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EUROPE

1. EU GHG Emissions To Increase In 2010, But Long-Term Decrease Expected

The European Union remains well on track to achieve its Kyoto Protocol target for reducing greenhouse gas emissions despite a 2.4% emissions increase in 2010, according to first estimates by the European Environment Agency (EEA). The 2010 increase follows a 7% drop in 2009, largely due to the economic recession and growth of renewable energy generation.

The latest analysis of greenhouse gas trends in the EU was published by the EEA in three reports which together analyze emissions levels since 1990 and look forward to the EU’s greenhouse gas emission reduction target for 2020 and beyond. They also cover progress towards Kyoto Protocol targets, early estimates for 2010 emissions levels and an analysis of drivers of emissions since 1990. Overall, EU emissions declined by 15.5%.

Past Change in Sectoral GHG Emissions (1990-2009)

EU-15 emissions were 10.7% below base year levels, still well below its collective 8% reduction target for the 2008–2012 period. However, of the 15 EU Member States with a common commitment under the Kyoto Protocol (the ‘EU-15’), Austria, Italy and Luxembourg were still lagging behind their Kyoto Protocol targets at the end of 2010.
Looking ahead to 2020, EU Member States will have to implement planned measures to achieve the Union's unilateral 20% reduction commitment, itself a precursor to the much deeper emission cuts needed in the long run to build a low-carbon economy.

"Many different policies have played an active role in bringing down greenhouse gas emissions", Professor Jacqueline McGlade, EEA Executive Director, said. "Alongside renewable energy or energy efficiency, efforts to reduce water pollution from agriculture also led to emission reductions. This experience shows we can reduce emissions further if we consider the climate impacts of various policies more systematically."

Key findings

- First estimates for 2010 show EU greenhouse gas emissions increased by 2.4% compared to 2009 (with a margin of error of +/- 0.3%), due to the return to economic growth in many countries and a colder winter leading to an increased heating demand. However, the increase in emissions was contained by a move from coal to natural gas and the sustained strong growth in renewable energy generation.

- In the EU-15, emissions were 10.7% below base year levels (1990 in most cases), which is well beyond the collective 8% reduction target. Countries which are not on track towards their target (Austria, Italy and Luxembourg) should make more efforts to ensure compliance, either by further reducing emissions or by relying more on the Kyoto Protocol's flexible mechanisms.

- EEA member and cooperating countries that are not part of the EU and agreed to a Kyoto target were on track by the end of 2009, apart from Liechtenstein and Switzerland. The latter has already decided to increase its use of flexible mechanisms to comply with its target.

- Measures in sectors not covered by the EU ETS, for example in the transport, residential or waste sectors, will be of particular importance for meeting national targets for 2020 set under the EU's 2009 climate and energy package.

- EEA's trend analysis shows that greenhouse gas emissions have been strongly influenced by economic development in the past two decades. However, recent trends are also showing signs of the positive impacts of EU policies on its emission trends, according to the EEA analysis.

The three reports published by the EEA provide a comprehensive picture on the past and future developments of greenhouse gas emissions in Europe:

- The EEA technical report "Approximated EU GHG inventory: Early estimates for 2010" presents the first figures on 2010 greenhouse gas emissions in the EU, following the publication of consolidated 2009 emission data in June. Final 2010 data will be available in May 2012, with the submission of the EU greenhouse gas inventory report to the UNFCCC.

- The EEA report "Tracking progress towards Kyoto protocol and 2020 targets in Europe" is tracking the progress already achieved or expected by European countries towards greenhouse gas emission targets. The EEA analysis underpins the European Commission's own report on this issue, also published today.

- The EEA report "Greenhouse gas emissions in Europe: a retrospective trend analysis for the period 1990–2008" presents an overview of drivers behind EU greenhouse gas emissions since 1990, with a particular focus on the influence of policies at EU level.
The change of GDP in 1990-2010 was 39% for EU-15 and 41% for EU-27, and around 1.8% between 2009-2010.

According to the recent GHG projections six Member States (Finland, France, Germany, Greece, Sweden, and the United Kingdom) are on track to achieve their individual GHG reduction targets domestically. Taking into account the planned use of the Kyoto flexible mechanisms, use of unused allowances from the EU ETS new entrants reserve and carbon sinks as well as additional policy measures, only three Member States (Austria, Italy and Luxembourg) might face difficulties with achieving their targets.

In most of the twelve Member States which acceded to the Union as from 2004, emissions are projected to slightly increase between 2009 and 2012. However, nine of them that have a Kyoto target are projected to meet or over-achieve their commitments using only existing policies and measures. Slovenia is estimated to meet its target when all the existing and planned measures, including the purchase of Kyoto credits, deliver as expected.

The climate and energy package adopted in 2009 provides an integrated and ambitious package of policies and measures to tackle climate change until 2020 and beyond. From 2013 onwards the total Union's effort to reduce greenhouse gas emissions by 20% by 2020 compared to 1990 will be divided between the EU ETS and non-ETS sectors.

**GHG Emissions By Sector**

**2009**

![GHG Emissions By Sector 2009](image)

Preparations for the implementation of the GHG reduction commitment by 2020 have continued to advance swiftly. In regard to the EU ETS Directive as revised, last year the technicalities of
the rules for free allocation and auctioning of allowances, use of international credits, setting the cap and the modalities for changes of the registries have been decided. As far as the Effort Sharing Decision, which regulates GHG emissions in sectors outside the EU ETS by setting binding annual GHG emissions targets for each Member States (MS), is concerned, work on implementing measures continued, especially in relation to determining the absolute values for Member States’ targets and the compliance system which will be put in place for monitoring Member States' action annually and helping them to make any necessary corrective measures if they fail to meet their targets.

The 20% GHG reduction objective is rooted in the Europe 2020 strategy for jobs and smart, sustainable and inclusive growth adopted by the European Council in June 2010. The emission reduction target is one of the five headline targets. As noted in the Commission’s Annual Growth Survey 2011, in the field of climate mitigation the existing and planned measures are not yet sufficient to reach the 2020 headline targets. Therefore, many Member States need to make additional efforts to meet their obligations under the Effort Sharing Decision. According to recent GHG projections estimates only 11 MS are expected to meet their commitments with policies already in place, further 7 MS would deliver on their targets when their additional policies and measures deliver as expected. The remaining 9 MS need to design additional policies in order to accomplish their targets.

2. EU Sets Conditions For Signing Up To Kyoto II

European Union environment ministers -- responsible for only 11 percent of global carbon emissions -- said they would commit to a new phase of the Kyoto climate change pact, on the condition that nations blamed for the rest join up too. The environment council conclusions, agreed in Luxembourg recently, outline the bloc's negotiating position ahead of the next global climate conference in Durban, South Africa, which starts at the end of November. "What's the point of keeping something alive if you're alone there? There must be more from the 89 percent," EU Environment Commissioner Connie Hedegaard told reporters.

The European Union stated the need for a road map that would indicate when the biggest emitters -- led by the United States, China and India -- would sign up. The milestones on the way, however, were imprecise.

A first commitment phase of the Kyoto Protocol -- the only global, legally-binding contract on tackling climate change -- ends at the end of next year and analysts say time has run out to get a new world-wide deal in place before then. The United States signed, but has never ratified the Kyoto Protocol. Developing countries were excluded from the original pact signed in 1997, but have since become major emitters.

As a bloc, the EU has taken a lead with binding EU goals that exceed its Kyoto commitments. It is in agreement with environmentalists and analysts that unless everyone joins in, it cannot solve global warming. "If we do that (agree to a second commitment period) without any conditions attached, some would say we have saved Durban, but Durban would not result in one less ton of carbon dioxide," Hedegaard told reporters.

"The easiest thing in the world is to bury this international process. The difficult thing is to find a way forward. We would have liked to see more progress, but we are trying to do our utmost to secure the only process that the world has so far."
The European Union must make a drastic shift from fossil fuels and derive more and more of its power from renewable sources, driving up electricity costs over the next two decades, according to a draft EU document. The 2050 energy road map to be published by the end of the year complements a 2050 low carbon road map released by the European Commission earlier this year, which seeks to chart a way to reducing carbon emissions by more than 80 percent by the middle of the century.

