Irvington, New Jersey and Staten Island, New York, and notified EPA.

Shell failed to follow protocols for sampling, testing, reporting and recordkeeping requirements that help ensure compliance of its fuel with federal standards. Shell proactively reported some of these violations to the EPA.

Recordkeeping, reporting, sampling and testing violations reduce EPA’s ability to know whether fuels meet certain standards and can lead to increased vehicle emissions.

The EPA says there are hundreds of different compounds and elements emitted from passenger cars, trucks and non-road equipment. Although vehicle emission controls have improved, emissions from motor vehicles are “a substantial portion of all air pollution,” the agency says.

The Shell companies’ diesel sulfur standard violations resulted in excess particulate matter, sulfur oxides, and nitrogen oxides.

The gasoline volatility violations led to an increase in volatile organic compounds, which contribute to the buildup of ozone during the summer ozone control period. The elevated levels of ethanol in gasoline can harm emission control components on some vehicles and engines.

27. New Rules Aim To Reduce Sulfur Pollution from Ships by 40 Tons Each Day

Officials with the ports of Long Beach and Los Angeles said they were expecting significant reductions in sulfur pollution spewed by cargo ships given restrictions that took effect this month. New international regulations mandate that ships switch to low-sulfur fuels when entering waters 200 miles from the U.S. coast.

“We’ve had low sulfur fuel requirements in automobiles for a long time, but now it is gradually being imposed on the ships, all the way out to 200 miles. The result has been a very substantial improvement in air quality,” said Chris Cannon, director of environmental management for the Port of Los Angeles.

The amount of sulfur in the lower-content fuel has around 1000 parts per million of the chemical, according to an official with the South Coast Air Quality Management District. The sulfur content of regular marine fuels is around 27,000 parts per million.

“Sulfur emissions from marine vessels are the highest contributor to sulfur dioxide emissions in the region,” said Henry Hogo, assistant deputy executive officer of the mobile source division at AQMD. Hogo said that industry and motor vehicles are also sources of sulfur oxide pollution but at far lesser amounts. Diesel fuel for trucks currently has sulfur levels at 15 parts per million.
Sulfur is a precursor to secondary fine particulate matter, which has been linked to a host of health problems. “Sulfur emissions are toxic, they contribute to asthma, and they’re also contributors to ozone,” Cannon said.

The regulations are part of the International Convention for the Prevention of Pollution from Ships (MARPOL), which was adopted by the International Maritime Organization in 1973. The new regulation will be enforced in the United States by the Environmental Protection Agency, under the Act to Prevent Pollution from Ships.

The EPA released a policy document last week that determines civil penalties for ships that violate the new regulation. Fines may be levied up to $25,000 per violation, per day. However, those fines do not include additional infractions against MARPOL that ship operators may incur.

In advance of the new regulation, California had mandated that a similar restriction be set in place for state waters, 24 miles offshore. The AQMD estimates that under the new 200 mile guidelines, sulfur oxide emissions in the South Coast Air Basin will be reduced by approximately 41.5 tons per day. It will also reduce PM2.5 emissions by 3.7 tons per day.

28. Some Question Whether Car Sales Have Already Peaked

New-car sales haven't yet recovered to their pre-recession levels, and at least one analyst believes that at best, they'll only equal those heights this year. The National Automobile Dealers Association (NADA) says 16.4 million vehicles were sold last year, against 16.9 million in both 2005 and 2006, heights that were followed by several years of declines.

Steve Szakaly, the group's chief economist, believes that this year's sales will only hit the same 16.9 million—against projections higher than 17 million by other analysts. Long-term trends will continue to siphon off sales, Steve told the press. His calculations aren't due to any one major factor, but rather a combination of smaller trends that together will keep sales down, he said. Such as:

- For one, people are driving less. Annual U.S. vehicle miles traveled peaked in 2004, and has declined since then.
- In 2013, 5.3 percent of Americans used public transit, compared to 4.7 percent in 2007. A 0.6-percent gain may not seem like much, but it's notable that public-transit ridership continued to climb even as the economy regained momentum. It's not uncommon for people to stop driving during an economic downturn to save money, but this uptick seems to indicate that commuters are sticking with trains, buses, and subways.
- Around 2 percent of Americans also telecommute—meaning they don't need a car at all to get to work.
- Szakaly also indicated that there is a generational component to the sales shift. While Baby Boomers are aging out of the workforce, younger generations appear less inclined to buy cars. Millennials are getting married and having children—two main motivations for vehicle purchases—later in life. They also tend to have less spending money due to significant student-loan debt and a lack of steady jobs.
Those are all important factors, but it's also worth noting that a decline in new-car sales could have something to do with cars themselves--and the way people use them. The emergence of car-sharing services like Zipcar and Car2Go, and ride-sharing services like Uber and Lyft means many people can travel in a car without actually owning one.

Cars are also much more reliable now than they were in past decades, so owners hang onto them longer. The average car on U.S. roads today is now 12 years old, the oldest it's been since World War II. That's great for owners of those cars, but perhaps not so swell for car companies--or the transportation sector's carbon footprint. New cars are inevitably getting more efficient, but the full impact of those improvements can only be felt when they replace older, less-efficient vehicles. That's less likely to happen if cars don't need to be replaced as often.

29. Air Pollution Looms as Pressing Issue for Families and Lawmakers in Utah

Poor air quality and its adverse impacts to health have risen as a key concern for both policymakers and the public, threatening family health and quality of life, Utah's economy and the vibrancy of its outdoor recreation. Solving the problem promises to be an issue that once again demands significant time and money from Utah's lawmakers this session.

A spate of bills has already been introduced, although advocates and the co-chairman of the Utah Legislature's Clean Air Caucus do not believe this session will be as active as 2014 when it comes to the number of measures filed.

"I think a lot of the focus this year will be on funding," said Rep. Patrice Arent, D-Millcreek. "Air quality will be a high priority again, but we want to make sure our funding is not just one-time. I see some important legislation coming forward."

The clean air effort also promises to capture the attention of a public dealing with January inversion. Billed last year as the largest political protest in Utah's modern history, the "Clean Air No Excuses" rally in late January drew a boisterous crowd demanding action.

This year a similar event is slated on the south steps of the Capitol and involves six advocacy groups, a local Lutheran pastor, and Utah musician and author Kurt Bestor. "We are trying to make this clean air rally as relevant and timely as we can," said Dr. Brian Moench, president of Utah Physicians for a Healthy Environment, adding that organizers want 10,000 people to attend. "We are hoping to make it feel more mainstream than last year."

The physicians group and HEAL Utah both are keeping an eye on air quality measures in the session this year. They mentioned Rep. Steve Handy's HB49 as a good proposal that did not pass last year that they hope prevails in this session.

Mirroring a recommendation from Utah Gov. Gary Herbert, the bill would provide $20 million to change out the most polluting diesel school buses in the state fleet and to boost the fueling infrastructure for alternative-fuel buses. Handy, a Republican from Layton, said $13 million of the funding would replace buses and be met by matches from local school districts, and the rest would augment refueling options.

Although Utah has been recognized as having the most aggressive diesel retrofit program in the country, already having changed out 1,041 buses in the fleet, Handy's bill calls for outright replacement of the worst of the worst diesel polluters. Handy says there are about 170 of the buses that are "really, really, really," bad, posing not only air pollution problems in crowded
metropolitan areas already out of compliance with federal clean air standards, but creating grave health risks to children.

Multiple studies point to air pollution levels inside buses that can be greater than emissions outside the actual bus. Researchers have found that the elevated levels inside the bus are attributed to emissions from the bus itself that intrude into the cabin, a process sometimes termed "self-pollution." One study found that average exposure to PM2.5 emissions or fine particulates on school buses was five to six times greater than ambient levels outside, and that exposures to both kinds of emissions and black carbon were determined to be higher than an average walking commute.

30. EPA Promulgates Robust Emission Control Area Enforcement Policy

Violators of Emission Control Area requirements face hefty penalties under the Environmental Protection Agency’s new penalty policy. Owners and operators of vessels operating in the North American and U.S. Caribbean Sea Emission Control Areas are encouraged to review their procedures and operations to ensure compliance with MARPOL Annex VI and the Act to Prevent Pollution from Ships.

The Environmental Protection Agency ("EPA") published a policy for assessing civil penalties for violations of the North American and U.S. Caribbean Sea Emission Control Area ("ECA") fuel sulfur standards on January 15, 2015. The policy is effective immediately and will be used by the EPA in calculating penalties in enforcement actions for violations of ECA fuel sulfur standards under the Act to Prevent Pollution from Ships ("APPS"), which implements Annex VI of the International Convention for the Prevention of Pollution from Ships ("MARPOL").

Vessels subject to MARPOL Annex VI are required to comply with fuel oil sulfur limits while operating in any of the four ECAs worldwide, including the North American and U.S. Caribbean Sea ECAs. Effective January 1, 2015, the maximum fuel oil sulfur limit was reduced from 1.00% (10,000 ppm) to 0.10% (1,000 ppm) in all four ECAs. The EPA and U.S. Coast Guard have been ramping up their coordinated inspection and enforcement efforts to monitor compliance with the sulfur emissions restrictions.

Pursuant to APPS, the EPA may impose a civil penalty of up to $25,000 per violation, per day. However, the EPA must consider the nature, circumstances, extent, and gravity of the violation, as well as the culpability and history of the violator, in calculating penalties. The EPA’s latest policy outlines how the EPA will review violations of both the fuel sulfur limit and related recordkeeping requirements and how penalties for such violations will be calculated.

Penalty calculations under the EPA’s policy include a preliminary deterrence amount and necessary adjustments to the preliminary deterrence amount based on various factors, including culpability and history. The preliminary deterrence amount is comprised of an economic benefit component and a gravity component. In most situations, the economic benefit is the avoided cost of purchasing compliant fuel. For the purposes of this portion of the calculation, the EPA will use the world-wide average price for compliant marine gas oil ("MGO") as the cost of compliant fuel after January 1, 2015. The EPA will then use the vessel’s records to best calculate or estimate the cost of the non-compliant fuel burned and the quantity of non-compliant fuel burned in the ECA. In addition, economic benefits may be calculated for recordkeeping violations, the time value of the money saved, and any profit or illegal competitive advantage the violator obtained.
The gravity component of the preliminary deterrence amount reflects the seriousness of the violation. For fuel sulfur limit violations, a chart in the policy sets additional penalty amounts based on the sulfur content of the non-compliant fuel. The gravity component for recordkeeping violations is set at $2,500 to $25,000 per violation, per day. Examples of recordkeeping violations include failure to maintain a current International Air Pollution Prevention Certificate, failure to maintain written fuel change over procedures, failure to maintain a log of fuel change over operations, failure to maintain bunker delivery notes, and failure to maintain fuel oil samples.

To ensure equitable treatment and provide the flexibility to address the unique facts of each situation, the preliminary deterrence amount may then be adjusted based on: degree of willfulness or negligence, cooperation, history of noncompliance, litigation risk, ability to pay, and performance of a supplemental environmental project in accordance with the EPA’s Supplemental Environmental Project Policy.

The EPA policy raises the bar with respect to future enforcement of ECA violations. The policy establishes a specific methodology to issue penalties with a view towards deterrence, which can result in significant penalties depending on the economic benefit inuring to a violator and the gravity of the violation.

31. Diesel Engines Selling Well In Large Luxury SUVs & Crossovers

In the U.S., diesel engines have long been established in pickup trucks. In passenger cars, however, they've remained a small part of the overall market. But diesels seem to be doing well in another segment: larger SUVs, particularly those from luxury makers, like Audi, BMW, and Mercedes-Benz.

While the three Germans were the earliest to fit diesels in U.S.-market luxury utility vehicles, Range Rover is the latest carmaker to join the party. The Jeep Grand Cherokee also offers an EcoDiesel option, though its production has been limited by very strong demand for the same engine in Fiat Chrysler's Ram 1500 EcoDiesel pickup truck.

But while luxury SUVs are a small portion of the overall market, diesel engines are making substantial inroads in the segment. In the luxury sport-utility vehicle segment as a whole, the take rate on diesel engines is 15 to 20 percent in the vehicle lines that offer them.

In the total U.S. market for passenger vehicles, diesels have jumped from 2 percent in 2009 to 3 percent last year. But within luxury SUVs, the rate grew from 3.1 percent to 4.6 percent. Overall vehicle sales in 2014 (roughly 16.5 million) were up significantly over the grim recession year of 2009—but diesel-powered luxury SUVs have risen 130 percent over the same period.

Finally, while luxury SUVs with diesels may carry a price premium, buyers typically recapture that premium when they sell. Their vehicles retain a higher percentage of their value when resold as used cars. Data from industry analyst ALG shows that after four years, diesel models of luxury SUVs have retained 2 to 7 percent more of their value than their gasoline counterparts. That can add as much as $3,000 to the value of the used vehicle for owners selling it or returning it at the end of a lease.

32. GM Shows Bolt Electric Vehicle Concept with 200-Mile Driving Range

General Motors Co showed its Chevrolet Bolt concept car with an electric driving range of more than 200 miles and a $30,000 price tag, offering a view into where the U.S. automaker is pushing
in development of electric vehicles (EV). The all-electric Bolt is a concept car not currently slated for production, but Chief Executive Officer Mary Barra said the company is committed to developing an affordable, long-range EV, and GM said they could develop the car in as little as 18 months.

"This is a real game changer," Barra told reporters at the media preview at the Detroit auto show. "Trust me, this is no stripped-down science experiment."

She didn't give a timetable for when GM would develop the vehicle, but said it was a natural next step from the Volt. GM is showing a new version of the Volt, and the 2016 version will debut this fall.

GM product development chief Mark Reuss said the automaker "has the technology" to deliver a production version of the Bolt electric car within 18 to 24 months. Reuss said the four-door, five-passenger prototype could be profitable, especially if the value of emissions credits it generates under clean air regulations is counted.

The current version of the Volt, which has an electric driving range of about 40 miles before a gasoline engine kicks in, starts at $34,345, and analysts have said GM loses money on the car. The new Volt has an electric driving range of 50 miles.

33. Truck Sales Hit High Note in 2014-- Scoring Highest Level in Eight Years

Now that the all dust has settled on the order books, it’s very clear that 2014 wound up as a very good year for selling trucks. With Decembers result tallied, U.S. Class 8 truck deliveries rolled up 220,405 units in 2014— making for the biggest total since 2006’s record finish, per a news report posted by WardsAuto. The strong finish was aided by sales of medium- and heavy-duty trucks that climbed 12.9% in December to 42,110 units.

For the year, Class 4-8 OEMs sold 406,747 units. That amounts to a year-over-year increase of 15.6% and the highest total since the 544,581 delivered in 2006, as shown by WardsAuto data.

Meanwhile, ACT Research has cited December as indicative of “healthy” demand for trucks. The research and forecasting firm’s preliminary data shows that 65,700 total North American (N.A.) Class 5-8 orders were booked for the month— which equals a year-over-year figure 41% higher.

ACT also found that “over the past twelve months, N.A. Class 5-8 net orders have totaled 602,300 units— [for] an average of more than 50,000 orders per month.”

Kenny Vieth, ACT’s president & senior analyst remarked that “December’s 43,900 N.A. Class 8 net orders mark the fourth-best month on record and bring the full-year order total to just over
December’s preliminary 21,800 N.A. Classes 5-7 net orders equate to the second strongest order-month cycle to date, according to Vieth.

“As has been the case throughout 2014,” Vieth observed, “the strength in order activity is symptomatic of converging trends that are favorable to demand-- including stronger economic activity, lingering pent-up demand, sizeable fuel economy gains and rising carrier profitability.”

And research and forecasting firm FTR has advised that its preliminary data indicates N.A. Class 8 truck net orders will come in at 43,620 for December. That would make for the third consecutive month with order activity above 40,000 units. The firm contended that “December’s order strength, unlike the previous two months, was broad-based among OEMs, with almost all manufacturers showing healthy increases from the previous month,” which would indicate “an overall vibrant truck market.”

FTR put total N.A. Class 8 truck orders for 2014 at 375,000 units, a performance that would mark last year as the second-highest for orders in history (after 2004).

In his detailed report, WardsAuto also related that Class 8 deliveries climbed 14.1% in December on sales of 23,379 units vs. 19,695 a year ago.

As for the medium-duty segments, Ward’s Auto reported that:

- Class 7 deliveries rose 19.2% on unit sales of 5,297 vs. 4,272 in December 2013
- Class 6 deliveries gained 14.7% for the month on unit sales of 4,733
- Class 5 deliveries went up 5.6% in December
- Class 4 deliveries increased 5.8% for the month

In addition, WardsAuto found that in December, Class 8 inventory dropped for the first time since June. Yet, year over year, it was still ahead some 8000 units and days’ supply ended at 43—up from 38 the previous December. The medium-duty stood at 45,834 units at the end of the month, making for a 64-day supply.

In a separate WardsAuto post, medium- to heavy-duty sales also finished well last year in Canada. North of the border, sales gains were scored for the third month in a row as December deliveries rose 18.8% with all segments reporting year-over-year increases, per WardsAuto data.

WardsAuto found that Canada’s combined medium- and heavy-duty deliveries for full-year 2014 rose 5.2% on volume of 42,496 units vs. the year-ago total of 40,398 units. Class 8 finished the year 5.9% on volume of 29,043 units compared to 27,430 for 2013.

### 34. US Senate Reaffirms Existence of Climate Change

The US Senate resoundingly reaffirmed the existence of global warming during a contentious debate on 21 January over legislation that would authorize construction of the Keystone XL oil pipeline. But lawmakers narrowly rejected the idea that human activities have played a part in climate change.

Senator Sheldon Whitehouse (Democrat, Rhode Island) offered an amendment that stated that climate change is “not a hoax”. The lawmaker criticized his Republican colleagues for either denying or neglecting to address the issue while pushing for an oil pipeline that would increase
greenhouse-gas emissions. Keystone XL would carry oil from the tar sands of Alberta, Canada, to the US Midwest, connecting to existing pipelines that run to the Gulf of Mexico.

At least on this particular vote, the answer was unequivocal: lawmakers voted 98–1 to adopt a 16-word, non-binding amendment that seemed to poke fun at the Senate's leading climate sceptic, Republican James Inhofe of Oklahoma. The provision reads: "It is the sense of the Senate that climate change is real and not a hoax." Even Inhofe, who once called global warming "the greatest hoax ever perpetrated on the American people", joined Whitehouse as a last-minute sponsor of the amendment.

Senators narrowly rejected an amendment from Senator Brian Schatz (Democrat, Hawaii) that went a step further, pinning some of the blame for climate change on human activities. That provision failed 50–49.

The votes mark the first time since 2005 that the US Senate has expressed a formal position on the existence of global warming. At that time, Inhofe proposed an amendment that would have killed a similar resolution affirming the existence of global warming; the lawmakers rejected Inhofe's amendment on a 53–44 vote, and then adopted the resolution itself by voice vote.

35. Vehicles Without Proper Emission Controls Seized At Ports of L.A., Long Beach

Federal authorities at the ports of Los Angeles and Long Beach have announced the seizure of numerous all-terrain vehicles, motorcycles and generators imported into the U.S. without proper emission controls in violation of the federal Clean Air Act. More than 730 items were seized as the result of a 90-day investigation by the U.S. Environmental Protection Agency and U.S. Customs and Border Protection (CPB). Some of the items were sent back to their country of origin, according to the EPA.

The vehicles and engines would have emitted over 350,000 pounds of pollutants such as carbon monoxide, hydrocarbons and oxides of nitrogen per year, EPA officials said.

Eight companies, all first-time violators will pay a total of more than $57,000 in civil penalties, authorities said. The EPA identified the firms as: Nan Fang Distribution Group, LLC; Kandi USA Inc.; Vantage Vehicle International Inc.; Dongfang Motor Inc.; Dynamic Power Equipment Inc.; Alliance Powersports Inc.; Denebola Motor Sports USA Inc.; and Sanven Corp.

Under the joint operation between the two agencies, EPA conducted inspections at the ports of Long Beach and Los Angeles and worked with CBP to investigate companies that had previously imported engines and vehicles. These inspections found that numerous companies imported vehicles and engines without proper certification. As a result of the joint operation’s success, EPA Region 9 will continue to conduct inspections with CBP at the ports on a monthly basis.