The road map lists a series of scenarios to take account of differing levels of energy efficiency, varying levels of renewable energy, a possible delay in implementation of carbon capture and storage technology and whether more or less nuclear energy is used.

Scientists have said carbon emissions need to fall by between 80 and 95 percent by 2050 to contain global warming within the limit of 2 degrees Celsius (3.6 degrees Fahrenheit) that scientists say is necessary to avoid the worst effects of climate change.

Electricity is the obvious way to decarbonize energy as transportation demand is relatively inelastic, although the draft sees an eventual shift toward electric vehicles. According to all scenarios, electricity will play a much greater role, almost doubling its share in final energy demand to 36-39 percent in 2050.

Renewable energy also rises significantly in all scenarios, achieving at least 55 percent in gross final energy consumption in 2050, up 45 percentage points from today's level of 10 percent. In a high renewables scenario, it would rise to 97 percent by 2050.

Still, the road map sees a need for some precautionary oil investment, even in the European refineries many companies have been eager to divest because they have not been profitable enough. "Maintaining a foot in the global oil market and keeping domestic refineries even when production and consumption is falling at home is important to the EU economy and security," it said.

Coal use could fall to very low levels, while gas, which only emits around half as much carbon dioxide as coal when used for power generation, has a role as a bridging fuel until around 2030 or 2035.

The importance of shale gas, however, is unclear because it is still the early stage of exploration, the draft said.

All scenarios depended on the conclusion of a global climate agreement, the draft said. "If coordinated action on climate among the main global players fails to strengthen in the next few years, the question arises how far the EU should continue with an energy system transition orientated to decarbonisation," it said.

It also noted the EU's 2020 goals have to be achieved on the way to 2050 scenarios. The EU's three 2020 targets are to cut carbon emissions by 20 percent, derive 20 percent of energy from renewable sources and a third target -- which in contrast to the other two is not binding -- of improving efficiency by 20 percent.
A committee of EU experts has urged the European Commission to take carbon leakage and the depth of emissions cuts proposed by other regions into account in its forthcoming energy roadmap. The group was convened by the commission to advise on the preparation of the 2050 roadmap. A draft of its final report suggests trade-offs may be needed between the three main goals of decarbonisation, competition and supply security. The roadmap should be very clear about these trade-offs and should ensure they are explained to the public, the draft says. Concern about other countries not taking on equivalent emissions reductions and the loss of carbon-intensive businesses abroad can be addressed by making the roadmap flexible, it suggests.

The commission should also consider basing its policies on the carbon footprint of goods consumed by the EU's member states, as well as their domestic emissions, introducing border taxes, and adjusting the EU emissions trading scheme to help energy-intensive industries, the report continues.

Making the roadmap flexible, with annual reviews, would also allow for uncertainty over the degree of technological change expected in the period to 2050, it notes.

The group, which was chaired by Oxford University economist Dieter Helm, also questions the need for separate financing provisions and roadmaps for energy and transport, because transport is likely to become increasingly electrified. The two sectors could benefit from being merged under one roadmap, the report suggests.

The energy roadmap is expected to be based around a series of different scenarios including energy efficiency, high renewables, low carbon capture and storage (CCS) and low nuclear visions. It is clear from the report that some of the group had concerns about the fragmentation this approach might create, with common themes being lost and stakeholders given the impression that these are the only options under consideration.

The report was drafted over the summer, with an initial version presented to the group at its third and final meeting in September. The launch of the roadmap has been delayed and is now due in mid-December.

5. EU's Top Court Lawyer Says Airline Carbon Cap Is Legal

European rules forcing all airlines to pay for carbon emissions are within the law, an adviser to Europe's highest court said recently, in the latest stage of a bitter battle between the European Union and the aviation industry. From January next year, all airlines will have to buy permits under the EU's emissions trading scheme (ETS) to help cover the carbon cost of all flights that land or take off in Europe.

"EU legislation does not infringe the sovereignty of other states or the freedom of the high seas guaranteed under international law, and is compatible with the relevant international agreements," said the opinion from Advocate General Juliane Kokott. While her opinion is not binding, the court's judges, who are expected make a final ruling early next year, usually follow an advocate general's guidance. In turn, lawyers expect the London High Court of Justice, which referred the case brought by the Air Transport Association of America, American Airlines and United Continental to the Luxembourg court, to follow the ECJ's line. Chinese and Indian airlines have also expressed vehement opposition to the EU law.
The airlines took the case to the London court after Britain introduced national laws to implement the European directive.

The 1997 Kyoto Protocol on combating climate change ruled countries should try to regulate aviation emissions through the industry body International Civil Aviation Organization (ICAO), but talks with the body have not yielded progress. The European Union -- regarded as the vanguard of efforts to reduce planet-warming emissions -- therefore decided to include airlines in addition to factories, power plants and other installations in its carbon trading scheme.

The EU scheme sets a cap on the level of emissions allowed. Utilities, factories and (from January) airlines that emit carbon above their cap have to buy carbon permits to cover these emissions. If they emit less than their limit, they can sell spare permits from their emission allowances. Airlines initially would only be required to pay for 15 percent of the carbon they emit, and would be allocated free allowances to cover the other 85 percent.

Depending on decisions by airlines on how much of the cost they pass on to their customers, the European Commission has calculated that would result in a cost per passenger of between 2 and 12 euros ($2.66 and $15.96) -- much less than the penalty it would enforce on airlines that do not comply of 100 euros per allowance.

European Commission figures show emissions from airlines have doubled since 1990 and could triple by 2020, in contrast to emissions from most other sectors, which have been decreasing.

6. New Road Charging Rules For Trucks Enter Force

The revised Eurovignette directive on road charges for trucks has entered into force following its publication in the official journal. The EU rules must be transposed into national law by 16 October 2013. There is no obligation to impose such charges but Member states choosing to do so will now be able to charge trucks for the air and noise pollution they cause, in addition to the existing infrastructure charge.

Annex IIIb of the new directive sets the level of charges for air pollution, which vary according to Euro emission standards and road categories (suburban and inter-urban). Noise charges only vary according to the type of roads used. These amounts will be reviewed every two years, starting from January 2013.

Higher infrastructure charges can also be levied during peak periods of up to five hour a day to reduce congestion. A 'mark-up' can also be added to the infrastructure charge in environmentally-sensitive regions such as mountainous areas. Revenues from all charges should be spent on transport projects, the law says.

In particular, revenues from charges on air and noise pollution should be used for the following purposes: reducing pollution from road transport, improving vehicle energy efficiency, supporting the trans-European transport network, optimizing logistics, improving road safety and providing secure parking places.

Member states applying these charges will be allowed to exempt trucks weighing between 3.5 and 12 tons, but they will have to justify their decision to the European Commission. Brussels will assess the effectiveness of the rules by October 2015 and will consider if the derogation for trucks under 12 tons should be scrapped.
Vehicles complying with Euro V standards will be exempt from air pollution charges until the end of 2013. Euro VI vehicles will be exempt until the end of 2017. Hybrid and electric vehicles, which are even less polluting, will be permanently exempted.

7. Cutting Ship Speed 'Does Not Damage Engines'

Danish shipping giant Maersk's vessels have not suffered engine damage since they began reducing speed to save on fuel costs, a study by the company has found. Risk to engine damage from slow steaming has been a concern for the industry. The results were presented at a seminar on slow steaming organized by green groups Seas at Risk and T&E. Maersk's container ships have been operating at 10% of their maximum power since January 2009, moving at 10-15 knots instead of the usual 25 knots. This has resulted in average fuel savings of about 7%.

Initial concerns over soot build-up, loss of lubrication and propeller health did not materialize, the company said. There is currently a debate at international and EU level over whether slow steaming should be required. Maersk and the shipping industry at large oppose obligations on the grounds that ships need flexibility if they are running late.

8. EC: New F-Gas Rules Could Be A Boon For EU Firms

Stricter limits on fluorinated gas (f-gas) emissions are unlikely to harm EU firms and could provide new business opportunities, according to a European Commission official. The commission began consulting on new f-gas laws last month. Speaking to reporters on the sidelines of the ATMOsphere Europe conference on natural refrigerants recently, the official from the climate directorate said international action was needed to tackle growing demand for HFCs, especially among developing countries. But the EU can still push ahead alone if this does not materialize.