36. US To Monitor Air Pollution at Embassies Worldwide

The USA has signed a new air quality partnership agreement between its State Department and the Environment Protection Agency (EPA), which will see ambient air quality monitors installed at a number of US embassies and consulates worldwide. The statement of intent was signed on February 18th at a ceremony in the US State Department’s Washington D.C. Treaty Room by both Secretary of State John Kerry and EPA Administrator Gina McCarthy and will see a network of global monitors set up to measure particulate matter PM$_{10}$. 
The global monitoring network will add to the existing 4,000 domestic air quality monitors run by the EPA across the USA.

According to the US State Department, the partnership will provide both US citizens and government personnel with better information on air quality in order to reduce risks from outdoor air pollution, as well as offering “greater opportunities for the United States to create partnerships on air quality with other nations”.

The State Department said the monitors would be installed “where continuous fine particle pollution (PM2.5) data is currently of limited availability” and the resulting data would be publicly shared through the EPA’s AirNow website.

It has not yet been confirmed which US embassies and consulates around the world will be included in the air quality network, but UK campaign group Clean Air in London (CAL) has called on the Secretary of State for a monitor to be installed at the US embassy on Grosvenor Square in central London. Simon Birkett, CAL founder and director, said: “We could do with some monitors please in London, if Defra progresses plans scrapping local monitors.” He added: “How many world cities have ever experienced NO2 levels like London?”

The partnership comes as part of a US air quality program which also includes a new fellowship program to enable US technical experts to visit participating diplomatic missions to help transfer skills and help build capacity for air quality monitoring data analysis and maintenance.

In a joint statement launching the air quality agreement, Secretary Kerry and Administrator McCarthy said: “Air pollution is a serious and growing health threat worldwide, yet in many areas, real-time air quality data is not available.

“This partnership will enhance the availability of outdoor air quality data and expertise at a number of US diplomatic missions. The US Department of State has a keen interest in providing sufficient air quality information to U.S. citizens and government personnel overseas to empower them to make informed health decisions.”


Federal emissions regulations applicable to marine vessels with diesel engines would be aligned with international standards developed by the International Maritime Organization, under a direct final rule the Environmental Protection Agency has issued. The rule published on February 19th would codify an exemption for certain steamships from low-sulfur fuel requirements. Those ships wouldn't be subject to the fuel requirements until Jan. 1, 2020, in line with recent amendments to the International Convention for the Prevention of Pollution from Ships, also known as MARPOL. The EPA's final rule also would clarify that any vessel that has a national security exemption for engines or for fuel is automatically considered to be a “public vessel,” which are exempted from MARPOL’s engine emissions standards and fuel requirements. The agency also published a proposed rule containing identical revisions. If it receives adverse comments by April 6, the EPA will withdraw the direct final rule and move ahead with the proposed version.

38. Obama 2016 Budget Urges States to Cut Emissions Faster

President Barack Obama's fiscal 2016 budget proposes boosting funding for clean energy by 7 percent and a new $4 billion fund to encourage U.S. states to make faster and deeper cuts to emissions from power plants, officials said. Obama's budget also calls for the permanent
extension of the Production Tax Credit, used by the wind industry, and the Investment Tax Credit, used by the solar industry, the officials said.

Obama has made fighting climate change a top priority in his final two years in office. The White House sees it as critical to his legacy.

The investment in clean energy technologies would cover programs primarily at the departments of Energy and Defense, the officials said.

The $7.4 billion figure is an increase from the $6.9 billion proposed in Obama's fiscal 2015 budget, a rise of 7.2 percent, and over the $6.5 billion enacted by Congress for this year.

The administration is finalizing rules that will cut carbon dioxide emissions from power plants nationwide. The new fund would give states incentives to hasten that process or go further than their mandated cuts. The proposed $4 billion fund would be available to any state that applies, Janet McCabe, acting assistant Environmental Protection Agency Administrator in charge of air regulations, told reporters. "What we will be looking for are states that will get (carbon emission) reductions earlier... or seek to go further than final guidelines require," she said.

States would have access to money that could be used to finance clean energy technologies, funding for low-income communities that face "disproportionate impacts from environmental pollution" and create incentives for businesses to back projects that cut down on emissions, blamed for global warming.

In addition, the budget provides $400 million to help communities assess flood risks.

It also spells out the costs to the federal government of climate-related disasters, highlighting a fiscal argument to fight global warming. The United States has taken on over $300 billion in direct costs resulting from extreme weather and fire in the past decade, the budget says.

The EPA's proposals to cut carbon and other air pollution from power plants and oil and gas facilities are a target of some lawmakers. Senate Majority Leader Mitch McConnell of coal-producing state Kentucky said he will join the Senate committee that oversees the EPA's budget.

Acting EPA Deputy Administrator Stan Meiburg said the agency is already working with limited resources, including a "historically low" staffing level. "This has made us focus on being more efficient... with the staff we have," he told reporters.

The Department of Energy requested $29.9 billion for fiscal year 2016, an increase of $2.5 billion from the amount enacted for 2015, of which $10.7 billion would be spent to support scientific research, development and deployment of new clean energy technologies and advanced manufacturing. Energy Secretary Ernest Moniz said the department's budget request highlights new investments in energy infrastructure technology to make the electric grid more resilient and reduce methane emissions from natural gas systems.

To support the international component of Obama's climate strategy, the budget requests $500 million to support the United Nations' Green Climate Fund, the first tranche of the $3 billion pledged by the United States in November to help poor countries deal with climate change. Some lawmakers have said they plan to block the funding.
39. Opponents Argue U.S. ‘Clean Coal’ Project Demise Shows EPA Plan’s Weakness

The U.S. government's move to suspend a trouble-plagued $1.65 billion carbon capture and storage (CCS) project this month may have bolstered legal challenges to proposed environmental regulations on power plant carbon emissions, several legal experts said. The FutureGen project in Illinois would have been the first U.S. commercial-scale, near-zero emission coal plant to use technologies to capture carbon dioxide from major industrial plants and store it safely underground. This approach could sharply reduce carbon dioxide emissions and curb global warming.

Under the Clean Air Act, Environmental Protection Agency (EPA) standards must be based upon the "best system of emission reduction" using technology that has been "adequately demonstrated." Some legal experts said this week the Department of Energy's abandonment of the project proves the technology failed to meet those criteria.

Asked about the FutureGen project at a Senate hearing, the EPA's air pollution head Janet McCabe dismissed comments that CCS is not viable and pointed to a project launched in October in Canada as proof that it can work to scale.

The agency had previously pointed to FutureGen, as well as Southern Co's long-delayed Kemper project in Mississippi as beacons for nascent CCS technologies, the varied ways to capture carbon waste from sources such as power plants and transport it to storage sites.

FutureGen was a collaboration between the DOE and coal companies that aimed to show that producing coal-fired electricity under strict carbon emission curbs was possible. But FutureGen was beset by delays and management problems from its 2003 start, as well as disputes over where to sequester the captured carbon. When it became clear that FutureGen would not meet its private sector financing target, the DOE suspended the project on Feb. 3rd to avoid about $1 billion in financing commitments.

But the EPA likely anticipate the challenge, some lawyers said. The agency issued its new source standards in two parts, with one rule focused on new plants and a second governing modified and reconstructed plants. The standards for modified plants exclude requirements for CCS. The EPA has said that if either of the new source rules were to be vacated by a court, the other rule would remain in effect.

40. California High-Speed Rail Opponents Challenge Federal Ruling

California's high-speed rail project faces another challenge after a group of counties and activists filed a lawsuit to overturn a decision they said fails to apply state environmental law to a segment of the train's route.

Two counties and five non-profit organizations from the Central Valley and the Bay Area filed the joint lawsuit in the U.S. Ninth Circuit Court of Appeal. They seek to strike down a December decision by the federal Surface Transportation Board that put federal jurisdiction over California environmental regulations with regard to a segment of the rail line that travels from Fresno to Bakersfield.

The petitioners argue that California environmental law should apply to the state's high-speed rail project, a planned train line from Los Angeles to San Francisco, scheduled for completion in 2029 and costing an estimated $68 billion. By ignoring the state's environmental law, the High-Speed
Rail Authority and its contractors could "inflict significant harm to lands and communities along its rail lines," petitioners contend.

In response to the filing, High-Speed Rail Authority spokesperson Lisa Marie Alley said the authority was "following the law and the rules set before us."

The proposed 800-mile (1,287-km) route is the most ambitious high-speed rail projects planned in the United States, which lags behind Europe and Asia in fast trains, and would eventually carry passengers from San Diego to Sacramento at speeds exceeding 200 mph (320 kmh).

The project has been plagued by litigation since voters approved a $10 billion bond measure in 2008. In December, one of seven environmental lawsuits was settled, after the rail authority agreed to find an alternative route through Bakersfield. In October, the California Supreme Court declined to hear a lawsuit challenging the project's funding.

For many years, the voter-approved bond measure appeared to be the project's only source of money. But last year, the legislature agreed to pledge 25 percent of future cap-and-trade revenues, or funds paid by companies to offset carbon emissions, plus an additional $650 million.

CENTRAL AMERICA

41. Study Concludes That Man-Made Air Pollution Reduces Central America Rainfall

Air pollution tied to industrialization in the northern hemisphere almost certainly reduced rainfall over Central America in new evidence that human activity can disrupt the climate, a new study suggested. "We identify an unprecedented drying trend since 1850," the scientists wrote in the journal Nature Geoscience after studying the rate of growth since 1550 of a stalagmite found in a cave in the tiny nation of Belize. Stalagmites are pointed rocks formed by mineral-rich water dripping from the cavern roof. The experts, from Britain, the United States, Switzerland and Germany, said the drying in Belize "coincides with increasing aerosol emissions in the northern hemisphere" as the Industrial Revolution pushed up fossil fuel use.

The findings indicate that growing air pollution in countries such as China and India may cause further disruption, especially in Asia, to a band of tropical rains that encircles the globe around the equator and is vital to farming.

The scientists linked the drying to sun-dimming pollution because the nine biggest volcanic eruptions in the northern hemisphere since 1550, spewing out ash that veiled sunshine, also showed up as dry periods in the stalagmite's growth. For example, an eruption of the Laki volcano in Iceland in 1783, which has also been associated with lower water flows in the Nile, coincided with drought in Belize, they wrote.

Sun-masking pollution cools the northern hemisphere, where most industry is based. That tends to push the Intertropical Convergence Zone, a band of rain encircling the globe, south because it moves towards the warmer hemisphere, they said.

However, the scientists wrote that some unknown natural variations might also provide an explanation for the drying.

ASIA-PACIFIC
Recent Developments in China

‘Gutsy’ University Chief to Take On China’s Pollution

Tsinghua’s Chen Jining is slated to become environmental protection minister as China steps up efforts to clean up its air, water and soil.

The president of Beijing’s prestigious Tsinghua University got the nod as party chief of the environmental protection ministry. Observers say the move puts Chen Jining in line to be the next environmental protection minister, a post that some call the most fraught in the Chinese government.

If Jining is appointed in March, when the National People's Congress will meet, he will bring his environmental-research experience to an agency that has been struggling to clean up air, water, and soil pollution on an unparalleled scale.

“A Chinese public eager to breathe freely is calling for someone who 'gets' the environment and can deliver results,” says Ma Tianjie, program director for Mainland China at Greenpeace East Asia. “With such public expectation, this could easily become the most challenging cabinet position in China,” says Ma. He adds that Chen is the right choice for the minister job.

Neuroscientist Lu Bai, who is the executive vice dean of Tsinghua's medical school, agrees. “He has vision, he has the guts to get things done, and he can inspire others to follow his lead,” Lu says of Chen.

Over the past three decades, China has pushed for economic development while failing to take environmental problems seriously, especially at the local government levels. That attitude seemed to be changing in 2008 when an environmental protection agency was upgraded to the Ministry of Environmental Protection. Since then, national leaders have been increasingly strident in their calls for reducing pollution. This month a new environmental protection law went into effect that tightens pollution standards, puts in place measures to make local governments more accountable, increases penalties for misrepresenting data and gives citizens more legal avenues to report polluters.

But many are skeptical. Under the ten-year leadership of Zhou Shengxian, who will be stepping down from minister, environmental regulations went ignored or were enforced but only with tiny fines, and it is not clear that the new law will change that. It has loopholes. The law does not clarify the lines of authority among competing government agencies over crucial things such as water use. And it gives the ministry insufficient resources and legislative authority to force local environment bureaus to enforce the regulations. The law also leaves out policies aimed at
lowering carbon emissions, such as a carbon tax currently being planned. Meanwhile air pollution indices in Beijing, Shanghai, and elsewhere still regularly shoot up into hazardous levels.

Some observers hope that Chen is the right choice of minister to give the system a jolt.

As an outsider to the ministry who is not burdened with responsibility for the current state of environmental management, Chen “can bring new and fresh ideas”, says Lu Yonglong, an ecologist at the Chinese Academy of Sciences in Beijing.

Zhang says that Chen’s decade of experience in environmental management overseas — including a doctorate in environmental systems analysis from Imperial College — “gives him the edge” as a leader. “China needs to learn from the experiences of developed countries in environmental protection,” says Zhang.

But there are worries about Chen's lack of government experience. “University president and minister require two completely different skill sets.” Still, Chen will be helped by his tight connections with the Communist Party, including President Xi Jinping, who is a Tsinghua graduate.

Most experts agree that the Chen’s task will be straightforward, if not simple — to enforce the new law and assert the power of the ministry, especially in the face of resistance from local environmental protection boards that are conflicted by their ties with local industry. Zhang, meanwhile, has a to-do list for a strengthened ministry, including unified registration of pollution sources, pollution discharge permits, and the increased use of ‘big data’ in environmental management and ecological governance.

“[Chen] can quickly make significant changes if he makes a few simple but difficult choices, that is, to erase the pollution by quickly cutting off the emissions of air, water and soil pollution,” says Wei-xian Zhang, an expert in environmental remediation at Tongji University in Shanghai. “This is not rocket science. It has been proved beyond any doubt during the 2008 Beijing Olympics and last year's APEC summit,” he says, pointing to examples in which the government shut down businesses and construction for short-term air quality improvements. “To improve China's environmental quality, we cannot give the polluters free rides anymore.”

Shutting down businesses, however, led them to ramp up production — and pollution — just before the events. Observers says a test of whether the government is serious about long-term solutions rather than short-term spectacles could come as earlier as next year, when the G20 meets in Beijing. “It would be unacceptable if the government adopted similar measures then. The world will be watching.”

**Daunting Task Ahead For China's New Environment Minister**

China’s new Minister of Environmental Protection is a political outsider. Respected academic Chen Jining's rise may signal a trend to seek officials beyond the political elite amid efforts to defuse public anger about pollution

The elevation of the president of China's most prestigious university to the job of government minister was unexpected. It is rare to bring in an academic without a government background. But given the tarnished reputation of a ministry that is widely viewed as having failed, the move makes sense.
Unusually, the announcement of Tsinghua University president Chen Jining’s appointment as Minister of Environmental Protection barely mentioned his 65-year-old predecessor, Zhou Shengxian, who had held the post for a decade. This break with convention is less surprising than it first seems. Zhou presided over high profile environmental disasters that became an increasing source of public discontent, and of discomfort to the Communist Party leadership.

Large numbers of party cadres censured the MEP at the annual March meeting of the National People’s Congress, often referred to in Western media as "a rubber stamp parliament" for its lack of controversy, and the parallel session of the Chinese People’s Political Consultative Conference. Such public censure is extremely rare.

Worse, it happened two years in a row. In March 2013, a vote on appointments to the NPC’s Environment and Resources Protection Committee saw 850 votes against, 120 abstentions, and 1,969 in favor. The result prompted gasps of surprise, and applause from delegates.

In 2014, delegates requested the MEP make an annual report to the NPC and CPPCC that they could vote on.

These events underscored both the depth of China’s pollution crisis, and that public willingness to accept environmental problems was at breaking point. Such dissent had never been seen before, even on other matters of public anger such as house prices, healthcare and education.

After these events, the change in the ministry’s leadership came as no surprise. But why has Chen Jining been chosen?

Despite his professional and technical knowledge, it may be more worthwhile to note a personal connection. Chen Xi, deputy director of the influential Party Organization Department that oversees appointments, was Tsinghua University’s Party secretary from 2002 to 2009. He is also a chemistry alumnus, who studied there from 1975 to 1979.

Xi Jinping also studied chemistry at Tsinghua during that same five-year period. It is possible we will see more rising stars from Tsinghua.

Chen has only a few weeks to prepare before he steps into his new role after the NPC’s March meeting. He will face daunting challenges, such as how to translate the leadership’s priorities for ‘sustainable growth’ into real improvements to the dire quality of China’s air, soil and water.

Chen’s former teacher, Professor Wang Zhansheng of Tsinghua’s School of Environmental Sciences and Engineering, told the Beijing newspaper ‘The Paper’ that he hoped his former student could bring together various interest groups, and face down pressure.

Despite Chen’s academic background, he has practical experience of solving a wide range of environmental problems, dealing with government ministries and encouraging new business solutions.

Wang Yong, a former classmate at Imperial College, London, said Chen “was involved in many different fields and strategic environmental impact assessments, he understands China’s environment as a whole. He’s not like many scholars who focus on one particular technology.”

Chen may be better qualified than many academics to head the MEP. Despite his lack of a governmental experience, he has strong professional and technical networks. He is a member of
the National Environmental Advisory Commission, deputy chairman of the MEP’s Science and Technology Committee, and Vice President of Chinese Society for Environmental Sciences.

Qu Geping, the first head of the State Environmental Protection Agency, says Chen has many of the right qualities to head the MEP, describing him as “practical and sound” person, who “considers the facts of the matter”, “doesn’t do big empty talk”, has “a scientific attitude.”

Even so, his appointment carries risks. Chen is a political newcomer, with little experience of officialdom other than at Tsinghua, where he was in charge for less than three years. At Tsinghua, he as often seen on campus standing by his bicycle to stop and chat with other teachers. But at the ministry, life will be less cozy.

Political battles will become the norm in his new job, where he must balance complex webs of interests and relationships between local governments, other ministries, and big state-owned firms.

However, Chen's lack of governmental experience could be an advantage in the midst of an anti-corruption crusade unprecedented since the founding of the People’s Republic. Between the 18th Party Congress in 2012 and the end of last year, 55 officials at provincial-ministerial level have been caught in the anti-corruption clampdown. An average of two a month have been placed under investigation.

The current leadership’s prime concern now is to rebuild that political structure, but this task is complicated when many potential candidates have links to officials under suspicion. It creates a dilemma for those doing the top-level hiring and firing.

The last 2 decades have seen a number of university presidents elevated to high office. Zhou Ji was president of Huazhong University of Science and Technology, when he was promoted to minister of education.

More unusually, two ministers have even been chosen from outside the Communist Party for their strong technocratic skills. Wan Gang, Minister of Science and Technology, is an ex-president of Tongji University who has worked for German carmaker Audi. The sensitive post of Minister of Health is held by Chen Zhu, an internationally renowned hematologist and stem cell scientist.

Chen takes on his new job amid major challenges, as China tries to face down a full-scale environmental crisis.

**Shanghai: Ships, Cargo Trucks 'Next' To Curb Air Pollution**

Reducing pollution caused by heavy trucks and ships will be a priority for Shanghai this year according to an environment official. Although the city has far fewer vehicles than Beijing, the amount of pollution they create is much higher, said Luo Hailin, an official with the Shanghai Environmental Protection Bureau. The problem, he said, is that Shanghai has more cargo trucks that produce a “huge amount of exhaust fumes and dust, and damage air quality.”

“Seeking ways to reduce emissions from motor vehicles will continue to be one of our main tasks in 2015,” he said.

Unlike Beijing and most other Chinese cities, Shanghai has the added problem of having to deal with a massive volume of river traffic, Luo said. “In the past we have overlooked the impact of the
emissions from ships coming into and out of harbor, but they are a major source of pollutants,” he said.

“One of the problems is that Shanghai welcomes vessels from all over the world, but there is no unified standard on emissions. The government needs to decide whether we should follow the practice of international ports or establish our own,” he said.

According to a survey issued in 2013 by the air quality watchdog, ships account for 12 per cent of Shanghai’s sulfur oxygen emissions, 11 per cent of its nitrogen dioxide emissions and about 5 per cent of its PM2.5 particles.

As well as vessels coming into port in Shanghai, ships passing the mouth of the Yangtze River en route to or from Anhui and Jiangsu provinces also contribute to the city’s pollution, Luo said.

As part of last year’s efforts to reduce pollution from road traffic, more than 170,000 heavy-polluting and aging vehicles were taken off the city’s streets, the bureau said.

Another key measure taken to tackle pollution in 2014 was a cooperation deal agreed by authorities in Shanghai and the neighboring provinces of Zhejiang, Jiangsu and Anhui. Under the pact, governments agreed to share air quality data, create industrial emission standards and alert each other to pollution threats, the bureau said.

Other steps last year included the closure or updating of 1,675 boilers and furnaces that used coal or heavy oil, and the installation of more than 100 dust detectors at construction sites.

The city also introduced a ban on straw burning early in the year, which is upheld with the help of regular aerial inspections by police helicopters.

The reward for the government’s efforts was an improvement in the number of “good air days” in the city. The environment bureau said Shanghai had 281 days of “excellent” or “good” air quality in 2014, an increase of 11 percent from 2013. To achieve such a rating, the air quality index has to fall below 100.

According to official figures, just 84 days were classed as polluted in the year — down from 124 in 2013 — while four days saw heavy pollution, with an AQI reading of between 201 and 300. There were no days on which severe pollution (or an AQI above 500) was recorded.

As well as the improvements resulting from fewer heavy-polluting vehicles and a reduction in the use of coal for industry, Shanghai last year experienced fewer days with “extreme” weather conditions, which would have affected the diffusion of local pollutants, the bureau said.

Tiny PM2.5 particles remained the main air pollutant in the year, with an average density across the 12 months of 52 micrograms per cubic meter. While the figure was 16 percent lower than in 2013, it remained five times the standard set by the World Health Organization. The WHO’s safe levels for PM2.5 are no more than 25 micrograms per cubic meter within a 24-hour period, and 10 micrograms per cubic meter as an average over a full year.

The corresponding figures set by the Chinese government are 75 and 35 micrograms per cubic meter.
The average density of other air pollutants, including PM10, sulfur dioxide and nitrogen dioxide, last year fell to their lowest levels since 2001.

As well as its pledge to tackle vehicle emissions, the bureau said there remains room for improvement in cutting pollution from industry, particularly in the catering, dry cleaning and vehicle maintenance sectors. The agency will also seek support from district and county governments, especially in suburban areas, in building up a network of environmental inspectors.

“At present we rely heavily on tip-offs from the public about pollution violations and illegal discharges by factories,” Luo said. “So we are encouraging district and county governments to help us create a more effective and wider reaching network,” he said.

“The battle against air pollution is a long-term one, and while we are encouraged by our successes in 2014, there is also a lot of pressure on us to achieve even more,” he said.

**China Coal Production Falls for First Time This Century**

The impact of China’s clean air and renewable energy policies are beginning to have an impact on the country’s coal industry, according to reports suggesting domestic coal production fell last year. State media reported that coal production fell in 2014 for the first time this century, with production totaling 3.5bn tonnes between January and November representing a 2.1% fall on the same period in 2013.

The China National Coal Association (CNCA) predicted that full year production will fall 2.5% year-on-year. Meanwhile, Jiang Zhimin vice president at the CNCA, told news agency Xinhua that the sector expected production to decline by a further 2.5% this year.

The industry maintains that it has been hit by a number of one-off factors, such as high rainfall leading to high levels of hydro-electric production that has in turn impacted demand for coal. Similarly, government restrictions on the export of low-quality coal hit a market that was already suffering as coal prices fell by around 20%.

However, Xinhua acknowledged that much of the pressure on the coal industry is the result of demanding new environmental regulations from the Chinese government and increased investment in renewable energy that has made China the world’s largest investor in clean technologies.

The news agency said that between 2005 and 2013 emissions per unit of GDP fell 29% in China, while new figures suggest a further drop of 4.8% was achieved last year as investment in clean energy infrastructure continued to soar.

**China Plans To Extend Green Vehicle Subsidies Until 2020**

China will extend subsidies for new energy "green" vehicles to 2020, according to draft rules published recently, extending the current incentive scheme which expires at the end of 2015. The policy represents China's latest effort to fight severe pollution and snarling traffic and is a boon to firms such as BYD Co Ltd, the country's biggest maker of electric vehicles.

Subsidies will be granted to buyers of pure electric, highly electrified plug-in hybrid and fuel-cell vehicles, with the amount of subsidies gradually scaled down during the period from 2016 to 2020, according to the draft rules posted on the Ministry of Finance's website.
China has rolled out a series of policies to encourage sales of green vehicles, hoping the industry can help China fight pollution and reduce the country's reliance on imported oil. Production of such vehicles in China has jumped five-fold during the first 11 months of this year compared with 2013, but the industry still lags far Beijing's goal of putting 5 million new energy vehicles on Chinese roads by 2020.

China will still only subsidize purchases of locally manufactured green vehicles, excluding imported cars by foreign companies such as BMW, Tesla Motors Inc and Nissan Motor Co Ltd.

Buyers of pure-electric cars will initially be able to receive subsidies of up to 55,000 yuan ($8,834) under the draft rules, while buyers of pure-electric busses will be eligible for up to 500,000 yuan.

**Vehicle Sales Climb at Slower Pace, Hit by Cities' Restrictions**

Passenger-vehicle sales rose at a slower pace in China last year as economic growth moderated and more cities imposed purchase restrictions in the world's largest auto market.

Retail deliveries climbed 10 percent to 18.9 million vehicles last year, slowing from the 17 percent gain in 2013, the China Passenger Car Association said on its website. Minivans and SUVs remained the fastest-growing segments, while sedan sales growth fell to 5 percent from 13 percent.

China's economy is forecast to have grown at the slowest pace since 1990 last year, damping buying sentiment. Carmakers and dealerships have also been hurt by limits Chinese cities imposed on new vehicles to fight pollution and traffic congestion. The southern city of Shenzhen last month started capping new car license plates at 100,000 a year, following other Chinese cities in setting such quotas.

For December, passenger-vehicle deliveries climbed 11 percent to 2 million units.

**China's Auto Market May Expand 7% This Year: Industry Body**

China's vehicle market, the world's biggest, may expand 7 per cent this year, roughly matching last year's growth, although just half the pace of 2013 as the economy slows, an industry body said. The slowdown has fuelled tension between global automakers and China's car dealers, who accuse brands such as BMW and Toyota Motor Corp of setting unrealistic targets and forcing them to buy more cars than they can sell.

China's economy is embracing the "new normal" of slower growth, and the auto market is also entering an era of "stable increase," the China Association of Automobile Manufacturers (CAAM) told a news conference in the capital.

The CAAM forecasts China vehicle sales, which include passenger cars and commercial vehicles, to grow 7 per cent to 25.1 million units this year, in line with economic growth. That is similar to the pace of 6.9 per cent in 2014.

But some analysts are more pessimistic, predicting weaker appetite for cars in an economy that may cool further this year, after expanding last year at its slowest in 24 years. China's auto market growth could slow further this year, to 3 per cent to 4 per cent, said Yale Zhang, managing director of consultancy Automotive Foresight. "Growth figures will likely be ugly," he said, citing factors
such as continued sluggishness of the economy, a larger comparative base, and dealers' backlash against automakers.

Chinese dealers of BMW, Porsche and a Toyota Chinese venture have banded together in talks with the carmakers over subsidies and sales targets, as they fight over who should bear the brunt of slower growth.

Reflecting diverging fortunes, Volkswagen AG, which grabbed the top spot last year in a close race with General Motors Co, has said it is ramping up expansion in China to keep up with demand.

Ford Motor Co, which has overtaken Japanese rival Toyota in China, also attributed a recent slowdown in sales there to a shortfall in production capacity.

**Beijing Pollution Levels Fall Slightly In 2014**

Beijing recorded a slight drop in smog levels in 2014, the municipal Environmental Protection Agency (EPA) said, though some pollutants remained at 150 percent above national minimum levels.

The city government has restricted coal use, shut down factories and introduced new fuel standards for cars and trucks in a bid to limit a surge in air pollution that at times has left the Chinese capital shrouded in smog.

Data showed the city is making slow progress in combating pollution, which reports say ends hundreds of thousands of lives in China prematurely every year. Average concentration of particulate matter smaller than 2.5 micrometers, known as PM2.5, fell 4 percent from 2013 to 85.9 micrograms per cubic meter, the EPA said. The national standard is 35, although the government does not expect to meet the standard until around 2030.

Sulfur dioxide (SO2) levels fell 17.7 percent, nitrogen dioxide (NOx) 1.3 percent and PM10 7.1 percent, the EPA said, while dust levels rose.

As a result, Beijing's 20 million denizens enjoyed 93 days with "excellent air quality" in 2014, up from 71 days in 2013, the EPA said.

The city plans to cut PM2.5 levels a further 5 percent this year, and reduce SO2 and NOx emissions by 6 percent.

It aims to get coal consumption levels down to 15 million tonnes this year from 19 million in 2014. It will get 200,000 old, highly polluting vehicles off the road and shut down some 300 factories, the EPA said.

By 2017, Beijing hopes to get PM2.5 levels down to 60, after cutting coal consumption to less than 10 million tonnes annually. In August, the municipal government said it would phase out coal use completely by 2020.

**China Politicians Anxious Over Severe Air Pollution in Beijing**

China's politicians are increasingly nervous as heavy smog is back and enveloping the city, threatening another 'Airpocalypse' over Beijing, and prompting the Chinese people to look to the
government for fast solutions. Air quality in Beijing in the winter months is tremendously bad and reports said recently, PM2.5 readings hit 550 micrograms per cubic meter, more than 20 times higher than the World Health Organization (WHO) limit of 25ug/m3.

Reports said the winter months mean the coal-fired heating operations in the capital is in full swing and the locals are forced to give up walking and bicycling outside in favor of the warmth in their petrol-run cars.

Environmental and health activists said coal and cars are the culprits that contribute to the already dangerous high levels of pollutants in China.

The Chinese people reportedly have become increasingly aware of the severe health dangers the high pollution level poses to them and their kids' health and they will not take this sitting down. Numerous protests against the government's inaction on the toxic air problems have been staged by locals and the Chinese leadership is starting to feel anxious.

The Chinese, most of them, were left in the dark about the long-term deleterious effects of the soot in the air to their and their children's health until January 2013 when the first 'Airpocalypse' happened. Air pollution level shot off the charts and lingered in the whole month of January. With the help of international environmental and health advocates and scientific health publications, the Chinese people now know the serious long-term damage of the poisonous particles in the air that they breathe to their lungs and heart.

The Chinese people reportedly also know now that in 2010 alone, around 1.2 million of their countrymen died prematurely from diseases caused by severe air pollution. As part of this public awareness, the Chinese have been consistently checking the level of air pollution through PM 2.5 reading through apps which are set in their mobile phones.

With this new awareness, the China leadership is in a quandary on how exactly they would deal with this gargantuan problem and at the same time, face the ire of their constituents, Reports said the government is seriously concerned that these localized pollution protests might coalesce into one organized national movement oppositional to the state.

In March 2014, Premier Li Keqiang declared a 'war on pollution' and implemented, for the rest of the year, several measures to bring down the air pollution to manageable levels. In November last year during the APEC meeting, the leadership managed to contain the problem by shutting down factories and pulling out cars from the streets.

Political observers said that should another 'Airpocalypse' happen this year, the Chinese people might go out on the streets again and demand that the government should do more in its fight against pollution.

Some of the Chinese have already shared their sentiments saying that if the China government was able to provide blue skies for the dignitaries in the APEC summit, then all the more the leadership should do all its best to provide clean air for their people who are the ones who are breathing the air day in and day out.

**China Lowers Gasoline, Diesel Prices for 13th Time**

China's top economic planner, the National Development and Reform Commission, on Monday announced another cut on the retail price of gasoline and diesel, reducing the price by 365 yuan
And Then China to Raise Retail Price of Gasoline and Diesel

China will raise retail prices for gasoline by 390 yuan (US$62) per ton and for diesel by 375 yuan (US$60) per ton as oil prices moved off lows plumbed last month, the country's powerful economic planning agency has announced.

The hike is the second consecutive price increase by the National Development and Reform Commission (NDRC), which can adjust fuel price ceilings on a bi-weekly basis.

The pricing system, adopted in March 2013, ensures a closer link to the global price of crude oil.

China Hands Out Record Fine to Six Polluters: Xinhua

A Chinese court has fined six companies in eastern Jiangsu province a total of 160 million yuan ($26 million) for releasing chemical waste into rivers, said state news agency Xinhua, the biggest fine of its kind ever handed out in China. The firms in Taizhou city had discharged 25,000 tonnes of waste acid into two rivers, Xinhua reported, without identifying the companies.

The Jiangsu Provincial Higher People's Court ordered the polluters to pay the fines into an environmental protection fund within 30 days.

Decades of rapid economic growth with little environmental oversight have brought major pollution problems for China's air, soil and water. The government says around 70 percent of the nation's rivers and lakes are polluted.

The court ruling comes just two days before a new environmental protection law enters into force that will give local authorities more power to punish violators. Under the new law, penalty levels will be raised and polluters will risk prison for violating laws. They will also increase the number of institutions that can file lawsuits against polluters.

Over the past couple of years, Beijing has introduced a number of policies to halt the problem. But efforts to curb pollution are often ineffective because local environmental protection agencies lack the authority to implement rules and standards while maximum levels for environmental fines are low.

Investors are closely watching out for the impact of the new law on the steel and aluminum sectors, among the country's biggest industrial polluters.

Northern China Polluted City Improves Air Quality by Hefty Investment

Shijiazhuang, one of the major polluted cities in north China's Hebei Province, saw remarkable improvement of air quality after a hefty investment last year, said the city's mayor Wang Liang. The capital city of Hebei invested nearly 1.6 billion yuan (261 million US dollars) in treating air pollution, said Wang at the annual session of the city's legislature.

Shijiazhuang witnessed 114 days of excellent or good air quality in 2014, or 71 days more than in 2013. The number of seriously polluted days also fell by 51. The city's density of PM2.5 and PM10, two key air pollution indicators, dropped by 19.5 percent and 32.5 percent respectively.
Shijiazhuang was often listed as one of the country's worst polluted cities.

Last year, the city reduced 7 million tonnes of coal consumption, 1.1 million tonnes of iron and steel capacity and 18 million tonnes of cement production capacity. The city also improved pollutant emission facilities for 14 thermoelectric companies and removed 80,000 heavy polluting vehicles from roads.

It aims to cut down coal consumption by 2.7 million tonnes and close small coal-burning boilers this year. Meanwhile, the city will displace 19 industrial companies in the downtown.

Hebei, which neighbors Beijing, is struggling to cut its excessive capacities to handle air pollution.

**Hong Kong's Strengthened Emissions Control of Vehicles to Expire at End of January**

The Environmental Protection Department (EPD) reminded the owners of vehicles and commercial garages on January 23rd that transitional arrangements launched on October 17 last year for the strengthened emissions control of petrol and liquefied petroleum gas (LPG) vehicles will expire on January 31.

In response to feedback from the owners of LPG taxis, light buses and garages saying that more time was needed to fix defective engine parts to reduce emissions for passing the EPD's new chassis dynamometer emission tests, the EPD announced on October 17 last year the implementation of two transitional measures to last until January 31 this year. The two transitional measures are: (i) extending the period allowed for petrol and LPG vehicles that are found emitting excessive emissions to pass the emission tests from 12 working days to 25 working days; and (ii) providing up to two free tests to those petrol and LPG vehicles that have failed the first emission test on condition that the vehicle owners pay for the first emission test.

An EPD spokesman said, "The vehicle maintenance trade has already adapted to the emission tests under the new control program. The overall passing rate of petrol and LPG vehicles after chassis dynamometer emission tests at the EPD's designated vehicle emission test centers has risen from 50 per cent in September last year to 80 per cent currently.

The passing rate of taxis and light buses is more than 90 per cent. Among the vehicles passing the emission tests, about 70 per cent passed at the first attempt.

"If vehicle owners cannot pass the emission tests before the deadline under the emission testing notices (ETNs), their vehicle licenses will be cancelled. Since September 1 last year when the strengthened emissions control for petrol and LPG vehicles came into force, the EPD's mobile remote sensing equipment has scanned about 190,000 vehicles and about 1,400 ETNs have been issued.

Subsequently, about 60 vehicles have either been voluntarily scrapped by the vehicle owners or their vehicle licenses have been cancelled by the Transport Department.

"Starting from February 1 this year, the testing period of ETNs issued by the EPD will revert back to 12 working days and no free tests will be provided to vehicles failing their first emission test."
The spokesman again appealed to petrol and LPG vehicle owners to replace the catalytic converters of their vehicles in a timely fashion and also to regularly check their vehicles so as to avoid causing excessive emissions due to the failure of engine parts.

Proper vehicle repair and maintenance can reduce vehicle emissions, improve driving performance and lower fuel consumption. Last year, the EPD organized a number of technical seminars for the vehicle maintenance, taxi and minibus trades and distributed technical guidance notes to garages. The EPD will continue to step up publicity and help enhance vehicle maintenance by the owners of vehicles and garages to minimize vehicle emissions.

**Shenzhen: Car Quota Policy to be Reviewed**

Guangdong province will review the introduction of a controversial policy in Shenzhen government to restrict car sale, reported Southern China Metropolis Daily. On the afternoon of Dec 29, 2014, the Shenzhen city government abruptly announced that it would restrict car purchases. The decision announced required prospective car buyers to acquire license plates via either a lottery or auction system.

The decision would go into effect less than 30 minutes after it was announced.

The abrupt announcement created a frenzy after with many buyers rushing to car sales agency for a new license plate before the new rule went into effect.

It also aroused public outcry over its legitimacy.

In a letter written to the Legal Office of Guangdong Province, Gu Dasong, a professor of transportation law in Southeast University, requested the office to review the legitimacy of the announcement. Gu posted a photo of the reply from the legal office on Sina Weibo, a twitter-like website. According to the letter, the Legal Office of Guangdong confirmed that it would initiate an investigation over the legitimacy of the Shenzhen government's announcement to restrict car purchases.

**Region: Beijing, Tianjin & Hebei to Develop Integrated Shipping**

The first sea-railway integrated shipping train, carrying tons of containers, set off from the Tianjin Xingang Port on January 19th. Its destination is Shijiazhuang South Station in North China's Hebei province. The train route has realized an effective connection between sea and rail shipping, road and rail shipping, and the transportation cost in the market.

The train route has been seen as another accelerating measurement to support the integrated development of Beijing, Tianjin, and Hebei after the freight express connecting Beijing, Tianjin, and Hebei was set up in 2014.

It is reported that the newly established train route will operate every other day back and forth between Tianjin Xingang Port Station and Shijiazhuang South Station. A statement from the railway department said that the train route would gradually be operated every day according to the situation of the supply of goods.

**EVs Predicted to Make up 11% of All New Vehicle Sales in China**
Electric vehicles are expected to account for at least 11% of all the new vehicles sold in China in the next decade on the back of growing environmental awareness and stricter regulations, according to a new survey. The survey, published by global consultancy firm KPMG, showed that a majority of the Chinese respondents (68%) expect e-vehicle sales — hybrid, battery cell and fuel cell units — to account for between 11% and 15% of the market in the next 10 years.

The survey was based on responses from 200 executives from automobile companies, suppliers, dealers, financial services providers, rental companies and mobility solutions providers in 31 countries, including 25 from China.

"The Chinese government and automotive industry have high hopes that e-vehicles will usher in a new era in the world's fastest-growing car market. Not content with catching up with more established players in traditional combustion engine technology, China is looking to leapfrog rivals to become the premier market for e-mobility," said Danny Le, partner and head of automotive at KPMG China.

Respondents from China ranked fuel efficiency as the top criterion for buying a car, with about 76% indicating it would be the main priority, far higher than the global average of 67%.

Rising air pollution in China, higher fuel costs, strict emission standards and rapid urbanization will ensure that the huge potential for electric cars is eventually realized, although this will require further innovation and disruption across the automotive ecosystem, and help from regulations and tax incentives, the KPMG report said.

By the end of last year, regulators had issued policies for supporting the development and application of new-energy vehicles between 2016 and 2020.

In Shanghai alone, more than 8,500 electric vehicles were sold by the end of November 2014. Chang Xianghui, a Shanghai-based car dealer said: "Lower fuel costs and incentives are prompting many consumers to choose e-vehicles, as many consider long-term fuel costs while making purchases."

E-vehicle owners said they also expect companies to set up more charging stations and also provide better after-sales service. Sun Taoli, an e-vehicle owner in Shanghai said: "I can find several charging stations in Shanghai. But sometimes when I travel to other provinces it is quite difficult to find such facilities."

**Hong Kong Delays 0.5% Sulfur Cap**

Hong Kong has delayed implementation of sulfur cap rules for ocean-going vessels (OGVs), IHS Maritime 360 reports. It is understood that the timetable for a 0.5 percent sulfur cap has now been pushed back to some point in the first half of 2015.