"It may be possible for the EU to design a policy more efficiently [working alone]," she said. Options under consideration include the development of new f-gas market mechanisms, which could be an opportunity for EU businesses. "The assumption is that it will not damage Europe," said the EC official.

Most industry representatives at the meeting favored legislative action over voluntary measures. Katja Becken, a policy advisor at German environment agency UBA, pointed out the findings of a report showing that natural refrigerants with lower global warming potential were available for almost all applications.

There have been suggestions that the EU could use its existing ecodesign regime to further reduce f-gas emissions, but another commission official from the energy directorate expressed reservations about this. New requirements could be introduced to cut leaks, he said. But "it is not something that is clearly part of ecodesign". The official also cautioned against a blanket ban on f-gas refrigerants. F-gas emissions typically represent only 10-25% of the emissions from the energy consumption of devices, he said, and some replacements would reduce efficiency.

Stephane Arditi, a policy officer at environmental group EEB, called for a faster f-gas phase-out, and suggested better use could be made of the waste electrical and electronic equipment (WEEE) regime to reduce refrigerant emissions.
9. ITRE Rapporteur Against Higher Diesel Taxes

The proposed revision of the energy tax directive will push up the price of fossil fuel and have a negative impact on society, according to the MEP leading discussions on this issue in the European Parliament's industry, research and energy committee (ITRE). Diesel and petrol taxes in Europe should continue to be differentiated to "give a fiscal incentive to diesel for being more energy efficient..." says Hungarian MEP Béla Kovács in a draft opinion to be discussed in the ITRE committee.

Under the European Commission's legislative proposal, the minimum energy tax rate for petrol would be set at €9.60 per gigajoule from 2013. The rate for diesel would be €8.20/GJ, rising to €9.60/GJ in 2018. This could increase diesel taxes significantly in member states such as Germany which have currently set low rates.

The higher diesel rate has already been criticized by the automobile sector, which as Mr Kovács says would reverse a decade of policy encouraging consumers to buy more fuel efficient cars. But NGO T&E has pointed out that, in the UK, diesel is taxed at the same level as petrol and diesel cars still represent 50% of new cars sold.

The economic and monetary affairs committee is responsible for drafting the parliament's position on the revised directive, based on opinions from other committees such as ITRE. Luxembourger MEP Astrid Lulling, the lead rapporteur, will table her proposals soon.

10. Britain Seeks Comments on its Plan To Reduce Particulate Levels in London

Britain's environmental agency is seeking comment on its plan to move London into compliance with the European Union's air pollution daily limits for coarse particulates (PM-10). The Department for the Environment, Food, and Rural Affairs (Defra) launched the consultation on October 12th and detailed the proposal to meet EU standards in its Update to the Air Quality Plan for the Daily Mean PM10 Limit Value for the Greater London Agglomeration Zone. The updated plan includes a number of measures, which the London mayor published last December in his Air Quality Strategy. These include:

- Low Emission Zone Phase 3 – From 3 January 2012, heavier LGVs and minibuses will be included in the London Low Emission Zone. These vehicles will have to meet the Euro 3 standard for particulate matter (PM). This will deliver pre-compliance benefits across London in 2011 of around 22 tons of PM10.
- Cleaner taxis and Public Hire Vehicles (PHVs) – From 1 January 2012, no license will be issued to a taxi that is over 15 years old, ensuring that the oldest, most polluting vehicles are removed from the roads. Similarly, a ten-year age limit will apply to Private Hire Vehicles from 1 January 2012. These age limits are expected to deliver benefits in 2011, as drivers take action in advance to become compliant with the new standards. In addition, the Mayor has announced a financial incentives scheme to encourage drivers to purchase the cleanest available taxis. This will be established by the end of 2011. These measures will reduce emissions of PM10 across London by around eight tons, with the most significant benefits in central London, where taxis are responsible for over 30 per cent of road transport exhaust emissions.
- Cleaner buses – 300 hybrid buses will be in use in London by the end of 2012, replacing older, more polluting buses. Through the London Hydrogen Transport Plan, eight hydrogen buses will be operational in London by mid-2011. It is also expected that London’s first hydrogen refueling facility will be available from 2010.
• Greener Vehicle Discount – To encourage the uptake of the cleanest vehicles, a Greener Vehicle Discount has been introduced to the Congestion Charging scheme. This allows a 100 per cent discount from the Congestion Charge for cars that emit 100g/km or less of CO2 and that meet the Euro 5 standard for air quality.

• Electric Vehicles – Through his Source London program, the Mayor is aiming to make London the Electric Vehicle capital of Europe. He aims to deliver 1,300 publicly accessibly charging points by the end of 2013. The Mayor also encourages the uptake of electric cars by offering them a 100 per cent discount on the Congestion Charging scheme.

• Cycle Superhighways - Cycle Superhighways are new cycle lanes into central London from outer London. They provide cyclists with safer, faster and more direct journeys into the city. The first two have already been launched, with two more opening in summer 2011. Cycling levels have already increased on these routes. More than £4m has also been awarded to 13 London “biking boroughs” to improve routes for cyclists.

• Best Practice Guidance for Construction and Demolition – The Greater London Authority (GLA) is currently reviewing Best Practice Guidance for reducing emissions from Construction and Demolition processes. This review will be completed by November 2011 and the Guidance will be included in Supplementary Planning Guidance to make it more easily enforceable.

• Biomass boilers – During summer 2011, the GLA will introduce emissions limits for PM and NOX for new biomass boilers which will be enforced through the planning process.

The Mayor’s Air Quality Strategy also identified priority locations along three interconnected corridors in central London which modeling identified as being at greatest risk of exceeding PM10 daily limit values in 2011. These corridors are:
- Marylebone Road/ Euston Road
- Marble Arch to Hyde Park Corner
- Embankment to Tower Gateway.

These locations are consistent with the areas of highest concentration identified in the national assessment undertaken by the UK Government to assess compliance with the Limit Values across the UK. The Mayor’s Air Quality Strategy sets out a range of targeted measures that would be implemented at these locations. Evidence of the effectiveness of local measures comes from other European cities who have implemented similar measures and it is estimated that a package of local measures could deliver improvements in local PM10 concentrations of between 10 and 20 per cent.

The deadline for comment submissions is January 6th.

Britain's capital has the worst air quality in the country and among the worst in Europe, according to a 2009 investigation into air quality in London. Based on current results and projections, Defra said it expected London to comply with EU PM-10 limits by September 2012. The latest published data on air quality compliance showed that PM-10 limits in London were “within the margins of tolerance permitted,” Defra said.

11. EC Unveils Energy And Transport Infrastructure Plans

The European Commission presented a package of proposals to better connect Europe's transport, energy and telecommunications infrastructure recently, but green groups questioned some of the measures' environmental credentials. The 'connecting Europe' package seeks to
establish a single €50bn funding facility for the three sectors for the 2012-20 period, combined with a project bond initiative intended to lower the risks for private sector investors. There are also rules on project development.

The “Connecting Europe Facility” will finance projects which fill the missing links in Europe’s energy, transport and digital backbone. It is intended to also make Europe’s economy greener by promoting cleaner transport modes, high speed broadband connections and facilitating the use of renewable energy in line with the Europe 2020 Strategy. In addition the funding for energy networks is intended to further integrate the internal energy market, reduce the EU’s energy dependency and bolster the security of supply. To assist with the financing of the Connecting Europe Facility, the Commission has also adopted the terms for the Europe 2020 Project Bond Initiative which will be one of a number of risk-sharing instruments upon which the facility may draw in order to attract private finance in projects. The pilot phase will start next year.

By focusing on smart, sustainable and fully interconnected transport, energy and digital networks, the Connecting Europe Facility will help to complete the European single market. The Commission has singled out projects where additional EU investment can have the most impact. In particular, the Commission expects Connecting Europe Facility investments to act as a catalyst for further funding from the private and public sector by giving infrastructure projects credibility and lowering their risk profiles. For the first time, the Commission is proposing a single funding instrument for the three network sectors, true to its commitment to create synergies and simplification of rules.

The Connecting Europe Facility will invest €31.7 billion to upgrade Europe’s transport infrastructure, build missing links and remove bottlenecks. This includes €10 billion ring fenced in the Cohesion Fund for transport projects in the cohesion countries, with the remaining 21.7 billion available for all Member States for investing in transport infrastructure. The idea is to improve links between different parts of the EU, to make it easier for different countries to exchange goods and people with each other.

By focusing on transport modes that are less polluting, the Connecting Europe Facility is intended to push the transport system to become more sustainable. It will also give consumers more choice about how they want to travel.

Transport systems in Europe have traditionally developed along national lines. The EU has a crucial role to play in coordinating between Member States when planning, managing and funding cross-border projects. A well-functioning network is essential to the smooth operation of the single market and will boost competitiveness. The Commission proposed to create corridors to cover the most important cross-border projects. It has estimated that by 2020, €500 billion will be needed to realize a real European network, including €250 billion for removing bottlenecks and completing missing links in the core network.

The energy sector can look forward to €9.1 billion being invested in trans-European infrastructure, helping to meet the EU 2020 energy and climate objectives. The CEF will also help to remove financial gaps and network bottlenecks. The internal market for energy will be further developed through better interconnections, leading to security of supply and the possibility to transport renewable energy in a cost effective manner across the EU. Both citizens and companies need to be able to rely on energy being available at all times and at an affordable price. The money from Connecting Europe will act as leverage for more funding from other private and public investors.
The “Connecting Europe Facility” foresees almost €9.2 billion to support investment in fast and very fast broadband networks and pan-European digital services.

The CEF finance will leverage other private and public money, by giving infrastructure projects credibility and lowering their risk profiles. On the basis of conservative estimates, the Commission considers that the network infrastructure finance could stimulate investment worth more than €50 billion. The Digital Agenda for Europe set targets for 2020 of broadband access for all at speeds of at least 30 Mbps, with at least 50% of households subscribing to speeds above 100Mbps.

As regards digital services, the money would be used for grants to build infrastructure needed to roll-out e-ID, eProcurement, electronic health care records, Europeana, eJustice and customs-related services. The money would serve to ensure interoperability and meet the costs of running the infrastructure at European level, linking up Member States’ infrastructures.

Green transport group T&E had suggested the revision should remove criteria in the current funding system favoring road projects over railways, such as lower EU funds for projects financed by user fees. It also thought EU-funded transport projects should have to pass a climate rating test.

In the revision, the criteria for cohesion funding are still based on economic impact and need, T&E says. There is a provision allowing the EU's contribution to be 10% higher where a project reduces emissions, but funding is not dependent on any particular environmental outcomes.

Greenpeace said the increase in cross-border power connections would green Europe's energy system, but Green MEPs said the proposal favored gas pipelines over renewable energy networks.

12. Portugal's Austerity Budget Raises Car Taxation

The 2012 budget presented recently by Portugal's conservative coalition government includes a significant hike in car taxation as part of efforts to tackle the country's large public deficit. Electric vehicles also lose their tax exemption. Revenue from the circulation tax is set to rise by 7.7%, largely thanks to a 7.5% hike in rates for large-cylinder cars. Engines over 3500 cubic centimeters will now pay €408 a year compared with just €17 for the least-polluting vehicles.

Revenue from the registration tax is also set to go up by 7.5% through a rise in its carbon dioxide element and the elimination of fiscal exemptions including the car scrappage scheme, which has now been completely phased out.

Other budget measures affecting transport include the near-elimination of fiscal support for biofuels and a requirement to green and downsize Portugal's vehicle fleet.

Surprisingly, restrictions on income tax benefits for users of company cars, prescribed in May by the IMF-European Commission-European Bank trio in return for Portugal's financial bail-out, are not included. An EU study published last year has shown such tax breaks have negative effects on the environment.

13. Workplace Pollutants Tied To Kids' Asthma Risk
A mother's exposure to airborne pollutants at work during her pregnancy may increase the likelihood that her unborn child will later develop asthma, a Danish study has found. The review of registry data on 45,658 seven-year-old children and their mothers found that 18.6 percent of children of mothers who were exposed to low-molecular-weight particles at work during pregnancy developed asthma compared to 16.1 percent of the general population.

"This is the first large-scale study which has shown an association between maternal exposures during work and asthma in children," said study leader Berit Christensen, at the School of Public Health in Denmark, in a statement.

For the study, which was presented at the European Respiratory Society's recent annual congress in Amsterdam, Christensen and colleagues used mothers' job titles to estimate their exposure to workplace pollutants, with categories for either low- or high-molecular-weight particles, mixed, farmers, "unclassifiable" and students, as well as a reference group of office workers for comparison.

After adjusting for age, body mass index, allergy and hypersensitivities, smoking, medication and pets, there was a slightly higher risk -- about 11 percent -- for asthma in children when their pregnant mothers were exposed to particles of both low molecular weight and high molecular weight.

The researchers found no asthma associations in the other exposure groups.

Experts greeted the results warily. "Results like these should always be interpreted with caution since they may be caused by confounding from other lifestyle factors that are not easily adjusted for," said Klaus Bonnelykke, of the Danish Pediatric Asthma Center, who was not involved in the research. "However, there is increasing evidence that the prenatal period may be a critical period affecting the offspring's risk for later development of asthma and other (allergic) diseases," he told the press.

Christensen agreed that more work is needed. "Whilst a link has been found, our results at this stage are modest and further research is needed into specific chemicals and substances to determine those that could be most harmful," Christensen added.


Greater reliance on solar, wind and hydro power means that utilities can increasingly blame extreme weather for high electricity and gas bills, a meteorologist at global forecaster WSI told reporters recently. Drought, freezing weather and heavy clouds can all hit household budgets as they restrict output from renewable energy plants.

"It gives the utility companies an easy excuse now, they don't have to blame speculators, it's the weather," said Mark Stephens-Row in an interview on the sidelines of WSI's winter weather outlook presentation, while Britain's energy regulator Ofgem pushed ahead with plans to force suppliers to make energy bills more transparent.

As European governments pursue legally binding targets to cut carbon emissions, renewable energy accounts for a bigger slice of energy production. In Europe's biggest economy, Germany, power producers are already relying on renewable energy more than ever after the government imposed the immediate closure of eight nuclear power plants with a combined capacity of nearly 9 gigawatts (GW) in the aftermath of Japan's Fukushima nuclear disaster.
Renewable energy accounted for 20.8 percent of all German power production in the first half of 2011. Solar capacity is forecast to grow strongly, adding another 5 gigawatts (GW) to the market next year, according to figures from German transmission grids.

Prices in the German power market, also Europe's largest, act as a benchmark for many other European electricity markets, which means volatile trading patterns are reflected in neighboring markets the Czech Republic, France, Austria, Switzerland and the Benelux countries.

Stephens-Row said weather which brings drought, sunshine and high temperatures also comes with low wind -- combining factors which restrict hydro storage and boost energy demand with weak wind power output. "It's a double whammy. You've got no wind and no rain so all of a sudden you're not generating anything from those resources," he said. In these cases power suppliers see rising wholesale prices (because demand is high but renewable output low), which are eventually reflected in customer bills.

Higher volatility in the energy markets is also likely to attract higher liquidity and growing competition which, in theory, helps keep prices low for consumers.

15. Traffic Ban in Milan Sparks Debate Over How to Improve Air Quality

Milan banned all automobile traffic for 10 hours on October 7th, an automatic move triggered when the city experiences health-threatening air quality problems for 12 consecutive days. The 12-day trigger, based on the quantity and size of particulate matter in the air, was established in 2007 but did not come into play until this month. Less restrictive bans have been put in place six times in the last four years, most recently in February.

After 10 traffic-free hours in the city, pollution levels returned to within normal limits. However, the traffic restriction is thought to have cost companies up to €20 million ($26.6 million) in lost productivity on the day of the ban. The traffic ban affected an estimated 120,000 vehicles between 8 a.m. and 6 p.m. and sparked a series of city government meetings to discuss less intrusive ways to solve air quality problems.