Hong Kong had planned to implement the cap on sulfur content of fuels burnt by OGVs while at berth in the city's ports this month.

A cap on the sulfur content of fuel used by river vessels is said to have been introduced last year.

Incentives to encourage OGVs to burn low-sulfur fuel while in Hong Kong, such as reduced port fees, have been in place since 2012.
In 2013, 18 ship operators agreed voluntarily to burn 0.5 percent sulfur fuel while in Hong Kong waters.

**Chinese Government Investigation Uncovers High Polluting Factories**

The Ministry of Environmental Protection recently launched undercover investigations into fifteen factories in Linyi, Shandong province, and the results were shocking. Thirteen were found to be breaking anti-pollution rules, discharging illegal levels of toxic substances.

Local officials estimated that around 5,500 factories in Linyi were escaping any form of supervision.

“Whether it’s black smoke or yellow smoke, it’s all real pollution. We have not been keeping a proper eye on all factories. We need to re-evaluate our processes and improve. In the past some factories refused to be inspected. They said they were in periods of pilot production. Things like this won’t happen in future,” Xie Feng, deputy director general of Shandong Environmental Protection Bureau, said.

The mayor of Linyi, Zhang Shuping, is under pressure, but he said he’s determined to improve the situation.

It’s a similar story in Chengde city, in Hebei province, northern China. “Average levels of PM10, PM2.5, sulfur dioxide, nitrogen dioxide and carbon monoxide increased last year in the city, compared to 2013,” Liu Changgen, supervisor of Ministry of Environmental Protection, said. That means Chengde has the unhappy distinction of being the only city in the Beijing-Tianjin-Hebei region that saw air pollution rise in 2014.

Local officials said they were surprised. “We have a misunderstanding. We always thought Chengde’s air quality wasn’t bad, especially compared to other areas in North China. It’s good, but it can be better. We can’t regress. It’s a warning,” Mayor of Chengde Zhao Fenglou said.

In the wake of the findings, Linyi and Chengde are now drawing up new plans to curb illegal emissions.

**China Says Coal, Petroleum Industries Must Measure Their Greenhouse Gas Emissions**

China has announced four more industries that will be expected to measure, report and verify their greenhouse gas emissions as the country prepares to launch a national emissions trading market as early as next year. The four industries are coal, petroleum and natural gas, petrochemical, and coking, the National Development and Reform Commission (NDRC) said on February 9th.

The four industries join 10 others that China late last year said would be included in the program. Those include power generators, electrical grid companies, and iron and steel producers.

China is piloting carbon emissions trading in seven cities and provinces and has indicated a national program could begin as early as mid-2016.
Coal producers and the petroleum and natural gas industry will be required to measure their carbon dioxide and methane emissions. Petrochemicals and coking industries will have to measure carbon dioxide, according to the NDRC.

**China’s National Emissions Trading Plan on Schedule for 2016 Launch, Officials Says**

When China launches its national carbon emissions trading system sometime next year, it will at first cover heavy industry with emissions of more than 26,000 metric tons annually on regional trading platforms in seven to 10 locations, a top National Development and Reform Commission official said on February 4th. Jiang Zhaoli, director of the NDRC Climate Change Department, which is responsible for designing the national system to expand on the current seven emissions trading system (ETS) pilot programs operating across China, said the initial phase of a national ETS program is on schedule to launch in the summer or fall of 2016.

Speaking at a forum held by the NDRC with representatives from the European Commission in Beijing, Jiang discussed new details of how the nationwide emissions trading program will roll out, noting that he expects the number of companies involved in the national market to “expand significantly” after a phase-in period ends in 2019.

China had previously targeted 2016 for launch of a national ETS, but Jiang's comments filled in some elements of a plan that has grown quickly in the 20 months since the first regional pilot ETS program started in the city of Shenzhen.

Jiang indicated that companies covered would first be those with annual emissions over 26,000 metric tons. Jiang's statement indicates that the second phase of a national ETS could cover more than the industries outlined in a document released by the NDRC late last year regarding greenhouse gas emissions from coal-fired power, iron and steel, non-ferrous metals and other heavy industries, along with civil aviation.

Jiang said that when the national platform launches, the seven currently operating pilots—in Shenzhen, the state-level municipalities of Shanghai, Beijing, Tianjin and Chongqing, and the provinces of Guangdong and Hubei—will need to integrate central government rules with their own systems.

“We already have seven pilots, so each one could be a possible future exchange” in the national platform, Jiang said. He said there could be up to 10 regional markets. Currently only the Beijing ETS has launched trades outside of its geographical coverage area, with some pilot trades conducted between Beijing and companies in the city of Chengde in Hebei province in mid-December.

On January 30th, the Guangzhou Carbon Emissions Exchange—which covers Guangdong provincial carbon trading minus Shenzhen, also in the province—the Hong Kong Emissions Exchange and a Guangdong certification body signed an agreement to develop a regional carbon trading market.

There will be many issues to iron out during the initial phase of a national program, Jiang noted, but said “problems are unavoidable in the development stage of a carbon market.”
Detailed legal provisions and high-level legislation still need to be developed to ensure that there is “legally binding” authority over the carbon markets, as well as integration of central and local government regulatory systems surrounding the ETS, Jiang said.

China Auto Sales Up 10% in January on SUV, MPV Demand

China’s auto sales rose 10 percent year-on-year to 2.0 million units in January, led by demand for SUVs and MPVs as consumers continued to favor more spacious rides over conventional sedans. According to the China Association of Automobile Manufacturers, SUV sales surged 51 percent to 487,300 units, while MPV deliveries advanced 17 percent to 225,500 units.

Sedan sales rose 2 percent to 1.2 million units, but microvan sales plunged 24 percent to 103,300 units.

Vehicle sales in China are forecast to expand 7 percent this year, half the pace achieved in 2013, as the economy cools off.

China’s gross domestic product is forecast by economists to expand 7 percent this year, slowing from 7.4 percent in 2014, as President Xi Jinping seeks a "new normal" after three decades of breakneck growth.

Local authorities in China have stepped up restrictions to limit deliveries of vehicles as a growing number of cities join the fight to control smog and traffic congestion. Shenzhen’s decision to cap the number of new vehicle registrations a year has spurred concern that several smaller cities may follow suit.

As the economy cools, commercial truck sales have been spotty. In January, bus sales rose 9 percent to 48,700 units, but truck sales fell 12 percent to 232,900 units.

In January, China’s total vehicle sales -- including buses and trucks -- increased 7 percent year-on-year to 2.3 million units.

43. Pollution Doubles Near Auckland Motorways

People who live beside Auckland’s Southern Motorway are subjected to air pollution at nearly double the level of those 130m further away, research shows. The researchers suggest looking at preventing people from living within 20m of motorways and building more walls to separate the roadways from homes, children’s facilities and businesses.

Fixed and bicycle-mounted measuring instruments, used in autumn and winter in Otahuhu, detected pollution levels that peaked beside the motorway from 7am to 9am, coinciding with the morning commuter rush. The researchers, from Canterbury University’s geography department and the National Institute of Water and Atmospheric Research, found similarly high levels of pollution along Princess St, which feeds the motorway, and several other areas of high traffic volume.

Potentially of most concern is their finding of a morning peak of around 140,000 "ultrafine" particles of pollution per cubic centimeter of air. These particles, a 10,000th of a millimeter in diameter, can penetrate deep into the lungs. Particulate air pollution is associated with lung disease and heart problems.
However, the researchers did not investigate the health effects of air pollution and note that their findings cannot be compared with national air pollution standards because of different measuring methods.

They say in the journal Atmospheric Environment that when their data on larger particles and carbon monoxide gas are included, across the study’s four daily measurement times, arterial roads with traffic lights appeared to have a greater influence on pollution levels than the busier but more free-flowing motorways.

Beside the Southwestern Motorway in Mangere Bridge, the study’s other suburb, the morning peak of ultrafine particle pollution levels was lower than in Otahuhu. In both suburbs, ultrafine particle pollution levels were generally much lower away from the heavy traffic flows.

Some of the houses near high pollution points in Otahuhu are just 5m from the edge of the motorway, said one of the researchers, Dr Woodrow Pattinson. "Many of the homes are older, from the 1950s, 60s and 70s and don't have double glazing. They have fairly high rates of infiltration of outdoor air. The indoor air is often as bad as what it is outside. In modern apartments with filtration systems it wouldn't be as much of a concern. It's difficult because people need to live somewhere and there is a housing shortage. The best thing we can do for now is to not have sensitive population groups living there."

He said some restrictions were imposed on locating childcare centers near busy roads but he was not aware of any residential housing controls. Some researchers now advocated a buffer zone of 100m between homes and main roads.

Co-researcher Professor Simon Kingham urged authorities to consider not allowing people to live within 20m of main highways.

Dr Pattinson said noise walls helped "to deflect the plume of pollution". "It would be great if we could have greenbelts or use the land for industrial buildings that properly protect the people inside," he said.

"It is important not to overstate the issue either as Auckland is very coastal so the wind usually flushes out a large proportion of these toxic fumes. However, under certain atmospheric conditions the influence of the motorways is fairly strong."

The study also involved interviews with 104 residents of the two suburbs. Dr Pattinson said a number of people were worried about "children and family members suffering long-term illnesses because of the polluted air around them".
44. Recent Developments in India

Indian Government May Skip A Stage in Emission Norms to Adopt BS-VI Standards

The Indian government is reviewing its vehicular emission norms road map and may consider skipping a stage to move to the Bharat Stage (BS)-VI standards since the domestic oil companies can easily adopt and supply the quality of fuel required. A senior official told the press that the fuel quality specifications for BS-V & VI, such as sulfur content, are nearly the same and the oil supplying companies can easily adopt them over the next few years.

The country's automotive industry would be asked to upgrade and deliver the right technology, the official, who did not wish to be named, added. Bharat stage emission standards are norms instituted by the government to regulate the output of air pollutants from internal combustion engine equipment, including motor vehicles. India has been following European emission norms, though with a time lag of five or more years. At present, BS-IV norms are applicable on cars in 33 cities in the country where the required grade of fuel is available.

The rest of the country conforms to BS-III standards, which allows all categories of vehicles to run on lower grade fuel. As per the timeline in the national auto fuel policy, BS-IV standards are to be adopted across the country by 2017, and BS-V by 2020. BS-VI was to be introduced in 2024.

"There is a need to bring in the best of technology in the Indian market. Most of the companies operating in India are global. Even local biggies like Tata Motors and Mahindra & Mahindra have acquired overseas automobile companies and are global in operations. All these have the best knowhow to possibly skip one level of emission and graduate to the next standard," the official said.

Such a move will bring India's vehicular emission norms closer to those prevalent in the European Union. The issue has gained traction with the proactive role of the Environment Pollution Control Authority (EPCA), a body notified by the Centre in 1997 to deal with all environmental issues in the national capital region and ensure compliance with air quality standards.

The auto industry, however, says higher level norms and technology can be adopted only in stages. As per industry estimates, about Rs 50,000 crore would have to be pumped into the four-wheeler segment to upgrade engines from BS-IV level to BS-V. "The auto industry would incur a lot of investment and if required can meet the emission level of new vehicles by a year earlier than the original auto fuel policy timeline," a senior automobile industry executive said.

"U.S. And India Announce ‘Cooperation’ On Climate Change"

President Obama and Indian Prime Minister Narendra Modi have announced that the two countries will work together to fight global climate change, laying out a set of goals that the two countries hope "will expand policy dialogues and technical work on clean energy and low greenhouse gas emissions technologies."

While not a concrete emissions reductions agreement like the one Obama reached with China this past November, the deal includes efforts to cooperate on reducing emissions of fluorinated gases, invigorate India’s promotion of clean energy investment, and partner to reduce the debilitating air pollution that has plagued many of India’s cities.
The agreement also emphasized that the countries would “cooperate closely” for a “successful and ambitious” agreement at the Paris climate talks at the end of the year. During that conference, 196 nations are expected to meet and tentatively agree a course of action to respond to climate change. It is widely considered the last chance for a global agreement that could feasibly keep the rise in global average temperatures under 2°C.

“India’s voice is very important on this issue,” Obama said at a press meeting, the Times of India reported. “Perhaps no country could potentially be more affected by the impacts of climate change and no country is going to be more important in moving forward a strong agreement than India.”

There was very little expectation among analysts that the U.S. would achieve a deal like the one it achieved in China, wherein the country would actually pledge to reduce its overall carbon emissions. In the China deal, the U.S. committed to cut its emissions 26 to 28 percent below their 2005 levels by 2025 and China agreed to get 20 percent of its energy from non-fossil-fuel sources by 2030 and to peak greenhouse gas emissions that same year. Many said that it would be unfair to expect India — the world’s third largest carbon emitter behind the U.S. and China — to announce a similar target, considering the hundreds of millions of rural poor.

Still a developing country, climate change stands to impact India more severely than other parts of the world, according to the U.N. Intergovernmental Panel on Climate Change. India also has a particularly bad air pollution problem — a recent World Health Organization report found that India has 13 of the 20 most polluted cities in the world with the capital, Delhi, being the most polluted of all. The report also found that Delhi had six times the level of airborne particulate matter considered safe. Another investigation found that the levels could be up to eight times higher in heavily trafficked corridors.

Key elements of their Joint Statement are excerpted below.

**Clean Energy Goal and Cooperation**

President Obama and Prime Minister Modi emphasized the critical importance of expanding clean energy research, development, manufacturing and deployment, which increases energy access and reduces greenhouse gas emissions. The leaders announced actions to advance India's transition to low carbon economy. India intends to increase the share of use of renewable in electricity generation consistent with its intended goal to increase India's solar target to 100 gigawatts by 2022. The United States intends to support India’s goal by enhancing cooperation on clean energy and climate change, to include:

i. Expanding Partnership to Advance Clean Energy Research (PACE-R): A renewed commitment to PACE-R, including extending funding for three existing research tracks of solar energy, building energy efficiency, and biofuels for an additional five years and launching a new track on smart grid and grid storage.

ii. Expanding Partnership to Advance Clean Energy Deployment (PACE-D): Both the countries intended to expand our current Partnership to Advance Clean Energy Deployment (PACE-D) through increased bilateral engagements and further joint initiatives to expand cooperation in support of India’s ambitious targets in renewable energy.

iii. Accelerating Clean Energy Finance: Prime Minister Modi emphasized India’s ongoing efforts to create a market environment that will promote trade and investment in this sector. President
Obama welcomed India's ambitious solar energy goals and encouraged India to continue its efforts to increase trade and private investment in this sector. President Obama conveyed the potential availability of U.S. Government official financing in this area, consistent with its policies, to support private sector involvement for those entities in contributing to India’s clean energy requirements.

iv. Launching Air Quality Cooperation: Implementing EPA’s AIR Now-International Program and megacities partnerships, focused on disseminating information to help the urban dwellers to reduce their exposure to harmful levels of air pollution, and enable urban policy planners to implement corrective strategies for improving Ambient Air Quality in the cities keeping in view health and climate change co-benefits of these strategies.

v. Initiating Climate Resilience Tool Development: Jointly undertaking a partnership on climate resilience that will work to downscale international climate models for the Indian sub-continent to much higher resolution than currently available, assess climate risks at the sub-national level, work with local technical institutes on capacity building, and engage local decision-makers in the process of addressing climate information needs and informing planning and climate resilient sustainable development, including for India’s State Action Plans.

vi. Demonstrating Clean Energy and Climate Initiatives on the Ground: Additional pilot programs and other collaborative projects in the areas of space cooling, super-efficient appliances, renewable energy storage, and smart grids.

vii. Concluding MOU on Energy Security, Clean Energy and Climate Change: Both countries concluded negotiations on a five year MOU to carry this work forward, to be signed as early as possible at a mutually agreed upon date.

Climate Change

The United States of America and the Republic of India recognize that global climate change is a profound threat to humanity and to the imperatives of sustainable development, growth and the eradication of poverty. President Obama and Prime Minister Modi share a deep concern regarding the climate challenge and understand that meeting it will require concerted action by their countries and the international community. They stressed the importance of enhancing their bilateral cooperation on adaptation measures, as well as joint research and development and technology innovation, adoption and diffusion for clean energy and efficiency solutions that will help achieve the goals of transitioning to a climate resilient and low carbon economy. They also stressed the importance of working together and with other countries to conclude an ambitious climate agreement in Paris in 2015. To this end, they plan to cooperate closely over the next year to achieve a successful agreement in Paris. The President and Prime Minister reaffirmed their prior understanding from September 2014 concerning the phase down of HFCs and agreed to cooperate on making concrete progress in the Montreal Protocol this year.

Delhi: 20 Percent Increase in Air Pollution in Last Three Years
New Delhi: The quality of air has gone down drastically in Delhi this year. The level of pollution has touched the highest level in January when compared to the data of same period in last three years.

In January this year, the level of pollution is 20 per cent more than last three years. Thick blanket of fog has further worsened the pollution level in the national capital.

Dr Gufran Beig from the state-run System of Air Quality Weather Forecasting and Research said that the level of pollution in January has gone up significantly. He said that earlier in January, the average of 2.5 particulate matter (pm) in air used to hover around 200 to 300 microgram per cubic meter but this time the figure has crossed the 370 mark in the same unit.

The rise in pollution level has become a matter of serious concern for the authorities and also for the people living in the city.

The thick winter haze that settles over Delhi – a nasty mix of smog, vehicle exhaust and smoke from cooking fires – abated somewhat when President Obama arrived in India this week for talks. A bit of rain came and cleared the air. Even so, the air quality index hovered around 200 when the president arrived at the viewing stand to watch India’s Republic Day Parade. That’s approaching what’s deemed a “very unhealthy” level of the microscopic 2.5 particulate matter, which causes respiratory disease and other ailments.

(The Washington Post)
The Americans were prepared. Delhi police had kept traffic to a minimum around the parade route, and the Embassy ordered 1,800 Swedish air purifiers in the weeks preceding the American delegations’ arrival.

Bloomberg published a story Monday titled “Mr. President, World’s Worst Air is Taking 6 Hours Off Your Life,” which argued that Delhi’s toxic air was so harmful that it could shorten the president’s longevity.

“I think in Delhi, I think particularly at this time of the year, the air quality deteriorates,” John Podesta, counselor to the president, said to reporters in Delhi on Sunday. “But I think we weren’t concerned about bringing the president here for these meetings.”

The air in New Delhi is the worst in the world, according to a World Health Organization report last year. Environmentalists say that efforts to control it – such as a switch to clean-burning natural gas for auto rickshaws – have made little long-term impact as the city has sprawled, eight coal-fired power plants chugged out more power and more than 7 million cars clogged the roads.

The situation is hardly better in other parts of the country. Earlier this year, a report by a Yale University research team showed that India ranked 174th of 178 countries in air quality, somewhere close to China and Pakistan.

**India Is Poised To Become the World's Fastest-Growing Economy in Two Years: IMF**

India is set to become the world's fastest-growing major economy in about two years from now, as China slows after tearing along at speeds in excess of 10 per cent at times over the past three decades or so, according to latest projections by the International Monetary Fund in the World Economic Outlook.

The IMF’s flagship publication said India's gross domestic product is likely to grow at 6.3 per cent, marginally down from 6.4 per cent projected in October, in the next fiscal year and 6.5 per cent in year to March 2017, which will be the third year of the Narendra Modi government. The World Bank had said last week that it sees China being dislodged by its neighbor to the south in calendar 2017.

The likely role switch comes amid the Chinese economy stumbling on bad loans from excessive spending and investment drying up. While India's growth forecast is broadly unchanged, that of China has been slashed by half a percentage point from October projections. Official Chinese government data showed it posted growth of 7.4 per cent last year, missing the official target and slumping to a 24-year low, although this was better than the 7.2 per cent expectation. In India, weaker external demand has been offset by the boost to the terms of trade from lower oil prices and a pickup in industrial and investment activity after policy reforms, the IMF said.

In its global outlook released on January 13, the World Bank projected India to edge past China in 2017, clocking 7 per cent growth compared with China's 6.9 per cent.

IMF’s World Economic Outlook said global prospects, barring that of the US, remain bleak with growth projected to tumble to 3.5 per cent in 2015 from 3.8 per cent forecast in October. In 2016, the world is expected to grow by 3.7 per cent as against 4 per cent projected in October. The report sees low crude prices providing some succor but the global economy may be undermined by other factors.
"Global growth will receive a boost from lower oil prices, which reflect to an important extent higher supply. But this boost is projected to be more than offset by negative factors, including investment weakness as adjustment to diminished expectations on medium-term growth continues in many advanced and emerging market economies," it said.