The city's environmental protection division said more bans are possible in the coming months, as the population, traffic, and heavy industry in the area all continue to grow. Options announced on October 10th as under consideration include permanent limits on traffic in the city, a special toll for vehicles to enter the city center and surrounding areas, and curbs on high-polluting industrial facilities on the city's periphery.

A special committee is expected to make recommendations by December 15th.

16. Analyzing European Trends In Tropospheric Ozone

A new study¹ has analyzed trends in ozone levels in the European troposphere from 1996 to 2005. It indicated that average levels have been increasing despite reductions in pollutants that influence ozone formation. However, it also identified year-by-year variations, caused by climate factors.

and weather events, and suggested they could be masking the impact of emission reductions on long-term ozone trends.

The study analyzed ozone data from 158 European rural observation sites, mainly situated in central Europe, from the EU GEOmon project\(^2\) from 1996 to 2005. Annual and seasonal trends were determined as well as general geographic variations.

Overall, the average level of ozone across all the European sites increased each year by 0.16 parts per billion by volume (ppbv). However, within this overall trend there were geographical variations. Increases in annual ozone levels were observed at 54% of stations. Only 11% of stations experienced decreasing annual levels of ozone and these were mainly in eastern and south-west corners of Europe.

Very high average levels of ozone were recorded in several Austrian sites and the largest increase over time was observed in the Po Valley, Italy. This is a region with large anthropogenic emissions and very static weather conditions, meaning that accumulating ozone is unlikely to shift.

The research investigated the possible impact of influential events on the ozone levels, such as the 2003 north-western European heat wave. High temperatures are known to increase levels of tropospheric ozone and, when data from this year were removed from the calculations, fewer sites exhibited increases in annual ozone levels.

The researchers suggested that these extreme events could potentially mask the effect of emission reductions when considering trends over decades. Indeed the study found that there was a near uniform decrease in levels of NOx and VOC emissions in Europe, suggesting they are not reflected in the observed ozone trends. To take these ‘freak years’ into account a longer time-series would be required, which may show a stronger relationship between emissions and ozone levels.

Finally, the research compared the observed levels of ozone with those simulated by the CHIMERE model. The model predicted a smaller increasing annual trend in the European average level of ozone than the study’s results at 0.05 ppbv per year. It appears that the method of collecting data from numerous stations is a robust way to explore regional trends. However, there was a lack of data from sites in France, Spain and the Mediterranean area, which may bias the ozone trends towards those in Central/Northern Europe and longer time series may be needed to account for individual years where there are particularly high levels of ozone caused by climate and weather events.

### 17. Poland Sells Pollution Permits To World Bank

Poland sold some of its surplus pollution permits under the Kyoto Protocol to the World Bank, it said recently, adding so far it had sold Assigned Amount Units (AAUs) worth a total of 130 million euros. Countries below greenhouse gas targets under the global climate scheme can sell excess emission rights to third parties and Poland had some 500 million tons of CO2 equivalent after much of its heavily-polluting industry shut down since the 1989 overthrow of communism.

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\(^2\) GEOmon (Global Earth Observation and MONitoring) was supported by the European Commission under the Sixth Framework Program. See: www.geomon.eu
Warsaw has clinched seven deals on AAUs sales with the World Bank, Spain, Japan and Ireland, among others.

18. BP Says Biofuels Growth Stifled By EU Policy Delays

Biofuels for use in transport are becoming more competitive compared with oil but the pace of growth has slowed due to a lack of regulation and sustainability standards in Europe, the chief executive of BP’s biofuels division said. “In the UK, biofuels get no tax breaks whatsoever. The biggest obstacle (to biofuel growth) is uncertainty around the future of mandates and clear (European Union) sustainability standards,” Philip New of BP Biofuels told reporters in an interview.

New expects the European Union to meet its 2020 target of getting 10 percent of energy for transport from renewables, namely biofuels, if new measures are put in place to support the more sustainable alternative fuels.

EU policymakers are currently debating the green credentials of some biofuels and should present proposals for approval by EU governments and lawmakers before the end of the year. However, legislation might not emerge for several years.

Critics say some biofuels production can occupy land that would otherwise be used for agricultural purposes, thus limiting food and water resources for a rapidly rising world population. Some biofuel production could also increase carbon emissions, especially if rainforests are cut down to facilitate production.

BP produces ethanol from sugar cane in Brazil and owns Vercipia Biofuels in Florida in the United States, which is developing a commercial-scale cellulosic ethanol plant due to start production in 2013. In the UK, BP joint venture Vivergo Fuels is building a bioethanol plant in Hull, which should come online in the first half of next year, New said.

Rival bioethanol producer Ensus decided to shut down Britain’s largest bioethanol plant in May for an undisclosed time, partly due to the debate over biofuels’ green credentials which has created uncertainty for EU producers. "We are very concerned there are no new biofuel production facilities elsewhere in this country (...) because of the uncertainties of member states to do what is necessary to meet the renewable energy directive," New said. "It would be naive to pretend making biofuels is easy. We are relatively confident in our ability to learn from (bioethanol production) lessons."

19. Shift In Emission Sources Occurring From Land To Sea

According to Acid News, air pollutant emissions from international shipping continue to rise, while those from land-based sources in Europe keep on slowly shrinking. Since 1980, total European emissions of sulfur dioxide (SO2) – the most significant acidifying pollutant and an important precursor to health-damaging secondary fine particles (PM2.5) – from land-based emission sources have fallen by more than 80 per cent, from around 53 million tons in 1980 to 9.1 million tons in 2009.

Emissions of nitrogen oxides (NOx), non-methane volatile organic compounds (VOCs), and ammonia have also gone down, although to a lesser extent. VOCs have more than halved since 1980, while NOx and ammonia emissions have dropped by 35 and 39 per cent, respectively.
Since the late 1990s, emissions of primary fine particles (PM2.5) have been attracting increasing attention, mainly because of their negative impacts on health. However, these emissions are not as well documented as those of other air pollutants, and many countries lack emissions data for the 1990s. Between 2000 and 2009 it is estimated that emissions of PM2.5 from land-based sources have fallen by a quarter, from 2.9 to 2.2 million tons.

Emissions from international shipping in European waters on the other hand show a steady increase. Since 1980, ship emissions of SO2 have gone up from 1.7 to 2.4 million tons (a 41 per cent increase), and those of NOx from 2.4 to 3.9 million tons (61 per cent).

For most European countries the biggest share of depositions of sulfur and nitrogen emanate from outside their own territory, and an increasing share of the depositions originate from international shipping.

For 2009 it was estimated that ship emissions were responsible for ten per cent or more of the total depositions of both sulfur and oxidized nitrogen compounds in more than half of the EU's 27 member countries. In some countries, such as Denmark, Sweden, Norway, the Netherlands, Ireland, Portugal and the United Kingdom, ship emissions already make up approximately one fifth or more of total pollutant depositions.

20. EC Consults on GHG Emissions From Road Vehicles

The European Commission's climate department is consulting on actions to help achieve a 50-70% reduction in greenhouse gas emissions in the transport sector by 2050, following the publication of a low carbon roadmap and transport white paper. In particular, the commission wants to know which types of heavy duty vehicles (HDVs) should have carbon reduction limits – for example buses, coaches or long-distance trucks – and what measures should be required to achieve these limits.

In its strategy on clean and energy efficient vehicles, the commission floated the idea of curbing emissions from road freight transport by introducing CO2 standards. Although plans remain vague at this stage, work is under way to explore how to tackle lorry emissions. The European automotive industry is playing an active role in discussions, but it has warned that any forthcoming legislation should not be solely based on kilometers driven as is the case for passenger cars and vans.

The HDV market is very different, industry says. EU policymakers must also take into account the amount of freight transported, otherwise they will create a perverse incentive to put more small trucks on the road instead of fewer heavy duty vehicles carrying more goods, some industry representatives have pointed out.

The consultation will run until 09 December. The commission also wants to know whether non-CO2 transport emissions such as methane should be addressed.

Another question relates to a 2013 review of the EU regulation on vans, and particularly on the feasibility of achieving a 147g/km limit for 2020. By 2014, the commission might also propose to extend the rules to trucks weighing up to 12 tons.

21. EU Parliament: Climate Efforts Should Address HFCs, Nitrogen Oxides, Soot
The European Union's efforts to combat climate change by reducing emissions must go beyond carbon dioxide to tackle hydrofluorocarbons (HFCs), nitrogen oxides, and black carbon, or soot, the European Parliament said in a resolution approved on September 14th. Backed by a vote of 578-51, with 22 abstentions, the resolution urged the European Commission to propose legislation to reduce non-carbon emissions and to demand that measures are added to international treaties such as the Montreal Protocol.

“European policy on the mitigation of climate change should be complemented by reductions of non-CO2 gases,” said Richard Seeber, a European Parliament member from Austria. “This can be done in a cost-effective and timely manner with existing tools,” he said. “They can begin within two to three years and be substantially implemented with five to 10 years producing the desired response within decades or sooner. This is particularly true for HFCs.”

The European Union's Emissions Trading System currently focuses on emissions of carbon dioxide.

HFCs are used in refrigeration. According to the resolution, the price of reducing some HFCs is between 5 to 10 euro cents (7 to 14 cents) a ton, compared to about €13 ($18) per ton for carbon dioxide.

Nitrogen oxides lead to the formation of tropospheric ozone, as do carbon monoxide, methane, and volatile organic compounds. Black carbon results from the incomplete combustion of fossil fuels.

The resolution said reducing black carbon would be a “fast-action method of halting glacial melting” and urged that priority be given to emissions that affect regions of snow and ice, including the Arctic, Greenland, and the Himalayan-Tibetan glaciers.

Other recommended measures to reduce black carbon included new regulations to ban slash-and-burn tactics in forests, more stringent and regular vehicle emission tests, limits on biomass burning, and more monitoring of power plant emissions.

“The F-Gas regulation has fallen far short of expectations”, says the resolution, which was drafted by Richard Seeber and Theodoros Skylakakis. MEPs said that the European Commission should propose changes to existing rules to speed up the reduction in emissions of hydrofluorocarbons (HFCs) and the phasing out of ozone-damaging hydrochlorofluorocarbons (HCFCs). These gases are used in some fridges and air conditioning systems.

The European Parliament also wants the EU to reduce emissions of "black carbon" (or soot), e.g. through stricter testing of car emissions. Black carbon particles have a potent effect because in the air they absorb heat from the sun, and on the ground they speed up melting of snow and ice.

Action on HFCs and black carbon could begin within two to three years and be substantially under way within five to 10 years, MEPs said.

22. Hedegaard Promises New EU Rules on F-Gases

The European Commission will propose new measures to reduce emissions of fluorinated gases (f-gases) next year, climate commissioner Connie Hedegaard told the European Parliament in Strasbourg. Ms Hedegaard was responding to a question by center-right MEPs.
Richard Seeber and Theodoros Skylakakis on efforts to address non-CO2 greenhouse gases. The two MEPs also put forward a draft resolution calling for further action on the issue. The resolution was adopted by the full assembly.

A review of the existing f-gas regulations, to be published shortly, shows they could halve projected emissions by 2050, Ms Hedegaard told MEPs. A consultancy study shows rules on stationary sources of fluorinated gases has led to emissions reductions in certain areas. But further cost-effective reductions are also possible.

Potential measures to address black carbon and ground-level ozone – both short-lived climate forcers (SLCFs) – will be considered as part of the commission's overhaul of EU air quality policies, to be completed by 2013, Ms Hedegaard continued.

Internationally, the commission is backing North American countries in their call for action on HFCs under the Montreal Protocol and attempts by the UN Economic Commission for Europe (UNECE) to address black carbon emissions. It is also negotiating new binding targets on ozone-precursor gases with North American countries. An agreement on this could be reached by the end of the year, Ms Hedegaard said. Green MEP Bas Eickhout said the commission should also act on NOx emissions from aircraft and the climatic effect of their contrails.

23. Finland Mulls Nationwide Satellite-Based Road Pricing Scheme

The Finnish Broadcasting Company (YLE) has reported that the Nordic country's transport ministry would begin developing a national road pricing scheme based on satellite location technology. The public broadcaster added the national scheme would replace the plan to build a congestion charge scheme in and around Helsinki.

YLE reported further that under the ministry's tentative plans the charges levied from motorists would be staggered according to the time of day and the level of public transport coverage in the areas they drove in.

24. Norway to Allow Congestion Charging In Cities

The Norwegian government is to introduce rules allowing congestion charging in cities next month, it said recently. The measure is intended to help cut greenhouse gas and air pollutant emissions, and ease traffic problems. The cities of Oslo and Bergen both suffered severe air quality problems over the winter, environment minister Erik Solheim said in a statement. However, it is up to local authorities to decide whether to introduce charging schemes.

Accompanying guidance published by the Norwegian pollution control agency Klif and other government bodies provides detailed recommendations to local authorities on the various measures they can take to tackle poor air quality.

25. New Danish PM Facing Opposition to Road Pricing, Green Tax Plans

Denmark is likely to overhaul a number of environmental policies after the nation's center-left bloc emerged victorious from a September 15th general election. However, the rise to power of Social Democrat (SD) Prime Minister Helle Thorning-Schmidt has been tempered by major gains for two minority parties, the leftist Red-Green Alliance and the centrist Social Liberal Party, meaning a consensus on some environmental issues could be difficult to achieve.
Some proposals likely will receive majority parliamentary support, such as the creation of a privately financed climate fund to invest in emerging markets, greater investments in renewable energy, and tax credits for companies investing in energy savings.

Others will face stiffer political opposition, including a hike in the nation's tax on emissions of nitrogen oxides, higher registration costs for conventional vehicles, and a new road pricing plan to reduce congestion in the capital, Copenhagen.

Forming the basis of Thorning-Schmidt's environmental aspirations are two documents released by Social Democrats in the spring. “Fair Solution” called for an overhaul of green taxes as well as a road pricing plan, while “A Vision for Nature” urged new measures to cut pollutant emissions and improve nature conservation and biodiversity. However, political negotiations aimed at forming a new government have not yet concluded and thus no firm environmental policies have been announced.

The Social Democrats also were among parties calling in a 2010 policy document for Denmark's energy and heating sectors to be weaned off fossil fuels by 2035, with the entire nation following suit by 2050. That climate document was endorsed by the Red Green Alliance, the Social Liberals, and the Socialist People's Party.

Soren Friis Larsen, deputy director of the Danish Chamber of Commerce, told reporters on September 23rd that his organization shares the Social Democrats' goal of environmentally sustainable economic growth, but added that in the current financial climate any new initiatives should not increase businesses' costs. “While we do not reject all ideas or measurements in the ‘Fair Solution’ plan, we are concerned that they could be very costly and detrimental to competitiveness,” Larsen said. “With the current outlook of very slow economic growth, we are not at all convinced that further costs or burdens on businesses should be the way forward. Rather we would like to see more clever and progressive measures in play.” These, he said, could include a “greener and more reasonable” energy tax scheme that would “sector-neutralize” tax rates instead of a system that “massively favored” sectors with high energy consumption. More focus also is needed on involving the private sector in measures to reduce pollutant emissions, he said.

Like the Social Democrats and their allies, he said, the Chamber of Commerce is concerned about the environmental effects of traffic congestion. However, Larsen said his organization favors “an expansion of public transport and targeted investments in critical infrastructure” for the Danish capital rather than an “inflexible congestion charge.” The proposed congestion charge also is opposed by the right-leaning think tank CEPOS. It issued a September 15th statement questioning the benefits of such a levy based on an analysis by the engineering company COWI. CEPOS senior adviser Mia Amalie Holstein told reporters that she is “very skeptical” about the plan's benefits and believes the economic costs would outweigh any environmental gains. COWI's calculations show that the proposal could cost 8 billion Danish kroner ($1.4 billion) annually to implement, she said.

26. MEP Wants To Scrap Proposed Modal Shift Goal

The European Commission's goal to shift at least half of road freight travelling over 300 kilometers to rail and shipping by 2050 should be abandoned, says the MEP leading parliament debate on EU transport policy. Such a goal cannot be applied to the whole of Europe because of geographical and economic differences between regions, says center-right Belgian MEP
Mathieu Grosch. But individual thresholds could be used as guidance by local and national authorities.