The Modi government has rolled out several measures to perk the economy and lift overall business sentiment since coming to power in May. Various projections put India's growth in 2014-15 at 5.5 per cent after slumping to decadal lows of below 5 per cent in the past two financial years.

The forthcoming budget is expected to build on reform momentum to put the country back on the path to high growth.

IMF deputy director Gian Maria Milesi-Ferretti termed the new government's plans as promising but said it's the speed of implementation that will have to be seen.

The revised projection reflects a reassessment of prospects in China, Russia, the euro area and Japan as well as weaker activity in some major oil exporters because of the sharp drop in oil prices. The US is the only major economy for which growth projections have been raised, the IMF said.

**Air Pollution Hits Crops More Than Climate Change**

Atmospheric pollutants may impact India's major crops like wheat and rice more than temperature rise, says a new study based on a 'regression model' that predicts future events with information on past or present events. The study by Jennifer Burney and V. Ramanathan, scientists at the University of California, project that a one degree centigrade rise in temperature could lead to a crop decline of four per cent for wheat and five per cent for rice. But losses from pollution could be greater.

“For context, the yield loss for wheat attributable to pollutants alone in 2010 corresponds to over 24 million tons of wheat: around four times India's wheat imports before the 2007—2008 food price crisis and a value greater than $5 billion," the authors write in a paper on the study published November in Proceedings of the National Academy of Sciences.3

Most pollutants impact temperature by absorbing incoming radiation from the sun and reflected heat from the earth. Black carbon aerosols and ozone are of special concern as they affect crops directly — black carbon changes the amount of radiation reaching the surface while ozone is toxic to plants.

In 2010, wheat yields were 36 per cent lower and the models show that 90 per cent of that change was due to the pollutants. The impact was most drastic in the state of Uttaranchal and Uttar Pradesh. Wheat yields in Uttar Pradesh were 50 per cent lower than they would have been without the current climate and pollutant trends with two-thirds of the decrease attributable to pollutant levels.

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3 “Recent climate and air pollution impacts on Indian agriculture” Jennifer Burney and V. Ramanathan
In the case of rice, 15 per cent of yield decrease in the Gangetic plains could be attributed to pollutants. The Gangetic plains seem to accumulate surface level ozone and aerosols before the monsoons.

“Previous studies have shown that wheat is more sensitive to ozone than rice,” Burney told SciDev.Net. “Also, the dry season has more pollutants.”

Automakers Set To Get Some Relief on Penalty for Vehicle Recall

Automakers are set to get some relief from stringent norms on vehicle recall proposed in the Road and Safety Bill. The Centre now plans to cap the total penalty payout for each company instead of the proposed penalty of ₹5 lakh a recalled vehicle.

“There is an agreement on revising the penalty amount. Now, the thinking is to prescribe a cap on total penalty payout along with penalty per vehicle,” a senior Government official told BusinessLine. The draft Bill prescribes a ₹5 lakh fine per vehicle (the amount may be differentiated on the basis of vehicle size) or imprisonment for three months or both for manufacturing faulty vehicles.

The Heavy Industry Ministry has argued that in order to avoid undue pressure on automobile companies or create a conflict between authorities, capping the total penalty payout is required. In most developed countries, there is fine of $10,000-15,000 a vehicle with an upper ceiling of $3-$5 million, in terms of total payout, the Ministry has said.

If there is no ceiling, a small auto company or companies making electric vehicles will suffer the most, a senior official said adding that the fine could be certain percentage of total turnover of a company. Another provision, which is likely to see some change is the one related to the recall of vehicles on the basis of 100 applications.

A Committee of Secretaries headed by the Cabinet Secretary Ajit Seth discussed the draft Bill and proposals for changing some of the provisions. The committee discussed the proposal by the Heavy Industry Ministry (the administrative Ministry for Automobile Industry) beside others. It has favored redrafting of the bill.

Now the Automotive Research Association of India is helping the Road Ministry in re-drafting the Bill. “The Bill is expected to be ready in a couple of weeks, and then the process of putting it before the Cabinet will start,” he added.

The draft Bill prescribes three conditions for vehicle recall. One of the conditions says a defect in a particular model of motor vehicle should have been reported to the national authority by 100 or more people. The defect should be harmful to drivers or passengers of that model or to other road users, or render that model non-compliant with the provisions of the Act, or render that vehicle model unusable.

The official said that rather than act upon a certain number of applications, there should be a scientific mechanism and tests by an accredited agency to establish the faults first. Only then should a recall order be issued, he said. “The fault can also be established through accident data, data from dealers (how many vehicles of a particular make are coming for servicing and how often) and also from market intelligence,” he added.
He also said that the National Automotive Board (NAB) might continue with the task of advising the Governments on safety standards for the vehicles. The draft talks about giving this task to proposed National Authority.

**Fuel Norms May Be Flashpoint between New Delhi Govt and Green Community**

Air pollution is one of the vital issues that the new Delhi government will have to address as soon as it is formed. However, it may not be an easy task for the state government, as dealing with air pollution will involve tough negotiations with the Centre for Science and Environment on various aspects, especially the implementation of superior fuel norms.

The issue assumes significance in the wake of an affidavit filed by the Society of Indian Automobile Manufacturers (SIAM) in the Supreme Court recently. SIAM has claimed it cannot manufacture Euro V-compliant vehicles till 2020-2021 and has not committed to any timeline to manufacture Euro VI-compliant ones. The apex court was hearing a petition by M C Mehta, lawyer and environment activist, against air pollution in cities. Only 13 cities, including Delhi, have adopted Euro IV level, while the rest of the country is still following Euro III norms.

The Environment Pollution Control Authority (EPCA) as well as experts have recommended immediate implementation of Euro V norms and upgrading to Euro VI norms by 2020 in Delhi and other cities to cut air pollution levels.

"The new government will have to push for implementation of superior fuel standards. For rest of the measures, it may not require Centre's help like scaling up public transport, hiking parking fee and last-mile connectivity," said Anumita Roychowdhury, head of CSE's clean air program.

Experts say that if AAP forms the government, it will face more difficulty in dealing with the BJP-led Centre on this issue. The party has, however, promised in its manifesto a number of public transport interventions such as shared autos, Metro feeder services and e-rickshaws which may be used to provide efficient last-mile connectivity by fixing and delimiting routes.

Europe has already switched to Euro VI norms for light commercial vehicles and will bring heavy vehicles under its purview this year. "This means that new Indian vehicles are not fitted with the most advanced emission reduction technologies despite their availability in the market. India also lags behind Brazil and China, both of which are fastest-growing countries like India," a 2014 Planning Commission report said.

Euro 4 norms mandate a sulfur content of about 50 parts per million (PPM) as against the Euro V's sulfur content of 10 PPM. High sulfur content produces a significant amount of sulfur dioxide (SO2) and high emissions of particulate matter (PM). Delhi ranked the most polluted city among 1,600 global cities according to a recent WHO report.

**Delhi Govt't Puts Tackling Air Pollution as Top Priority: Officials**

The local government in the Indian capital has put finding a solution to the serious air pollution as its top priority, after the anti-graft Aam Aadmi Party (AAP) came to power early this month, said officials. In his first review meeting with the environment and forests department, chief minister Arvind Kejriwal chose to discuss only the rising levels of air pollution in the city, asking officials if the department could offer any immediate solutions to tackle the problem of air pollution.
Kejriwal criticized officials for lack of preparedness for emergency solution to the drastic pollution crisis in the capital city, which has risen to alarming levels due to car emission and industrial pollution.

The World Health Organization's urban air quality index showed Delhi with the highest PM$_{2.5}$ (fine, respirable particles). High PM$_{2.5}$ pollution is linked to cardiac and respiratory conditions.

A joint study by universities of Chicago, Yale and Harvard published recently said that half of India's population may be losing up to three years' lifespan because of bad air.

The European Union has directed its diplomats here to soon install air purifiers in their offices and residences.

**Air Pollution Levels in Delhi Nine Times That of WHO Limit**

Amid growing concerns over deteriorating air quality in the capital, the Central Pollution Control Board (CPCB) has said that air quality in Delhi is seriously violative of the National Ambient Air Quality Standards. CPCB stated before the National Green Tribunal that Delhites are inhaling highly contaminated air in comparison to neighboring places like Faridabad, Gurgaon and Ghaziabad.

A CPCB survey, which covered 16 cities in NCR and spanned over a period of 68 days from December 5, 2014 to February 10, 2015, stated that Delhi tops the list in terms of highest levels of nitrogen dioxide, benzene, and carbon monoxide.

"During the total monitoring period for nitrogen dioxide, it was observed that Delhi exceeds the NAAQS... While the remaining cities are within the National Standard (NAAQS 2009)," the report stated.

As far as particulate matter (sum of all solid and liquid particles suspended in air) is concerned, the CPCB report revealed that levels of particulate matter of the size of 10 micrograms in all 16 cities exceed the daily permissible levels set in NAAQS.

While fine particulate matter was monitored in four of the 16 cities - Delhi, Faridabad, Gurgaon and Rohtak, in all four, the levels exceeded permissible limits.

"Carbon monoxide has been monitored only at four cities namely Delhi, Faridabad, Gurgaon and Rohtak. During the total monitoring period for CO, it was observed that all the cities exceed the national standard (NAAQS 2009)," the report said.

Ammonia was monitored only at six locations in Delhi only and within the city, Punjabi Bagh has highest concentration of ammonia.

The CPCB report is in pursuance to the tribunal's December 4, 2014 order which had asked a team of CPCB, DPCC and others to take ambient air quality samples from the entire NCR Delhi at different intervals and times.

Recently, a study conducted at six places in the wake of US President Barack Obama's visit, found that air pollution levels are nine times than the WHO limit.
Ashok Bhattacharya, Advisor, Sustainable Mobility Unit, Centre for Science and Environment, said, “The number of vehicles on Delhi’s roads has increased phenomenally. Vehicular population in the Capital registered a 135.59 per cent jump between 1999-2000 and 2011-12 to touch 74.53 lakh. This is a major generator of gaseous air pollutants such as SO2 and NO2. Further, long traffic jams, congestion and lack of public transport contribute to poor air quality.”

IIT Delhi air pollution modeling scientist Dr Manju Mohan said, “An equal culprit is the lack of initiative to upgrade technologies in power plants. We still have coal-based power plants in the city. As per a study, of all the coal based power plants in the country, the most polluting was found to be in Badarpur in the south of the city.”

These shocking figures have also led to concerns among medical practitioners.

Dr Ajay Aggarwal, HoD, internal medicine, Fortis Hospital, Sector 62, Noida, said, “Cases of respiratory illness have suddenly gone up in the last few months. There are cases of breathlessness even among those who are not asthmatic.”

Pre-CNG Days May Return To Delhi

Delhi’s air quality will fall to the pre-CNG days by 2020 if the number of private vehicles continues to increase steadily and if there is no change in vehicle technology and fuel standards in the city, a new study reveals. This may put all the gains made by the Capital through the decision to convert to CNG after a Supreme Court directive in 1998, down the drain.

The study titled ‘Evolution of on-road vehicle exhaust emissions in Delhi’, is authored by Rahul Goel of the Transport Research and Injury Prevention Program at IIT-Delhi, and Sarath K. Guttikunda of Center for Climate Studies at IIT Mumbai.

The study focuses on the National Capital Region, including Ghaziabad, Noida, Greater Noida, Faridabad and Gurgaon.

The total emissions for all the criteria pollutants are projected to 2030 under the Business As Usual (BAU) scenario. Under BAU, no change in the emission and fuel standards is assumed past 2015. The sales for 2014 to 2030 were estimated using annual growth rates, projected by the Society of Indian Automobile Manufacturers in New Delhi.

The decade from 2021 to 2030, is estimated to add 430,000 two-wheelers and 350,000 four-wheelers per year to the in-use fleet, as opposed to 350,000 two-wheelers and 200,000 four-wheelers during the preceding decade 2011 to 2020.

The total in-use fleet will grow three times from a total of 6.0 million in 2014 to 16.0 million in 2030. Since 1990, for all the pollutants, the lowest emission totals are estimated for 2012-14, thanks to the CNG-conversion of vehicles, which will rise if left unchecked.

With no changes in the standards, the 4-wheelers will dominate the PM, SO2, CO, and CO2 emissions.

In conclusion, the study says, “We predict that the current regime of vehicle technology, fuel standards, and high growth rate of private vehicles, if left unchanged, is likely to nullify all the past emission reductions by the end of 2020.”
President Barack Obama's trip to India that ended Jan. 27 was never expected to produce a breakthrough climate pledge akin to what he got from his 2014 visit to China, but it did yield assurances for new cooperation on a global climate agreement and cutting hydrofluorocarbons, a potent greenhouse gas.

At a joint news conference on January 25th, Obama said he made a “personal commitment” to India Prime Minister Narendra Modi “to work together to pursue a strong global climate agreement in Paris.” The two leaders also “agreed to make concrete progress this year toward phasing out hydrofluorocarbons under the Montreal Protocol,” Obama said. That potentially could remove what has been a significant obstacle to a U.S. push to accelerate reductions in the global use and production of HFCs.

That would mark a significant departure for India, which for years has opposed the U.S.-led effort to use the treaty to cut HFCs. But Modi stopped short of committing to actual emissions reductions; India has long held that industrialized nations should bear the brunt of actions since they emitted the bulk of emissions now in the atmosphere. But Modi at the same January appearance pledged that the two leaders would work toward a “successful Paris conference on climate change” in December, and both said they would keep an open line of communication in the run-up to the summit.

Those pledges of cooperation aside, Obama's trip to India did not produce a commitment comparable to what the president secured from China during his trip there in November. Obama and China President Xi Jinping announced more ambitious climate pledges, with China vowing to “peak” its emissions by 2030, perhaps sooner. That pledge was widely seen as boosting the chance for sealing a global climate deal in December.

Modi said the announcement from the U.S. and China did not “impose” any additional pressure on India to make firm commitments toward reducing its emissions, but said there were other reasons to act. “India is an independent country and there is no pressure on us from any country or any person,” Modi said. “But there is pressure. When we think about the future generations and what kind of world we are going to give them, then there is pressure. Climate change itself is a huge pressure.”

Under Modi, India has pledged to accelerate actions on clean energy that ultimately could pay dividends in reducing emissions. For example, he has called for a total of 100 gigawatts of solar capacity by 2022—nearly five times what India previously had planned.

The climate talks were viewed with skepticism by Senate Republicans, who generally oppose the U.S. signing a global deal that is unlikely to require similar actions by developing nations. They, as well as some coal-state Democrats, say Obama should be focusing his efforts on getting more U.S. energy technologies, including clean coal advancements, into the hands of developing countries to help them boost access to electricity and cut poverty.

In making climate a priority, Obama “doesn't seem to [put] enough of his focus on energy,” Sen. John Thune (R-S.D.) said. The president's domestic climate efforts—including pending power plant carbon pollution limits—are “always in the context of more regulations, more taxes and higher cost of energy,” said Thune, a member of the Senate Republican leadership.
But Sen. Ben Cardin (D-Md.) said Obama recognizes India's dilemma: It is particularly vulnerable to climate impacts and recognizes the global threat of climate change, but it must balance its action against the need to ensure that its population of 1.2 billion has access to electricity.

China's pledge to cap its emissions by 2030 in many ways reflects the strength of its centralized government—which guides energy development through national plans—as well as local pressures for more action on its air pollution, Cardin said.

India's cooperation is considered crucial to the success of the Nov. 30—Dec. 11 Paris talks, where more than 190 countries are to agree to the first global climate accord to require actions from developing and developed nations alike. It would enter into force in 2020.

India is the world's third-largest greenhouse gas emitter, behind China and the U.S.; it is the fourth-largest energy consumer in the world after China, the U.S. and Russia; and its demand for energy is growing nearly 3 percent a year.

Together, China and India will account for about half the increase in global demand for energy through 2040, according to the U.S. Energy Information Administration.

**Improving Air Quality in India Would Give Some Three More Years of Life, Report Says**

Reducing particulate matter enough to bring all regions of India into compliance with international norms would increase the life expectancy of more than half a billion people by 3.2 years on average, according to a report in the Economic & Political Weekly.

The report, "Lower Pollution, Longer Lives," said more than half of India's population—54.5 percent, or 660 million people—live in areas that exceed the Indian National Ambient Air Quality Standard for fine particulate pollution. And it said nearly every Indian lives in a region with air pollution levels above the stricter World Health Organization standards.

As a result, India has the highest rate of death caused by chronic respiratory diseases anywhere in the world, according to the report from the India Initiative of Harvard's Sustainability Science Program, published on February 21st.

While recent studies have highlighted India's severe air pollution problem, the report aggregated findings to gauge how much pollution is costing India in terms of human lives and to suggest policy interventions.

Based on estimates from WHO, the report said 13 of the 20 cities in the world with the worst fine-particulate air pollution are in India, including Delhi, ranked worst.

Reducing pollution to achieve the national standard would increase life expectancy by 3.2 years on average, adding 2.1 billion life years to the nation, the report said. Achieving the stricter WHO standards would bring even higher gains.

The report outlined three policy reforms that “that all have the promise of substantial benefits at relatively small costs.”
1). India should improve the accuracy and broaden the coverage of pollution monitoring, both in ambient air and at its source. For example, Beijing has 35 monitoring stations, while Kolkata, the Indian city with the most monitoring stations, has only 20. “More monitoring stations built in more locations, and in a collaborative manner with independent scientists, will allow for continual improvement in monitoring and the wider use of monitoring data for source apportionment and other scientific purposes,” the report said, adding that the data should be accessible to the public through traditional and new media outlets. Wide public dissemination not only works as a health advisory system, but also increases pressure on polluters to comply with regulatory standards, it added.

2). India should base its environmental laws and regulations on civil, rather than criminal, penalties. Typically, criminal penalties in the country are so severe they seldom are used and are reserved for the very worst polluters. The bedrock of environmental legislation in India, the Air and Water acts, “are built on an outdated criminal system where draconian penalties such as imprisonment or industry closure are the main recourse available to regulators,” the report said. It would be better for India to set civil penalties, in accord with the widely recognized polluter pays principle, so that incentives to reduce pollution applied to everyone, according to the report.

3). India should implement market-based environmental regulations, such as emissions trading systems, which have been proved to be the most industry-friendly and cost-effective way to reduce pollution, the report said.

**Government May Propose 10-Year Tax Holiday on Clean Fuel, Engines**

Prime Minister Narendra Modi has instructed ministers to draft a policy proposal that would promote clean fuel and auto engines, including a possible 10-year tax holiday for stakeholders. “In one of the cabinet meetings, the prime minister told me and the finance minister to prepare a policy for clean fuel and clean engines. This may include exemption from all taxes for 10 years. I am trying for that,” roads minister Nitin Gadkari told a conference on sustainable fuels and internal combustion engines recently. “A cabinet note on the issue is likely within a month.” Modi’s instruction is in line with the National Democratic Alliance government’s thrust on new and renewable energy and a clean environment.

Alongside, Gadkari said, the government plans to introduce a bill in the next session of Parliament seeking to develop inland water transport and reduce India’s dependence on conventional fuel and road transport. The bill will propose converting 101 rivers into inland waterways. At present, the country has five waterways. The first of the 101 new waterways is likely to be built between New Delhi and Agra, Gadkari said. Gadkari’s comments follow a 16 January cabinet decision allowing private manufacturers of biodiesel to sell directly to users such as Indian Railways, seeking to increase the supply of environment-friendly fuels in the country. Until the decision, only state-owned oil firms and private firms with at least Rs.2,000 crore of investment in oil infrastructure were allowed to retail petrol and diesel.

Additionally, India has an ambitious plan to put 6 million electric vehicles on roads by 2020. Although the plan was announced by the erstwhile government led by Manmohan Singh, Mint reported on 8 January that the centre may set aside as much as Rs.1,400 crore, including allocations to other existing schemes, in the budget to launch the country’s electric vehicle journey.

India is the third most polluting country in the world, after the US and China, who have signed a major bilateral climate deal in November, where the US will reduce its emissions by 26-28% below
its 2005 level by 2025 and China will reach the peak of its harmful carbon dioxide emissions around 2030. India, too, is gearing up to meet the climate change challenge, and in November, the National Green Tribunal announced that it will ban vehicles older than 15 years from New Delhi’s roads. This has been subsequently challenged by the centre.

The planned new policy on clean fuel and engines is expected to strengthen India’s case on climate change. Gadkari said a tax exemption will make it attractive for people to get into manufacturing technologies for clean fuel and engines. “There will be a tax holiday on engines and fuel for 5+5 years. But, the finance minister won’t tell me if it will come in the budget or not,” Gadkari said.

The government’s focus on clean fuel also stems from the fact that India has an energy import bill of around $150 billion, which is expected to reach $300 billion by 2030. India imports 80% of its crude oil and 18% of its natural gas requirements. Fuel forms a major chunk of India’s overall imports. Reducing dependence on it will improve the fiscal deficit situation. “This will help us save on country’s import...new employment opportunities will come up, our GDP (gross domestic product) will increase,” Gadkari said.

Vishnu Mathur, director general of the lobby group Society of Indian Automobile Manufacturers, welcomed the move. “I am happy. It is a positive move as far as we are concerned. At least someone is thinking in that direction. These are the areas we really need to focus on,” Mathur said. “The new technology will have to be commercially viable and we hope this policy talks about how to do it.”

India: Former Minister Reportedly Delayed Projects at Party’s Behest

Jayanthi Natarajan, a former minister of environment and forests, has resigned from the primary membership of the Congress party. Since the party was defeated at the polls in May 2014, Natarajan is the latest to quit the Congress.

More than her resignation, it’s the letter she sent to the party president, Sonia Gandhi, in November 2014 that is significant. Released to the press only now, it reveals how the ministry of environment and forests functioned under her two-and-half-year term, between July 2011 and December 2013. She claims she received instructions from the office of the party’s vice-president Rahul Gandhi on particular infrastructure projects. She also liaised with Sonia Gandhi on specific ones in which the latter had expressed interest.

Rahul Gandhi championed the cause of the Dhongria Kondh tribals who opposed the mining of bauxite from the Niyamgiri hills, Orissa. He famously called himself a soldier of the tribe. Jairam Ramesh, Natarajan’s predecessor at the ministry, refused to grant permission to Vedanta Aluminium to mine the hill, a policy decision continued by Natarajan. Subsequently, the company challenged the ministry’s decision in the Supreme Court that let the residents have the last word. Betel leaf farmers in Nuagaon village, Orissa. A tense stand-off with farmers unwilling to give up their land threatens India’s largest-ever foreign investment project, a $12 billion steel plant planned by South Korea’s POSCO.

But none in the Congress seemed to mind depriving the rights of people living on land on which the Korean-promoted POSCO steel plant was to be built. Those residents had no soldier to fight for their rights against a state that wanted to protect the interests of India’s largest foreign investment, valued at $12bn, at all costs.
Natarajan also hints that she delayed projects at Rahul Gandhi’s behest. While she was minister, corporate executives complained that even after their projects were approved by the ministry’s clearance committees, Natarajan delayed signing off on them. As many as 35 large projects worth more than rupees 35,000 crores (about £3.2m) were reportedly stuck. At that time, the minister vehemently denied stalling projects.

However, in her letter to Sonia Gandhi, Natarajan listed a few projects on which she had received instructions. One such was Mundra port, promoted by Gautam Adani, known to be close to the then Gujarat chief minister Narendra Modi. Another was Lavasa township, being built near Pune, Maharashtra.

During Natarajan’s tenure, one ministry official was caught red-handed accepting a bribe in exchange for clearing a limestone-mining project.

In October 2013, income tax officials recovered diaries during a raid on the offices of Aditya Birla group in New Delhi. They found references to rupees 7.08 crores as “payments under Project-J, Environment and Forest.” One company official claimed it was a listing of unaccounted cash receipts, while another said the sums related to a proposed real estate project.

Some corporate executives alleged they had to meet one of the minister’s aides to get their paperwork moving. As a prime ministerial-aspirant Modi charged that industry had to pay a ‘Jayanthi tax’ to get approvals from the ministry. The Congress party stoutly defended Natarajan then. But after she revealed that the Gandhis interfered in the ministry’s functioning, the Congress party repeated Modi’s corruption charges against her.

Significantly, the central bureau of investigation (CBI) alleged the diversion of 512 hectares (1,265 acres) of forests in Saranda, Jharkhand, for iron ore mining by Jindal Steel and Power Ltd, owned by Naveen Jindal, who was Congress MP then.

In addition, the CBI is investigating irregularities in four other projects that were cleared by Natarajan’s ministry. The bureau might question the former minister in future.

To be fair, the delayed projects were not paragons of environmental probity; they did fall afoul of regulations. While the hold-up may have served short-term political interests, the price will be paid in the long term.

The new government appears to wooing the corporate world. According to a report published on Monday, 190 projects worth rupees 3.31 trillion were approved in the past six months, and more than 100 business leaders joined the ruling Bharatiya Janata Party (BJP).

Instead of protecting the environment, safeguards are being used by political parties to prove a point to their political opponents.

45. **Nissan: Japan Has More Electric Car Charging Locations than Gas Stations**

That surprising discovery comes from Nissan Motor Co., which reported that the number of power points in Japan, including fast-chargers and those in homes, has surged to 40,000, surpassing the nation's 34,000 gas stations.
The figure shows that in the relatively brief time since electric vehicles were introduced, the infrastructure to support them has become bigger than what the oil industry built over decades in the world's third-biggest economy—at least by this one measure.

Why that matters is obvious. Nissan's battery-powered Leaf can travel 84 miles (135 kilometers) on a charge, and the anxiety of being stuck away from home without power has restrained consumer demand. As the charging network expands and batteries become more powerful, that concern will wane.

“An important element of the continued market growth is the development of the charging infrastructure,” Joseph G. Peter, Nissan chief financial officer, told analysts on a conference call.

As charging stations become more common, electric-car support services also are emerging. Open Charge Map, for example, operates an online listing of public charging points worldwide. A mobile app combines the data with GPS technology to guide drivers to the nearest site.

Of course, gas stations typically have multiple pumps and can serve more vehicles in a day than an electric-car charging point.

Also, one criticism of Nissan's number is that many of those charging sites are in private garages. Considering the emerging so-called sharing economy, such as the online home-sharing service operated by Airbnb Inc., homeowners soon may be willing to make their chargers available to other drivers.

And more charging locations are being built all the time. Automakers have recognized that oil companies are unlikely to install plugs next to gasoline pumps and instead are building their own networks.

Tesla Motors Inc. has its own network of charging stations, and Bayerische Motoren Werke AG and Volkswagen AG announced in January that they are joining the network operated by ChargePoint Inc. and plan to build as many as 100 fast chargers along the busiest corridors of the U.S. coasts, from Portland to San Diego in the west and from Boston to Washington, in the east.

Utilities are joining in. Great Plains Energy Inc., the Kansas City, Mo.–based utility holding company, announced in January that it plans to build a network of more than 1,000 charging stations in the region by mid-2015. Charging will even be free to everyone for the first two years.

Given that there are only about 9,000 public charging stations in the entire U.S., the initiative gives Kansas City, the nation's 29th largest metropolitan area, a chance to become the nation's electric car capital with as much as 10 percent of the nation's chargers.

Kansas City may not be able to retain that position. PG&E Corp., owner of California's biggest utility, asked regulators on February 9th for permission to build a network of about 25,000 chargers in public areas throughout a five-year period.

46. State and Federal Governments Agree To Crack Down On Air Pollution in Australia
Tougher standards on emissions and a national clean air agreement could help reduce healthcare costs by billions of dollars.

**Fossil fuel power station**

The federal and state governments have agreed to work together to improve air quality standards and help Australia adapt to the effects of climate change.

After a recent meeting, environment ministers released a discussion paper for a national clean air agreement proposing stronger air quality standards for sulfur dioxide, nitrogen dioxide and ozone, tackling the release of mercury into the environment and curbing shipping emissions.

While the paper stressed that Australia’s air quality is “very good” compared with the rest of the world, the health costs of air pollution cost the country up to $24.3bn a year. Around 2.2% of hospital emissions for children aged under 14 with respiratory problems are due to PM10.

There will also be a review of fuel quality standards and measures to control emissions from wood heaters and non-road spark ignition engines. The exact level of these standards has yet to be thrashed out by the governments.

A climate change adaption working group has been established, to be chaired by Lisa Neville, Victoria’s environment minister. The group, which will involve all the states, will work on issues such as water management and renewable energy opportunities. Neville said there was “room for improvement” in air quality measures but that there needed to be a national agreement rather than the states going it alone. “We need a nationally consistent approach to provide certainty to everyone,” she told Guardian Australia.

Neville said while many of the states disagreed with the federal government on its climate change policies, the election of a new Labor government in Queensland provides “whole new options on what we can be doing together to tackle climate change.”

**47. Australia Issues New Carbon Credit Rules**

Australia has issued rules that for the first time allow airlines, shipping companies, and road and rail transport businesses to earn carbon credits by reducing the greenhouse gas emissions intensity of their activities. Environment Minister Greg Hunt also issued rules on February 17th that allow coal mines to earn carbon credits by flaring methane gas or generating electricity from it.

Finalizing the rules allows companies that follow them to earn Australian Carbon Credit Units (ACCUs), which they can then try to sell to the Clean Energy Regulator by bidding in an Emissions Reduction Fund auction.
They also can sell the ACCUs to other interested parties, such as organizations seeking to voluntarily reduce their net emissions.

The Emissions Reduction Fund, a central plank of Prime Minister Tony Abbott's Direct Action plan, will use government funds to purchase cheap abatement through a “reverse auction” process. Direct Action replaced the country's carbon price scheme, which required large emitters to pay for their emissions and was repealed effective July 1, 2014.

The aviation methodology determination, which is available only to airlines flying domestic routes, allows them to earn credits through new projects that reduce their emissions intensity. The methodology determination for land and sea transport describes rules for earning credits by reducing the emissions intensity of domestic shipping and road and rail transport. As with the aviation methodology, eligible activities include vehicle upgrades and modifications, fuel-switching and operational changes.

Sectors such as mining and agriculture can earn ACCUs by reducing the emissions intensity of the mobile equipment that they use.

The coal mine waste gas methodology determination is designed to allow mining companies to earn ACCUs by reducing the amount of methane and carbon dioxide that escapes into the atmosphere during the fracturing of overburden and coal seams. Combusting the methane with a flare or an electricity generation system converts it to carbon dioxide, which is a much less potent greenhouse gas than methane itself.

Only new mining abatement projects can benefit under this determination, but mines that have previously abated less than 5,000 metric tons of carbon dioxide equivalent annually will be treated as new and can earn credits.

The Clean Energy Regulator will hold the first Emissions Reduction Fund auction for the purchase of ACCUs April 15–16, with several more auctions likely to follow later in the year.

48. Malaysia’s Prices of Petrol, Diesel up 25 Sen per Liter for March

Petrol and diesel prices for March in Malaysia will rise 25 sen a liter starting March 1. Domestic Trade, Cooperatives and Consumerism Minister Datuk Seri Hasan Malek said the new retail price of RON95 petrol would be RM1.95 per liter, RON97 at RM2.25 per liter, and diesel at RM1.95 per liter.

In a statement, he said the price was determined based on the average cost price of the product during February 2015 and currency exchange rates.

“The government will monitor the development of the market price of the products’ costs and currency exchange rates every time to set the retail price of petrol and diesel for the following months,” said Hasan.

The minister reminded all oil companies and petrol station operators to comply with the new pricing, “Stern action will be taken against those who violate the rules relating to the new prices set by the government.”
Israel Gov't Plan Tackles Air Pollution Caused By Commuter Traffic

The Environmental Protection Ministry is slated to start funding projects that will let commuters leave their cars at home and get to work on time. The expected result is reduced air pollution and gas consumption; less traffic; and shorter commuting times.

The proposed measures are part of the implementation of a national plan to cut air pollution that has been approved by the cabinet and is slated to go into action a few months from now. Some 6 million shekels ($1.52 million) will be put into the project.

The ministry is expected to lend its support to projects designed to encourage commuting by public transportation and using bicycles rather than cars. The plan, which is projected to cut back on hundreds of thousands of car tips annually, includes the establishment of a shuttle system to and from centers of business, as well as an expansion of Tel Aviv's bike sharing system to all of the Gush Dan region. The latter initiative will also include upgrades to bike paths in the area.

Cities slated to benefit from the project include Tel Aviv and its surrounding cities Givatayim, Holon, Ramat Gan, and Petach Tikva, as well as Jerusalem. It should be noted that the amount of ministry support for the various municipal authorities is based on the cities' population density and the data on annual carbon dioxide emissions from cars. The amount of aid is being set according to each city's socio-economic status, with the poorer cities getting more money. Support from the Environmental Protection Ministry is conditional on each local authority submitting its own detailed plan to reduce air pollution and use of personal vehicles.

"The fight against air pollution will prevent deaths," Deputy Environmental Protection Minister Ofir Akunis said. "The citizens of Israel can imagine the savings they will enjoy if they decide to leave their cars at home during the week and get to work using the alternate methods of transportation we'll be offering, in conjunction with the local authorities," Akunis added.

Estimates say that placing bike rental stations in Givatayim, for example, would cut down on some 200,000 car trips per year. The shuttle initiative from the Petach Tikva train station to the city's business center is expected to save another 120,000 car trips annually.

The ministry's proposals to cut back on air pollution caused by commuter traffic also include developing ride sharing applications for government employees and steps to keep polluting vehicles out of city centers.
**50. Can the Middle East End Its Addiction to Cheap Oil?**

The recent drop in oil prices is a once-in-a-decade opportunity for the developing world to reform its economic structure for the betterment of its people. The lower cost in global fuel prices can provide a unique avenue for countries to carry out energy subsidy reforms and develop energy efficiency programs with a much smaller negative effects on the population than otherwise.

But why should Middle Eastern countries act now? Well, globally the Middle East and North Africa (MENA) region is now the second most energy-intensive region in the world, after Eastern Europe and Central Asia, and attributes to 6 percent of the world's energy-related Greenhouse Gas (GHG) emissions (2005). On average its energy intensity is now 60 percent higher than that of OECD countries and 40 percent above the world's average. The environmental, economic and societal costs of non-action have already started to considerably affect the region's inhabitants. The health costs attributed to the considerable local air pollution is estimated at close to $5.3 billion, an equivalent to 1 percent of gross national income in 2004 or 40,440 premature deaths per year. In comparison to global averages the local emissions are almost 50 percent higher in MENA urban areas than the world average. This is mainly due to the burning of fossil fuels for electricity generation, transportation and manufacturing.

In the past subsidies on food and fuel were intended as a means for sharing the region's oil wealth with its citizens and seen as part of the "social contract" without any regards for the effects on local air pollution. However, generalized subsidies are neither well targeted nor cost-effective as a social protection tool and have failed to reach those who need them most and instead mostly benefit the well-off who consume more subsidized energy.

Taking the example of Egypt in 2008, the wealthiest 20 percent of the population received 93 percent of gasoline subsidies, as they owned most of the vehicles, while the poorest 40 percent received 3 percent. Likewise in Yemen, the richest 10 percent of households received 40 percent of all subsidized diesel, while the poorest 2 percent received only 2 percent. While energy subsidies are not only inefficient in supporting the poor they also account for a considerable share of the region's public financing, averaging in excess of 20 percent of state budget across MENA countries and over 7 percent of GDP in 2006 well before the last round of 2008 global oil price spikes.

The time for change is now and governments must take advantage of low oil prices to introduce policies which index domestic energy tariffs to global oil prices. In order to ensure a smooth transition, social assistance programs for poor and vulnerable consumers must be bolstered while national communications strategies which raise awareness and build support for subsidy reforms must be implemented now. This would ensure that energy tariffs adjust automatically when oil prices recover, and that governments are prepared to provide the appropriate assistance immediately, rather than face political pressure to re-introduce price subsidies. The 2014 decision of the Egyptian government to phase out fossil fuel subsidies is a good example of another country, just like Tunisia in 2012, of taking a step in the right direction.

**SOUTH AMERICA**

**51. Ecuador Cracking Down on Emissions**

As part of an effort to reduce emissions and improve air quality in Quito, controls have been put into place throughout the city to ensure vehicles are operating within the permitted 0.6% and 0.8%
carbon monoxide levels. If found to be operating above, the owner of the vehicle is given 8 days for it to be properly calibrated, or will receive a fine of US$200.

"Why is it important to do this control? Because one of the greatest contaminants of the city is the particulate material that is deposited in the lungs of citizens. And this is found in gasoline and in diesel," said Secretary of the Environment Veronica Arias in an interview with teleSUR English.

The controls put into effect this week are part of a decade-long policy to improve the air quality of Quito, a city which has historically battled pollution, due to low oxygen levels at its high altitude of 2,800 meters and surrounding mountains which trap the air.

Cases of cancer and high rates of asthma have been registered in the past, thought to be directly related to air pollution.

There are currently 9 air quality monitoring areas throughout the city, which measure emission levels and collect data on chemicals in the air.

Valeria Diaz, an analyst of the monitoring facilities, told teleSUR English, "When the monitoring began there was a very drastic reduction, above all in the thick particulate material. It was strongly related to the change in the type of fuel." "Before, we used a diesel which was 7,000 parts per million sulfur, now we have a diesel that has or is less than 500 parts per million," she said.

As part of a larger fight against climate change, controls have also been put into place to ensure that imported cars meet national norms. The purchase of environmentally friendly cars has been encouraged, as they utilize technology which consume less diesel and gas.

"There is an influx of new technologies, more efficient cars, that consume less fuel, and in this way we are emitting less carbon dioxide. It is evident that this helps fight global warming," said Angel Portilla, the Executive Director of the "Center of Technological Transfer for the Capacitation and Investigation of Vehicle Emissions Control" in Quito. He went on to say, "So it is this government policy that has been strict in demanding that vehicles have better technology as far as fuel consumption goes."

Having experienced considerable success, the controls set by Quito and air monitoring systems have been implemented in the Ecuadorean cities of Cuenca and Ambato, and officials have traveled to other cities across Latin America to share their experience, in an effort to protect public health and combat climate change.

**52. Brazil Ethanol Industry Hails Plan To Restore Gasoline, Diesel Taxes**

Brazil's ethanol industry, struggling due to droughts and government policy decisions, hailed plans to raise gasoline taxes, while the biodiesel sector said it will raise production by 25 percent in 2015.

Finance Minister Joaquim Levy said the government will restore a fuel tax and another levy on diesel that had been eliminated in recent years, an announcement welcomed by the president of the governing board of the Brazilian Sugarcane Industry Association, or Unica, Roberto Rodrigues.

The government made the moves as part of a budget-balancing effort.
In statements to O Estado de Sao Paulo daily, the former agriculture minister said the measures "make the industry more competitive," although he cautioned that more initiatives are needed, including raising the mandatory proportion of ethanol in the gasoline mix from its current level of 25 percent. The ethanol sector wants that required amount raised to 27.5 percent per liter of fossil fuel gasoline.

Existing supplies of ethanol, made in Brazil from sugarcane, are sufficient to cover demand through April, when the 2015-2016 harvest - projected to be more abundant than the current one - gets underway, Unica says.

Separately, representatives of the ethanol sector are scheduled to meet at the end of this month with the governors of Brazil's nine producing states (Sao Paulo, Rio de Janeiro, Minas Gerais, Goias, Mato Grosso do Sul, Mato Grosso, Pernambuco, Alagoas, and Parana) to discuss a possible reduction of a tax on that biofuel.

"The current government has taken a big step by resuming dialogue with the sector," said Rodrigues, who promoted the ethanol industry as the agriculture minister of Luiz Inacio Lula da Silva, current President Dilma Rousseff's mentor and predecessor.

Ethanol is a major transportation fuel in Brazil, where more than 90 percent of new cars are "flex-fuel" vehicles that can run on ethanol, gasoline or any combination of the two.

Separately, Brazil's Abiove vegetable oil association said biodiesel output will rise 25 percent this year. The law, which the sector expects will be modified, requires a 6 percent biodiesel mix in Brazil's diesel fuel, a low proportion compared to countries such as Argentina, where the mandatory level is 10 percent.

Brazil posted record biodiesel consumption in 2014, with 3.27 billion liters blended with traditional diesel fuel, up nearly 15 percent from 2013. EFE

GENERAL

53. 2014 Breaks Heat Record, Challenging Global Warming Skeptics

Last year was the hottest on earth since record-keeping began in 1880, scientists have reported, underscoring warnings about the risks of runaway greenhouse gas emissions and undermining claims by climate change contrarians that global warming had somehow stopped.

Extreme heat blanketed Alaska and much of the western United States last year. Records were set across large areas of every inhabited continent. And the ocean surface was unusually warm virtually everywhere except near Antarctica, the scientists said, providing the energy that fueled damaging Pacific storms.