The idea for a modal shift for distances above 300km has come under criticism from EU carmakers, which see it as a break from the co-modality commitment. Mr Grosch agrees that co-modality should be the guiding idea for transport policy.

Carmakers and some countries have also raised fears about a goal of phasing out combustion engine use in city centers by 2050. Mr Grosch does not address this issue in the draft resolution, though he does stress the EU should be technology-neutral.

The MEP has pointed out that many of the objectives in the 2001 policy paper have not been met and said future goals should be regularly assessed. He also wants targets and funding provisions for 2020. The commission only sets targets for 2030 and 2050.

The EU should aim for a 20% cut in CO2 emissions from road transport by 2020 compared with 2010 levels, says Mr Grosch. He also proposes a 20% reduction in noise and energy consumption from rail transport and a 30% CO2 cut for bunker fuels.

By 2013, the commission should put forward proposals to develop infrastructure for pedestrians and cyclists in towns, and to double the number of passengers using public transport. Proposals should also be made by 2015 to allocate EU funding to transport projects only if sustainability plans have been submitted by local authorities.

The MEP's recommendations were discussed at a meeting of the parliament's transport committee in Brussels. At this meeting, the European Commission stated that it does not favor the adoption of interim targets for 2020; such cuts are not feasible during the given timeframe, said the official.

According to the commission's impact assessments, a 7-9% reduction in transport emissions would be achievable by 2020. The official added that goals for 2020 already existed in EU legislation, such as the revised 2009 fuel quality directive.

MEPs discussing Mr Grosch's draft resolution on the new transport policy widely backed his call for EU objectives to be regularly assessed. The commission is working on indicators to measure progress which they will discuss with MEPs in November.

Several MEPs also backed Mr Grosch's call for greater flexibility regarding modal shift.

There was concern among MEPs, also expressed by carmakers, that Berlaymont is moving away from its co-modality commitment. Although these fears were not directly addressed, the official said "efficient co-modality" was still a goal for the EU executive.

The proposed changes will be debated at a transport committee meeting on 10-11 October, followed by a vote in November. A full plenary vote in Strasbourg is planned for December.

27. German Government, Oil Lobby Clash on Biofuel Use Target

Germany's government and its oil industry association have disagreed about whether the country can reach its 2011 biofuel use quotas as sales of a new gasoline blend with a higher biofuel content remain sluggish. The German government this year raised the maximum
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permitted level of bioethanol blended in gasoline to 10 percent from 5 percent previously as part of Germany's program to protect the environment by cutting CO2 emissions.

German oil industry association MWV said only 10 percent of German gasoline sales were of the higher blend gasoline, called E10. An environment ministry statement said Germany's 2011 compulsory biofuel use level is 6.25 percent, the same as 2010 before the new E10 fuel was introduced. "Currently the sales share of E10 of 10 percent of the total gasoline volume is not enough to fulfill the quota we have been given," the MWV said. "E10 would have to make up almost the entire gasoline sales to achieve this."

Sales of the new blend have been low since introduction. Oil companies which fail to meet their biofuel blending quotas under Germany's environmental protection program can be fined. This would create additional costs for the oil industry, the association said. "That these costs must be considered in the calculation of gasoline prices, is an economic necessity," the MWV said. "The hard competition for customers will be decisive about whether all additional costs can be covered by the price."

The ministry took issue with the MWV. "There are no signs that the level will not be fulfilled this year in contrast to other years," the ministry said in a statement. Oil companies have a wide range of other fuels to meet the blending quotas including E5 gasoline with 5 percent biofuel content, diesel blends with 7 percent biodiesel content or 100 percent biodiesel, the ministry said. "It is therefore unacceptable and lacking in any justification to threaten to pass on possible fines to consumers or to already start doing this," the ministry said. The oil industry also has volumes of over-fulfilled quotas from last year which it can also use this year, the ministry said.

Germany's transport minister said in April the new E10 fuel blend must stay on sale despite the hostile reaction and blamed oil companies for failing to explain the new fuel to motorists.

28. EU To Delay Action on Biofuels' Indirect Impact

The European Union's top climate and energy officials have agreed to delay by up to seven years rules that would penalize individual biofuels for their indirect climate impacts. The political compromise is designed to protect EU farmers' incomes and existing investments in the bloc's 17 billion euro-a-year ($24 billion) biofuel sector, while discouraging new investments in biofuels that do nothing to fight climate change.

At a meeting of top EU officials on July 13, the bloc's energy and climate chiefs, Guenther Oettinger and Connie Hedegaard, agreed to a delay, according to minutes of the meeting, seen by the press. At issue is indirect land use change (ILUC), which states that if you divert food crops to biofuel production, someone, somewhere, will go hungry unless those missing metric tons of grain are grown elsewhere. If the crops to make up the shortfall are grown on new farmland created by cutting down rainforests or draining peat land, this can release enough climate-warming emissions to cancel out any theoretical emission savings from biofuels.

The July agreement would delay crop-specific rules on ILUC in favor of an indirect approach that penalizes all biofuels equally. This involves raising the carbon-savings threshold that all biofuels must meet compared with conventional fossil fuel to count toward the EU's target, which aims to raise the share of biofuel in road transport fuels to about 10 percent in 2020.

The current thresholds require biofuels to achieve carbon savings of at least 35 percent versus fossil fuel by 2013, rising to 50 percent in 2017.
The deal does not specify by how much the thresholds will be increased, and the exact level is subject to further debate within the European Commission, but EU sources told reporters they expect the 2013 target to be increased to 45 or 50 percent. As a second step, in 2014 the Commission will introduce crop-specific ILUC factors that would take effect in “2016 if possible, or at the latest in 2018.” By sending a clear message that ILUC factors will be introduced in the future, the Commission said its approach would help to “phase out the worst performing biofuels and to prevent further investments in unsustainable biofuels.”

The deal represents a short term reprieve for Europe’s biodiesel sector, after draft EU studies recently showed that such fuel from EU rapeseed, Asian palm oil and South American soybeans has a bigger overall climate impact than normal diesel.

Despite calls from some opponents for the EU to scrap its biofuel target, the Commission said it would not propose any reduction in the EU's goal for 2020, but any increase in the target was also unlikely.

In a further sign that biofuels are no longer seen as the magic solution they once were for reducing road transport emissions, the minutes state that the Commission will no longer support biofuel projects in its overseas development policies.

The Commission is expected to formally present its ILUC proposals in the coming months, after which EU governments and the European Parliament will have a limited time in which to raise any objections.

29. Questioning Europe’s Biofuels GHG Accounting

Much of the appeal of generating energy from plants was that they emit only as much carbon when burned in cars and power plants as they absorb while growing. Lately, that appeal seems to be going up in smoke. It turns out that the emissions from growing and processing some biofuels significantly diminish their benefits, when taking into account factors like the use of fertilizers manufactured with fossil fuels.

Concerns have also grown that large swaths of forest and grassland will be chopped down or burned to grow fuel crops — and to grow food that has been displaced by growing fuel crops elsewhere — thereby releasing additional stocks of carbon into the atmosphere. Olivier De Schutter, the special rapporteur on the Right to Food for the United Nations, is among the experts who have said that pressure on farmland from demand for biofuels is a major factor in the food price spikes that have exacerbated hunger and social unrest in some of the poorest countries in the past three years. Anti-poverty groups like ActionAid and Oxfam have warned that demand for biofuels led to land deals in Kenya, Senegal and Guatemala that displaced people, or left them without enough land to grow enough food to eat and make a living.

This month, an influential committee of 19 scientists and academics described yet another concern: that the authorities, including the European Union, had gotten their math wrong and were overestimating the potential for bioenergy to reduce greenhouse gas emissions. The Scientific Committee of the European Environment Agency said the Union had committed a “serious accounting error” by failing to measure how much additional carbon dioxide was absorbed by existing fields, forests and grasslands, compared with that absorbed by energy crops. “The potential consequences of this bioenergy accounting error are immense,” the committee wrote. The committee concluded that the Union was effectively “double-counting”
some reductions in greenhouse gases, and it warned that current bioenergy policies “may even result in increased carbon emissions — thereby accelerating global warming.”