In the annals of climatology, 2014 surpassed 2010 as the warmest year. The 10 warmest years have all occurred since 1997, a reflection of the relentless planetary warming that scientists say is a consequence of human activity and poses profound long-term risks to civilization and nature.

“Climate change is perhaps the major challenge of our generation,” said Michael H. Freilich, director of earth sciences at NASA, one of the agencies that track global temperatures.
Of the large land areas where many people live, only the eastern portion of the United States recorded below-average temperatures in 2014, in sharp contrast to the unusual heat in the West. Some experts think the weather pattern that produced those American extremes is an indirect consequence of the release of greenhouse gases.

Several scientists said the most remarkable thing about the 2014 record was that it had occurred in a year that did not feature a strong El Niño, a large-scale weather pattern in which the Pacific Ocean pumps an enormous amount of heat into the atmosphere.

Skeptics of climate change have long argued that global warming stopped around 1998, when an unusually powerful El Niño produced the hottest year of the 20th century. Some politicians in Washington have seized on that claim to justify inaction on emissions. But the temperature of 1998 is now being surpassed every four or five years, and 2014 was the first time that happened without a significant El Niño. Gavin A. Schmidt, head of NASA’s Goddard Institute for Space Studies in Manhattan, said the next strong El Niño would probably rout all temperature records.

How far above or below average temperatures were in 2014 Compared with the average from 1951 to ’80

“Obviously, a single year, even if it is a record, cannot tell us much about climate trends,” said Stefan Rahmstorf, head of earth system analysis at the Potsdam Institute for Climate Impact Research in Germany. “However, the fact that the warmest years on record are 2014, 2010 and 2005 clearly indicates that global warming has not ‘stopped in 1998,’ as some like to falsely claim.”

Such claims are unlikely to go away, though. John R. Christy, an atmospheric scientist at the University of Alabama in Huntsville who is known for his skepticism about the seriousness of global warming, pointed out in an interview that 2014 had surpassed the other record-warm years by only a few hundredths of a degree, well within the error margin of global temperature measurements. “Since the end of the 20th century, the temperature hasn’t done much,” Dr. Christy said. “It’s on this kind of warmish plateau.”
Despite such arguments from a handful of scientists, the vast majority of those who study the climate say the earth is in a long-term warming trend that is profoundly threatening and caused almost entirely by human activity. They expect the heat to get much worse over coming decades, but already it is killing forests around the world, driving plants and animals to extinction, melting land ice and causing the seas to rise at an accelerating pace.

“It is exceptionally unlikely that we would be witnessing a record year of warmth, during a record-warm decade, during a several decades-long period of warmth that appears to be unrivaled for more than a thousand years, were it not for the rising levels of planet-warming gases produced by the burning of fossil fuels,” Michael E. Mann, a climate scientist at the Pennsylvania State University, said in an email.

But U.S. Senator James Inhofe, a Republican who is the Senate’s leading climate change skeptic, said the temperature difference between 2014 and 2010 was so insignificant as to prove there was no need for more stringent regulations by the U.S. Environmental Protection Agency. “Human activity is clearly not the driving cause for global warming, and is not leading our planet to the brink of devastation that many alarmists want us to believe,” he said.

NASA and the other American agency that maintains long-term temperature records, the National Oceanic and Atmospheric Administration, issued separate data compilations that confirmed the 2014 record. A Japanese agency had released preliminary information in early January showing 2014 as the warmest year. One more scientific group, in Britain, that curates the world’s temperature record is scheduled to report in the coming weeks.

Separate temperature measurements taken from satellites do not show 2014 as a record year, although it is close. Several scientists said the satellite readings reflected temperatures in the atmosphere, not at the earth’s surface, so it was not surprising that they would differ slightly from the ground and ocean-surface measurements that showed record warmth.

“Why do we keep getting so many record-warm years?” Dr. Schmidt asked in an interview. “It’s because the planet is warming. The basic issue is the long-term trend, and it is not going away.”

February 1985 was the last time global surface temperatures fell below the 20th-century average for a given month, meaning that no one younger than 30 has ever lived through a below-average month. The last full year that was colder than the 20th-century average was 1976.

The contiguous United States set a temperature record in 2012, a year of scorching heat waves and drought. But, mostly because of the unusual chill in the East, 2014 was only the 34th warmest year on record for the lower 48 states. That cold was drawn into the interior of the country by a loop in a current called the jet stream that allowed Arctic air to spill southward. But an offsetting kink allowed unusually warm tropical air to settle over the West, large parts of Alaska and much of the Arctic.

A few recent scientific papers say that such long-lasting kinks in the jet stream have become more likely because global warming is rapidly melting the sea ice in the Arctic, but many leading scientists are not convinced on that point.

Whatever the underlying cause, last year’s extreme warmth in the West meant that Alaska, Arizona, California and Nevada all set temperature records. Some parts of California essentially had no winter last year, with temperatures sometimes running 10 to 15 degrees above normal for
the season. The temperature in Anchorage, Alaska’s largest city, never fell below zero in 2014, the first time that has happened in 101 years of record-keeping for the city.

54. Four of Nine Planetary Boundaries Have Been Crossed

Image source: F. Pharand-Deschênes /Globaïa

Four of nine planetary boundaries have now been crossed as a result of human activity, says an international team of 18 researchers in the journal Science (16 January 2015). The four are: climate change, loss of biosphere integrity, land-system change, altered biogeochemical cycles (phosphorus and nitrogen).

Two of these, climate change and biosphere integrity, are what the scientists call "core boundaries". Significantly altering either of these "core boundaries" would "drive the Earth System into a new state".

"Transgressing a boundary increases the risk that human activities could inadvertently drive the Earth System into a much less hospitable state, damaging efforts to reduce poverty and leading to a deterioration of human wellbeing in many parts of the world, including wealthy countries," says Lead author, Professor Will Steffen, researcher at the Centre and the Australian National University, Canberra. "In this new analysis we have improved our quantification of where these risks lie." Other co-authors from the Centre are Johan Rockström, Sarah Cornell, Ingo Fetzer, Oonsie Biggs, Carl Folke and Belinda Reyers.

The new paper is a development of the Planetary Boundaries concept, which was first published in 2009, identifying nine global priorities relating to human-induced changes to the environment. The science shows that these nine processes and systems regulate the stability and resilience of the Earth System – the interactions of land, ocean, atmosphere and life that together provide conditions upon which our societies depend.

The research builds on a large number of scientific publications critically assessing and improving the planetary boundaries research since its original publication. It confirms the original set of boundaries and provides updated analysis and quantification for several of them, including phosphorus and nitrogen cycles, land-system change, freshwater use and biosphere integrity.
Nine planetary boundaries
1. Climate change
2. Change in biosphere integrity (biodiversity loss and species extinction)
3. Stratospheric ozone depletion
4. Ocean acidification
5. Biogeochemical flows (phosphorus and nitrogen cycles)
6. Land-system change (for example deforestation)
7. Freshwater use
8. Atmospheric aerosol loading (microscopic particles in the atmosphere that affect climate and living organisms)
9. Introduction of novel entities (e.g. organic pollutants, radioactive materials, nanomaterials, and micro-plastics).

Scientists consider climate change the most serious crossed boundary. The amount of carbon dioxide in the atmosphere, a gas causing the planet to warm, has exceeded 350 parts per million to the present 395 parts per million, crossing the boundary of what scientists think to be acceptable.

"We are at a point where we may see abrupt and irreversible changes due to climate change," Rockstrom said, as warming could cause Arctic ice sheets to melt releasing more greenhouse gases and creating a vicious feedback loop.

The study results are set to be incorporated into the new global development goals that will be finalized in September at the United Nations in New York to replace the Millennium Development Goals on poverty alleviation expiring this year. Scientists hope the new study will help balance competing demands for economic growth and environmental sustainability which are likely to arise during the conference.

**55. Sea Level Rise Quickens More Than Thought in Threat to Coasts**

Sea level rise in the past two decades has accelerated faster than previously thought in a sign of climate change threatening coasts from Florida to Bangladesh, according to a new study. The report, reassessing records from more than 600 tidal gauges, found that readings from 1901-90 had over-estimated the rise in sea levels. Based on revised figures for those years, the acceleration since then was greater than so far assumed.

The new analysis "suggests that the acceleration in the past two decades is 25 percent higher than previously thought," Carling Hay, a Canadian scientist at Harvard University and lead author of the study in the journal Nature, told Reuters.

The study said sea level rise, caused by factors including a thaw of glaciers, averaged about 1.2 millimeters (0.05 inch) a year from 1901-90 - less than past estimates - and leapt to 3 mm a year in the past two decades, apparently linked to a quickening thaw of ice.

Last year, the U.N.'s Intergovernmental Panel on Climate Change (IPCC) estimated the 1901-90 rate at 1.5 mm a year, meaning less of a leap to the recent rate around 3 mm.

The Harvard-led study said the new findings might affect projections of the future pace of sea level rise, especially those based on historical trends.
John Church, a top IPCC author at the Commonwealth Scientific and Industrial Research Organization in Australia, told Reuters he did not expect any impact on the IPCC's core sea level projections, which are not based on past trends. IPCC scenarios, which range from a sea level rise of 28 to 98 cms this century, are based on the processes driving sea level change, for instance how ice in Greenland reacts to rising temperatures or the expansion of water as it warms, he said.

Stefan Rahmstorf, of the Potsdam Institute for Climate Impact Research and a world expert in past sea levels, said further analysis was needed to pin down 20th century sea level rise. The new findings confirm that "sea level is rising and ... the rise has accelerated, with the most recent rates being the highest on record," he told Reuters.

Sea level rise is gnawing away at shores from Miami to Shanghai. In cities such as Jakarta, the rise is aggravated by big local subsidence.

56. Study: Stringent Regulations Driving Demand for Emission Control Catalysts

GIA announces the release of a comprehensive global report on Emission Control Catalysts markets. The global market for Emission Control Catalysts is projected to reach US$8.9 billion by 2020, driven by growing concerns over environmental pollution and legislation of stringent regulatory riders for curbing industrial and vehicular emissions.

Emission control catalysts are vital for automobiles and industrial machinery. Rapid industrialization and growing number of vehicle population worldwide are causing serious damage to the environment, negatively impacting air quality and human health. Emission control catalysts, against this backdrop of environmental alteration and loss of biodiversity, are becoming essential components of vehicles and industrial machinery, given their ability to reduce harmful emissions. The introduction of new environmental and vehicular emission regulations across the globe is helping drive demand for emission control catalysts. Stricter air quality standards and higher international commitment to achieve climate control goals are fuelling growth in developed markets such as the United States and Europe. Strong international pressure on developing countries to tackle air pollution as a result of large scale urbanization and industrialization is resulting in the introduction of new legislations in Asia-Pacific and Latin America. In the industrial sector, rising demand for electricity and the ensuing establishment of new power plants is generating market opportunities for industrial emission control catalysts. Projected rise in demand for exploration, extraction and transport machinery in the oil & gas sector also bodes well for growth in the market according to the report.

As stated by the new market research report on Emission Control Catalysts, Europe represents the largest market worldwide. Asia-Pacific is forecast to emerge as the fastest growing market with a CAGR of 7.8% over the analysis period. Strong automobile sales, robust industrialization and manufacturing activity, and growing efforts at dieselization of motor vehicle systems in key national economies, represent factors driving growth in the region.


57. Global Trade: International Freight Transport to Quadruple By 2050 Says ITF

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In the face of shifting global trade patterns, international freight transport volumes will grow more than fourfold (factor 4.3) by 2050 according to the ITF Transport Outlook 2015. Average transport distance across all modes will increase 12%.

- As a result, CO2 emissions from freight transport will grow by 290% by 2050. Freight will replace passenger traffic as main source of CO2 emissions from surface transport.
- The North Pacific route will surpass the North Atlantic as the world’s most busy trading corridor in terms of freight volume (in tonne-km), growing 100 percentage points faster than the North Atlantic. The Indian Ocean corridor will see large growth, with freight volume quadrupling.
- Intra-African (+715%) and intra-Asian (+403%) freight volumes will see particularly strong growth to 2050. Road transport will dominate here due to lack of other modes.
- The share of domestic transport of international freight flows, identified here for the first time, accounts for 10% of trade-related international freight, but 30% of CO2 emissions. This is important: Domestic transport is shaped by national policies, less by international agreements.

These are some of the key findings of the ITF Transport Outlook 2015, presented recently at the OECD headquarters in Paris, France.

“The foreseeable increase in global freight represents an unprecedented challenge for the world’s transport systems”, said ITF Secretary-General José Viegas at the launch. “Increasing capacity constraints in transport can act as a brake on economic growth.” “A quadrupling of freight emissions can seriously undermine climate change mitigation.”

Viegas pointed to four action items that would help to avoid such a scenario:
1. Improve capacity management: Many freight facilities are underutilized
2. Invest in missing links: More alternative and multi-modal connections increase efficiency
3. Prepare for mega-ships: Adapt infrastructure to more and bigger vessels, including the port-hinterland connections
4. Increase vehicle utilization: Improve load factors and reduce idle times across supply chains.

The ITF Transport Outlook 2015 also contains a wealth of information on passenger transport. In particular, latest projections on CO2 emissions and health impacts for car-based and public transport-based mobility scenarios for big cities in China, India and Latin America. According to these projections, cities in these regions will generate more than a third (38%) of the growth in passenger transport emissions to 2050. Policies to avoid urban traffic and shift to public transport could reduce this growth by 30-40%. But these must look at both climate and health impacts, as some measures reduce CO2 emissions, but increase other pollutants.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Growth of global trade-related freight and emissions to 2050, By transport mode</th>
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<tbody>
<tr>
<td>Freight volume</td>
<td>Growth</td>
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<tr>
<td>(In billion tonne-km)</td>
<td>(In %)</td>
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<tr>
<td>2010</td>
<td>2050</td>
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<tr>
<td>Air</td>
<td>191</td>
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</tbody>
</table>
Road | 6 388 | 30 945 | 384 | 1 118 | 4 519 | 304
Rail | 4 262 | 19 126 | 349 | 62 | 217 | 250
Sea | 60 053 256 433 | 327 | 779 | 2 630 | 238
304
70 894 307 615 | 334 | 2 108 | 8 132 | 286

Source: International Transport Forum

<table>
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<tr>
<th>Trade corridor</th>
<th>Freight volume (In billion tonne-km)</th>
<th>Growth %</th>
<th>CO2 emissions from freight (In million tonnes)</th>
<th>Growth %</th>
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<tr>
<td>Africa</td>
<td>2010</td>
<td>5 396</td>
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<td>2010</td>
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<tr>
<td>Indian Ocean</td>
<td>10 479 53 015</td>
<td>406</td>
<td>123</td>
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<td>Asia</td>
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<td>29 650</td>
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<td>South Atlantic</td>
<td>1 872</td>
<td>9 368</td>
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<td>North Pacific</td>
<td>15 832 75 022</td>
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<td>North America</td>
<td>1 950</td>
<td>8 669</td>
<td>344</td>
<td>187</td>
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<td>South America and Mediterranean and Caspian Sea</td>
<td>271</td>
<td>1 127</td>
<td>316</td>
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<tr>
<td>North Atlantic</td>
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<td>South Pacific</td>
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<td>Europe</td>
<td>3 148</td>
<td>9 948</td>
<td>216</td>
<td>219</td>
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Source: International Transport Forum

### 58. East Asian Air Pollution to Have Bigger Global Impact Under Climate Change

Long-range transport of air pollution between continents means pollutants can have negative effects on human health and ecosystems far from their sources. For example, an earlier study estimated that intercontinental transport of fine aerosols was responsible for 90,000 premature deaths around the world in 2000.

This study focused on the transport of pollution from East Asia, the most significant source of intercontinental pollution in the Northern Hemisphere. Its location, at lower latitudes, means that pollution emitted here can move more easily around the globe, compared with North American and European emissions.

The researchers estimated changes in intercontinental transport of a large range of pollutants from East Asia between 2001 and 2050. They were interested in how climate change would affect atmospheric processes and thus the contribution of East Asian emissions to air pollution in other regions.

The model used combines meteorological processes and atmospheric chemistry and allows simulation of the trends of climate change every 10 years throughout the 50 year period. Simulations under different emission and climate scenarios for spring 2001 and 2050 were performed to characterize changes in intercontinental transport of emissions in a changing climate.

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climate. They assumed that climate change would progress as per the IPCC’s A1B scenario, which assumes rapid economic and population growth up until the mid-21st century.

Key results include projected rises in global average levels of tropospheric ozone and PM2.5. Ozone from East Asia will add an additional 0.8 parts per billion (ppb) to global average levels, going from 1.2 ppb in 2001 to 2.0 ppb in 2050, the model suggests. Average PM2.5 concentrations could also increase from 0.32 micrograms per cubic meter (μg/m3) in 2001, to 0.39 μg/m3 in 2050.

Other pollutants from East Asia that are also predicted to rise around the world include carbon monoxide, sulfur dioxide and peroxyacetyl nitrate. More mercury and black carbon from the region could also be deposited in other parts of the world.

There are two major atmospheric pathways for pollution from East Asia. One transports emissions up to the Arctic, and the other takes them west to North America. As a result, these two regions are particularly affected by East Asian pollution, and climate change will increase these flows, according to the study.

A North Pacific area of low pressure, known as the Aleutian Low, is expected to become stronger by 2050. This will lead to greater circulation of air that transports more pollution from East Asia to the Arctic. In addition, wind speeds over East Asia will become quicker, taking pollution towards North America more quickly.

The study’s authors say these results demonstrate the need for governments around the world to collaborate in developing integrated, collaborative emission control strategies. These should consider the complex relationship between air pollutants and climate change.

59. Global CO2 Emissions to Grow At Slightly Slower Rate to 2035: BP

Global carbon emissions from energy use will grow at 25 percent between 2013 and 2035, a slightly slower rate than previously estimated, BP said recently, but still above the rate scientists say would avoid the worst effects of climate change. Emissions are expected to increase at an average rate of 1 percent per year from 2013 to 2035, BP said in its annual report Energy Outlook 2035.

Last year, BP said in its report that global carbon emissions from energy use would increase by 29 percent to 2035, or an average 1.1 percent a year. This year's projections show a slower rate of growth in CO2 because the share of natural gas and renewables in the energy mix is increasing and their energy intensity will decrease.

"Despite improvements in energy efficiency and energy intensity going forward, the path is quite a bit higher than what scientists would say is needed to keep temperature rise within 2 degrees (Celsius) so more needs to be done," Spencer Dale, BP group chief economist, said in a webcast.

Carbon emissions in 2035 will still be nearly double the 1990 level, the report added.

60. Global Climate Deal Should Not Hamper Individual Countries' Economic Growth: France

A global deal to curb carbon emissions must recognize each country's right to develop, France's foreign minister said recently in New Delhi, as the host of this year's U.N. climate change talks
seeks to win India's backing for a global deal. Laurent Fabius said that efforts to reach an agreement, which is due at the United Nations summit in Paris in December, would fail if any country believed it would hurt their economic prospects.

India, the world's third-largest emitter of greenhouse gases, often acts as the voice of the developing world in climate change talks, and winning its support is seen as crucial if countries are to reach a deal.

"An agreement that would leave some countries to consider their growth hampered by its provisions will not be accepted," Fabius told an audience at an annual sustainable development summit. Fabius, who was due to meet Indian Prime Minister Narendra Modi, said he understood "the constraints of India" as it seeks to grow its economy.

Governments across the world are expected to submit national plans to rein in greenhouse gas emissions by an informal deadline of March 31 to form the basis of the global agreement due at the Paris summit.

India has long resisted pressure to commit to any emissions targets, on the grounds that it could hamper its economy and that rich countries should shoulder most of the burden of lowering emissions. Instead, India has committed to a huge expansion in renewable energy and improving the energy efficiency of its rapidly growing economy, while at the same time increasing its burning of coal to meet the bulk of its growing energy needs.

India will build an ambitious 100,000 MW of solar power capacity - 33 times its current level - by 2020, two years ahead of a target date announced last year, Prakash Javadekar, India's environment minister, told the same event in Delhi.

Fabius also argued that the public and private sector should commit more money to a green climate fund, a U.N. initiative that aims to help poor nations cope with global warming, if the world is to cut emissions successfully. "The initial capitalization of the green climate fund has mounted to over $10 billion ... but beyond that we need increased financing from both public and private sources to reach $100 billion a year starting from 2020."

**61. Study Boasts Increased Cost Efficiency of Renewable Energy Sources Worldwide**

Technological advances in electric cars and solar panels are making renewable energy sources more economically viable, increasing the likelihood of doubling the world's use of renewable energy sources by 2030, said a report by the International Renewable Energy Agency (IRENA). The goal of doubling renewable use, first established in the United Nation's 2011 Sustainable Energy for All initiative, is becoming more cost-effective due to advances in renewable energy technologies, according to the report.

Doubling the use of renewable energy sources could provide an annual $740 billion a year in health savings and job creation, while simultaneously curbing some effects of climate change, the report said.

“Compared to energy systems based on fossil fuel, renewable energy offers broader participation, is better for our health, creates more jobs and provides an effective route to reducing carbon emission—a goal that becomes increasingly urgent by the day,” said Adnan Amin, IRENA's director-general.
The report found that current renewable energy policies in more than two-dozen of the world's key energy markets, including the U.S., would increase the global share of renewable energies only by 3 percent leading up to 2030. “If we continue with business as usual, under the policies currently in place, the world will increase the share of renewable energy from 18 percent today to only 21 percent, instead of a potential 36 percent or more,” Amin said.

Six countries—Brazil, China, India, Indonesia, Russia and the U.S.—account for half of potential increases of global renewable energy use, the report found.

The group collected data from the following countries: Australia, Brazil, Canada, China, Denmark, Ecuador, France, Germany, India, Indonesia, Italy, Japan, Malaysia, Mexico, Morocco, Nigeria, Russia, Saudi Arabia, South Africa, South Korea, Turkey, Ukraine, United Arab Emirates, the U.K. and the U.S.

**62. Freight Transport Carbon Dioxide Emissions Could Triple by Midcentury, Forum Says**

Global carbon dioxide emissions from international freight transport will nearly triple by midcentury unless “radical” policy changes are adopted, as freight volume is set to climb rapidly, the head of the International Transport Forum told reporters. And although most international freight goes by sea, most international freight-related carbon dioxide emissions come from road transport, said José Viegas, secretary-general of the forum.

Shipping-related particulate matter, mainly from vehicles operating in port cities, is responsible for some 60,000 cardiopulmonary and lung-cancer deaths annually and projected to grow and without “radical action, big CO2 emissions growth from freight transport could undermine [international] climate change mitigation goals,” he said.

Viegas made his comments while presenting the Paris-based forum's annual transport outlook report for 2015, which looks at how shifts in international trade affect freight flows, carbon dioxide emissions and other pollution.

The forum is an autonomous intergovernmental body linked to the Organization for Economic Cooperation and Development in Paris, with 54 member countries, including both wealthy economies and developing countries.

The 172-page outlook makes recommendations for what it calls key policy actions to control carbon dioxide emissions and other pollution from the transport sector.

The report forecasts that global freight volume will more than quadruple by 2050 as average transport distances across all modes increase 12 percent. That would mean a spike of more than 290 percent in global carbon dioxide emissions from freight transport, as freight supplants passenger traffic as the main source of carbon dioxide emissions in surface transport, Viegas said.

As global population and economic power shifts from OECD economies to emerging economies in Asia, the North Pacific will overtake the North Atlantic as the world's busiest trading corridor in terms of freight volume.
The forum said road freight’s share of global freight transport will grow from 6 percent to 10 percent, driven by increasing intra-regional trade, especially in Asia and Africa, which have not developed efficient rail systems.

Some 85 percent of total global freight volume goes by sea, but road freight accounts for more than half the sector's carbon dioxide emissions—and that share is growing, the report said.

Viegas said the forum will provide more specific climate-related recommendations for transport policies at international climate talks hosted by Paris in December.

63. Report Calculates Carbon Dioxide Cuts From Eliminating Fossil Fuel Subsidies

A report recently presented to the United Nations showed how merely cutting fossil fuel subsidies could significantly help the world reduce carbon dioxide emissions, according to one of the authors. The report said that governments worldwide subsidize fossil fuels by around $543 billion annually. Eliminating these subsidies alone could lead to global emissions reductions of between 6 percent and 13 percent by 2050, in part by making renewable energy more cost-effective, the report said.6

Laura Merrill, senior researcher at the Canada-based International Institute for Sustainable Development, said in a statement that the report's findings could encourage some nations to consider subsidy reform as part of their national emissions-reduction commitments—called Intended Nationally Determined Contributions (INDCs)—being sent to the UN in the coming months ahead of end-of-year talks in Paris, which are meant to forge a global agreement to fight climate change.

Published under the International Institute for Sustainable Development Global Subsidies Initiative, with support from the Nordic Council of Ministers, the report was presented on February 10 to the UN Framework Convention on Climate Change conference in Geneva.

“Countries can now use this information in preparation for” the Paris climate talks, Merrill told reporters. “They can measure emissions reductions from planned subsidy reforms and include this in their INDCs of mitigation options. These national INDCs will contribute toward any agreement.”

Bjorn Lomborg, director of the Copenhagen Consensus climate think tank, told reporters that the economic policies that encouraged subsidized fossil fuel costs were most pronounced in developing countries, and the practice was often linked to political considerations. Where affordable energy is a political issue, he said, national leaders could experience a drop in support and political unrest if fuel prices increase.

But Lomborg noted that cheaper oil prices could encourage nations to reduce subsidy levels without necessarily being forced to implement sharp price hikes. “Recent falls in the price of oil mean that subsidies can potentially be reduced without having such a marked effect on prices," he said. “This means that such measures could potentially become more politically acceptable. Already we have seen nations reducing subsidy levels due to the cheaper cost of fuel. Malaysia, India and Indonesia have all recently announced plans to reduce or phase out energy subsidies. In Egypt, oil subsidies were reduced by 30 percent in 2014.”

6 “Fossil-Fuel Subsidies and Climate Change: Options for Policy-Makers Within Their Intended Nationally Determined Contributions”.
64. Geneva Climate Talks Wind Down; ‘Informal Consultations’ Now Loom Before Paris

The Geneva Climate Change Conference began winding down on February 12th with the focus shifting from the post-2020 years to more ambitious steps that can be taken during the next five years. Heading into the Geneva talks delegates were intent on completing the draft text left unfinished at least year’s climate summit in Lima. But that’s not going to happen.

The draft document, the basis for negotiations for the global climate agreement to be finalized late this year in Paris, nearly tripled in size during the first three days of talks in Geneva.

But instead of diving into the difficult work of beginning to cut the document to something considered more manageable, negotiators opted to use the final days of the conference to discuss ways for the global community to step up emissions reduction efforts before 2020, when the Paris agreement would enter into force.

The decision will let delegations return home with their contributions intact in the draft text. But it also raises the stakes for a series of five or six “informal consultations” scheduled to take place before the next round of talks, set for June in Bonn.

The informal consultations will be closed-door talks without a mandate to negotiate draft text language, but they could “loosen the lid” for an easier restart to the process in June, one European delegate told reporters. “The idea is that delegations know which countries are behind which language in the draft text and that they may get together to informally decide on a compromise between similar options for the same text,” Alden Meyer of the Union of Concerned Scientists said at a February 12th briefing. “Maybe text where there are 15 options gets reduced to eight or 10. If that can happen early in the Bonn talks, then it’s not a bad start.”

But Geneva marks another conference under the auspices of the United Nations Framework Convention on Climate Change that failed to live up to pre-conference expectations. And negotiators now have only 10 months before the Paris summit is scheduled to end with a historic global agreement to fight climate change.

The next looming deadline is March 31st, when most countries’ submission of their voluntary promises of domestic actions to confront climate change in a post–2020 world are due to the UN.

65. Experts Say Doctors Should Take Lead in Push to Curb Climate Change

Doctors should take the lead in supporting political efforts to cut the pace of climate change and encouraging more people to see the problem as a crucial issue for public health, experts say. With the 68th World Health Assembly coming up in May in Geneva, countries are poised to adopt the world’s first resolution on air pollution and health, in an effort to reduce premature deaths linked to air pollution.

Studies have found that air pollution can worsen a variety of health problems, from heart disease to strokes, said Carlos Dora, coordinator of public health and the environment at the World Health Organization (WHO). That suggests doctors should take action to try to curb air pollution and climate change, he said.

"Climate change is a big factor (in determining peoples’) health in the short term and doctors should take notice," he said. In particular, "there are a number of challenges to the capacities of
current health systems to respond to these health issues, so doctors should be prepared”, he said.

For a growing number of doctors, "health and climate change are no longer seen as different issues and are almost seen as synonymous because there is more evidence and data out there that link the two,” he said.

A survey of members of the American Thoracic Society, which represents 15,000 physicians and other medical professionals who work on respiratory disease and related issues, found that the majority were already seeing health effects in patients that they believe are linked to climate change.

Seventy-seven percent of respondents said they have seen an increase in chronic diseases in patients that are linked to air pollution, and 65 percent said they believed climate change was directly relevant to patient care, according to the survey, conducted by the Center for Climate Change Communication at George Mason University and published in the February edition of the journal Annals of the American Thoracic Society.

"There is more pressure for the health sectors to prepare themselves on how they can help the population in dealing with the diseases related to air pollution," Dora said.

Dora said the resolution that WHO is working on would encourage health systems to have a more proactive response in dealing with health issues related to climate change, for instance by sharing health data about levels and sources of air pollution with other countries and prioritizing ways to curb emissions.

Health care providers should reach out and work with other health sectors in other countries to tackle these issues because working on a global scale could help find and implement solutions more quickly, the resolution suggests. The resolution is currently being negotiated and is expected to be adopted in May at the assembly.

This is not the first time that health and climate experts are encouraging doctors to see health and climate as related issues and to advocate for action on climate change. A group of military and medical experts published an article in the British Medical Journal in 2008 urging doctors to take a leading role in the highlighting the dangers of climate change, which could lead global security threats and health problems from worsening allergies to injuries from more frequent weather-related disasters.

Today, six of the top 10 polluted cities in the world are in India, with New Delhi topping the list for particulate matter in the air over a year, according to data from WHO. New Delhi's annual average concentration of particulate matter registered 153 micrograms per cubic meter, with 25 micrograms per cubic meter considered a safe limit by WHO.

Dora said more doctors in India and China, also well-known for its poor air quality, should step up to help tackle climate change and its health impacts in their cities. "In general, doctors [in India and China] are not very engaged," he said. But "India is working on getting the doctor's engagement in climate change responses and preparedness for what could happen in the future."

Dora said he is optimistic the expected new international resolution on health and climate change could improve preparedness to deal with climate change. "This resolution will provide the health sector with the equipment, tools, knowledge and capacity to respond to climate-related health
issues in their area, while drawing upon resources and ideas from other players,” he said. "There’s still a lot the health systems can do, though, to adapt to climate change."

**66. IPCC Takes Decisions on Future Work; Chairman Pachauri Steps Down**

The Intergovernmental Panel on Climate Change scientific body completed a “stock-taking session” of its future on February 27th after four days of talks in Africa, which were overshadowed by the abrupt resignation of Chairman Rajendra K. Pachauri over sexual misconduct allegations. Pachauri was replaced on an interim basis by Ismail El Gizouli, who had been IPCC’s vice chairman. A permanent replacement will be named at the IPCC’s next round of talks in October.

At a briefing in Nairobi, the host city, El Gizouli said the talks were a “valuable opportunity” to discuss the organization’s upcoming steps in the wake of the heralded release of the Synthesis Report for its Fifth Assessment Report nearly four months ago and in preparation for the year-end summit in Paris, where IPCC recommendations will play a role as part of the basis of the negotiations on a global climate deal.

Also speaking from Nairobi, IPCC Secretary Renate Christ said the group—the scientific advisory arm to the United Nations on climate change—will look to become more “user friendly,” working with writers and graphic designers with a scientific background to make reports more palatable to the general public rather than exclusively for scientists, climate negotiators and other policy makers.

The Intergovernmental Panel on Climate Change (IPCC) has taken a series of decisions to make its reports more accessible and involve developing countries more closely in its work. The decisions, following a review of the future work of the IPCC over the past year and a half, pave the way for the IPCC to prepare its next cycle of reports, which will be initiated by elections for a new Bureau and Chair in October 2015.

“We have taken stock of our future. We have been through a detailed process to examine how to continually improve our work, to make it as relevant and useful as possible, not only for government policy makers but for society at large,” said Acting Chair Ismail El Gizouli. Among the moves agreed to this week at its Session in Nairobi, Kenya, the Panel decided to increase the representation of African and Asian countries in the IPCC Bureau by increasing the number of its members to 34 from 31.

It also decided to continue preparing comprehensive assessment reports every five to seven years, which also cover regional aspects of climate change, taking into account the work of the United Nations Framework Convention on Climate Change (UNFCCC) in determining its future reports and their timing. It agreed that the different parts of an assessment report should be released within about a year, but no more than 18 months, with a staggering between working group contributions to allow information presented by one working group to be adequately reflected in the other working group contributions and the Synthesis Report.

“I am very pleased with the progress we made this week,” said Renate Christ, Secretary of the IPCC. “The Panel addressed a wide range of issues to enhance the timing and quality of the IPCC’s reports. The IPCC is in good hands and well prepared for the future.” This meeting, hosted by the United Nations Environment Programme at its headquarters in Nairobi, was the IPCC’s first since completing the Fifth Assessment Report in November 2014, the most comprehensive assessment of the science relating to climate change ever undertaken.
The IPCC generally examines its operations and products at the end of an assessment cycle. The latest review, to help determine how the IPCC works in future, the kind of reports it produces and how it can draw on the contributions of all its members, began in October 2013.

Selection of decisions taken by the IPCC at its 41st Session in Nairobi on 24 - 27 February:

**Structure and operations of the IPCC**

- Increase the representation of African and Asian countries on the IPCC Bureau by increasing the number of its members to 34 from 31;
- Request the Secretariat and Technical Support Units to command a respectful workplace, emphasizing policies and practices that promote diversity, fairness, collaboration and inclusiveness.

**Frequency and scheduling of reports**

- Continue to produce assessment reports every 5 to 7 years;
- Parts of an assessment report to be issued within about a year and at most 18 months of each other. Making reports more user-friendly
- Ensure that up-to-date digital technology is used to share and disseminate information;
- Seek advice from various specialists to make IPCC reports more readable.

**Enhancing the role and contribution of developing countries**

- Improve access for authors to non-English language scientific literature;
- Encourage the authors of non-English language literature to serve as expert reviewers, contributing authors and chapter scientists;
- Allow the possibility of both countries providing co-chairs for a working group or task force to host a technical support unit to enhance the profile and improve working conditions for co-chairs from developing countries;
- Consider how to broaden the nomination process for authors and review editors;
- Encourage the use of research assistants or chapter scientists to support authors;
- Encourage co-chairs and other Bureau members to engage experts from developing countries in technical support units, as authors and as reviewers;
- Increase the number of IPCC activities in developing countries;
- Arrange briefings and training sessions for government representatives, e.g. before IPCC sessions;
• Use communications and outreach activities to provide experts with information about the IPCC process and how they can participate in IPCC work;

• Consider ways of training and supporting young scientists from developing countries, even though training and capacity-building is beyond the mandate of the IPCC.

At the start of the talks, the IPCC issued a warning based on information from the Fifth Assessment Report, telling local policy makers that food and water security in East Africa will likely become more problematic due to changes in weather patterns and more severe weather related to climate change.

The departure of Pachauri, who had chaired the organization since 2002 and who accepted the Nobel Peace Prize on its behalf in 2007, came on the eve of the Feb. 24–27 talks. Christ said the allegations against Pachauri involved his work in his native India and were not related to the IPCC, and since an ongoing investigation is being conducted, the organization would not formally comment on the charges.

67. 7 Out of 10 Doctors Call Air Pollution Top Climatic Health Threat

Recently, members of the American Thoracic Society visited Congress to share results of a new survey that indicates 77 percent of doctors believe climate change is negatively affecting the health of their patients. Health impacts from the changing climate are expected to increase as well, the doctors surveyed said.

The top concern doctors cited? Climate-related increased air pollution, which is already worsening illnesses in patients. Air pollution is known to cause lung cancer and has been linked to COPD, asthma and other respiratory illnesses, as well as heart attacks and heart disease. Without more stringent pollution control guidelines, the problem could get worse. Hot, humid weather also exacerbates the effect of existing ozone in the air, according to the EPA.

Allergies to mold and pollen as well as weather-related injuries and deaths, such as those from flooding or heat stroke, are the other top concerns among the M.D.s surveyed. The sick, the elderly, and people in poverty are particularly at risk for these and other effects, the group also said, according to the White House blog post on the ATS's Congressional visit.

In October, a report found that the majority of Americans — though they accept the science of human-caused climate change — have not given climate's impact on their health any thought. The majority of people surveyed either skipped the question asking which health problems are
related to climate, or said they didn't know. One in four (27 percent) named at least one health problem related to global warming, and 10 percent answered — wrongly — that there are no health problems associated with it at all, the report stated.

But that's not the case. "Every American, whether they know it or not, has been affected by climate change," Edward Maibach, the director of George Mason University's Center for Climate Change Communication, told reporters. As climate-caused hardships, such as the California drought, continue, it's likely more people will express greater concern for their health as it relates to climate change, Maibach's report found.

"When people tell us they've personally experienced climate change, more often than not, what they're thinking about is a change in the weather in their part of the country," Dr. Maibach said. Beliefs in climate change are "almost always related to observations that they have made in their own little niche of the world."

68. Climate and Clean Air Coalition Holds Successful Meeting

The meeting of the Climate and Clean Air Coalition to Reduce Short-Lived Climate Pollutants (CCAC) Working Group took place from 24-25 February 2015 in Kathmandu, Nepal. More than 100 participants attended the meeting which focused on developing a 5-year Strategic Plan for the CCAC, as requested by Ministers and Heads of the CCAC Partner organizations.

Agenda items on Partners in Action, Demonstrating Impact, and the 5-Year Strategic Plan and on Initiatives and the Communications group were addressed on Tuesday. Breakout sessions on the 5-year Strategic Plan also convened on Tuesday. On Wednesday, participants heard from the Scientific Advisory Panel (SAP) and received an update on initiatives with new funding requests.

During the meeting, the Working Group made progress on developing key elements of the Strategic Plan. It also approved the SAP Work Plan, together with six funding requests for Initiatives on Agriculture, Diesel, Hydrofluorocarbons (HFCs), Regional Assessment and Supporting National Planning for Action on SLCPs (SNAP). The Working Group also adopted decisions on Demonstrating Impact, the 5-Year Strategic Plan, and the Road to Paris. Requests from UN-HABITAT and the Smart Freight Centre to join the CCAC were approved, bringing membership to 103.

INITIATIVES: The CCAC has approved 11 Initiatives. Its seven sectoral Initiatives include:
- accelerating methane and black carbon reductions from oil and natural gas production;
- addressing SLCPs from agriculture;
- mitigating SLCPs and other pollutants from brick production;
- mitigating SLCPs from municipal solid waste;
- promoting HFC alternative technology and standards;
- reducing black carbon emissions from heavy-duty diesel vehicles and engines; and
- reducing SLCPs from household cooking and domestic heating.

The CCAC also has four cross-cutting Initiatives on: financing mitigation of SLCPs; regional assessments of SLCPs; supporting national planning for action on SLCPs (SNAP); and urban health.
Drew Kodjak, International Council on Clean Transportation, presented two funding requests under the Diesel Initiative-Soot Free Urban Bus Fleets and the Global Green Freight Action Plan. He highlighted the opportunity to clean up all types of diesel engines and vehicles, notably in China, Mexico, Indonesia, Africa and Latin America.

Kodjak explained that the overarching goal of the Initiative is to expand the European regulatory pathway, considered to date the most efficient model for diesel phase-out. He stressed that nearly 2 million lives could be saved over the next 20 years through the widespread adoption of world class emission standards on heavy-duty vehicles.

On Green Freight, Kodjak noted the voluntary character of the Initiative with increasing levels of private sector participation; and the importance of providing technological assistance for demonstrating impact. He also underscored the need to green the supply chain and disseminate best practices, as well as harmonize data and metrics around regions.

On Wednesday afternoon, the CCAC Working Group approved the following funding requests:

- Funding allocation of US$756,354 under the Agriculture approved initiative. The decision recommends fully funding phase 1 of the Initiative.
- Funding allocation of US$899,960 under the Heavy-Duty Diesel approved initiative – Soot Free Urban Bus Fleets.
- Funding allocation of US$265,000 under the HFCs approved initiative – Capacity Building.
- Funding allocation of US$525,100 for the Regional Assessment approved initiative – Asia Assessment.
- Funding allocation of US$675,656 under the approved SNAP initiative – Adding Morocco and Peru for institutional strengthening and an outreach workshop in West Asia.