Citing research by US academic Tim Searchinger, the scientists explain that clearing or cutting forests for energy crops can lead to a significant loss of carbon sinks that may only fully recover decades later. In other words, this leaves a carbon debt that may never be paid back.

These remarks echo the findings of a report, Bioenergy: a carbon accounting time bomb, released by three environmental groups in 2010. More recently, a report by British NGO RSPB raised particular concern over the use of biomass electricity, warning that it could cause serious damage to wildlife and the climate.

The opinion of the Scientific Committee drew a chilly response from the European Commission, which oversees policies on renewable energy. Marlene Holzner, a spokeswoman for Energy Commissioner Günther Oettinger, said “Tim Searchinger's paper on which the EEA scientific committee would seem to base their draft conclusion has already been rebutted by others.” His research looks at the issue of indirect land use change (ILUC) in a "wrong way", she continued. The US academic "ignores the reductions in greenhouse gas emissions because of not having to use fossil fuels when crops are used for biofuels". She added: “Trees absorb carbon only until a certain stage of maturity of the forest. If the wood is not harvested then, whether for industrial use or energy production, there is no further absorption of carbon.” And much of the wood used for bioenergy is harvested anyway as byproduct from industrial use of wood.

Bioenergy has become one of the most fiercely contested issues in Brussels since the E.U. governments agreed three years ago that 20 percent of all energy, and 10 percent of transport fuels, should come from renewable sources by the end of the decade. Bioenergy, including the burning of wood to produce electricity, would meet about half of the overall renewable energy target under national plans, while biofuels would provide the majority of renewable transport fuels. Biofuels already supply about 4 percent of transport fuels in Europe, with sales worth about $17 billion annually.

Recently, environmental groups including BirdLife International, the European Environmental Bureau, Transport and Environment, Greenpeace and Wetlands International sent a letter to José Manuel Barroso, the president of the commission, seeking assurances that his organization was “giving due consideration to science in its energy policy, after several instances in which the best available science was dismissed.” The groups expressed particular concern that some of the findings by the 19 scientists and academics on bioenergy had been “rebutted, without cause.” Aides to Mr. Barroso said that a response was being prepared.

30. France Transposes EU Directives on Renewable Energies, Biofuels

France has modified its environmental, energy, and customs codes to bring them into line with current EU law on renewable energies and biofuels. Nine months past the European Union's December 2010 deadlines, France published ordinance No. 2011-1105 (of Sept. 14), which transposes two directives that the European Union adopted in 2009 as part of its Climate-Energy Package. The ordinance writes into French law key parts of EU Directive 2009/28/EC, which among other things set a target for EU members states overall to get 20 percent of their energy from renewable sources by 2020. The Directive set a 23 percent target for France.

The ordinance requires France's transport fuels and diesel to contain a minimum 10 percent biofuels by 2020 and establishes procedures for creating guarantees that fuels meet the
standard. The text creates a French organization to manage delivery, transfer, and cancellation of these guarantees and to create a public online registry of them. It sets out rules for how guarantees from other EU member states can be accepted for use in France.

In text transposing Directive 2009/30/EC, the ordinance sets sustainability criteria that biofuels and bio-liquids for uses other than transportation must satisfy to qualify for tax breaks and other public support. To qualify, the fuel must reduce greenhouse gas emissions by at least 35 percent, taking into account the entire production and consumption cycle, compared with baseline data for 2010 use of fossil fuels. This rate takes effect immediately, climbing to 50 percent for 2017. It goes to 60 percent on Jan. 1, 2018, for biofuels produced at sites launched after Jan. 1, 2017, according to the text.

The ordinance further stipulates that qualifying biofuels cannot be produced from crops grown in areas rich in biodiversity, or in forests, humid zones, or peat bogs that have a high capacity for absorbing carbon dioxide.

31. Russia's Putin Says Arctic Trade Route to Rival Suez

Prime Minister Vladimir Putin recently predicted Arctic shipping routes along Russia's northern coast would soon rival the Suez Canal as a quicker trade link from Europe to Asia. Russian plans to revive the Soviet-era shipping lane as polar ice cover receded to near record lows this summer could speed energy deliveries to China and boost business for cargo suppliers such as state-owned Sovkomflot.

Officials at the Arctic Forum in the White Sea port city of Arkhangelsk said Russia must develop infrastructure to guard against oil spills, revamp ports and build more icebreakers to realize Putin's vision of year-round shipments.

"The shortest route between Europe's largest markets and the Asia-Pacific region lie across the Arctic. This route is almost a third shorter than the traditional southern one," Putin told participants, who included Iceland President Olafur Grimsson.

High energy prices fueled by demand from China and other emerging economies are helping spur interest in the Northern Sea Route, which trims 4,000 nautical miles off the southern alternative via the Suez Canal. "I want to stress the importance of the Northern Sea Route as an international transport artery that will rival traditional trade lanes in service fees, security and quality," Putin said. "States and private companies who chose the Arctic trade routes will undoubtedly reap economic advantages."

With scientists across the globe predicting a thaw linked to climate change could deliver ice-free Arctic summers within a decade, Sovkomflot and others have increased test cargoes via the polar region, in spite of higher costs. The Arctic was crossed in a record eight days last month by the STI Heritage tanker, owned by Scorpio Tankers Inc., powering from the United States to Thailand. In August, Sovkomflot's supertanker, the Vladimir Tikhonov, ferrying 120,000 tons of natural gas condensate, became the largest vessel of its kind to forge the passage. "I have no doubt this is just the beginning," Putin said of the latest pioneering voyages.

Russia plans to sell a 25 percent stake in state-owned shipping giant Sovkomflot to the public, but has postponed the sale due to turmoil in financial markets.
Russia’s Novatek, which is eyeing the short-cut as part of an ambitious project to ship liquefied natural gas from the Yamal peninsula, estimates the route will slash 10-15 percent off shipping costs.

In another marker of rising interest, Rosatomflot, which sends one of its ten atomic-powered icebreakers to smash through ice as thick as 2 meters, received 15 requests to escort Arctic voyages in 2011, against four in 2010. To meet demand, Putin said Russia will spend 38 billion rubles ($1.2 billion) through 2014 on adding to its atomic icebreaker fleet and plans to build three more by 2020.

One of the chief lures of the Arctic transport corridor is as a means of avoiding pirates in the waters off East Africa, Sovkomflot’s deputy chief Evegeny Ambrosov told forum guests.

Worried over tanker traffic in the Arctic’s pristine waters, in addition to resource drilling, ecologists warn it could be far harder to stem any oil leaks, for instance, than in the Gulf of Mexico after BP Plc’s catastrophic spill in 2010.

32. Air Pollution ‘Takes Up To Eight Months Off Life’

Air pollution is estimated to reduce life expectancy in the UK by an average seven to eight months, according to the Chartered Institute of Environmental Health (CIEH). During the first World Environmental Health Day held by the institute, it will target the Northern Ireland Executive and the public in a bid to reduce pollution problems.

Emissions from road traffic will be a particular issue focused on, with children living near busy roads showing an increased risk of respiratory illnesses including asthma, according to a study conducted by the Royal Commission on Environmental Pollution.

Speaking about the awareness day Gary McFarlane, director of CIEH Northern Ireland, said: “We want to highlight the negative impact poor air quality can have on our societies wellbeing, particularly in the cases of children and people with respiratory ill-health.” Mr McFarlane said the Executive needed to show real leadership and introduce programs that will help ease the problem of pollution. He continued: “We also need to consider new and innovative ways of reducing the need to travel in the first place, including radically improving the potential for home-working through the use of modern technology.”

33. Commission Decides Method to Assign Free Carbon Allowances to Airlines

On September 26th, the European Commission adopted a method for allocating carbon allowances free of charge to airline operators, which must participate in the European Union's Emissions Trading System (ETS) as of January 1st. The number of allowances given to operators will be based on how much their planes weigh and how far they travel. Under the calculation, airlines will receive 0.6797 allowances per 1,000 metric ton-kilometers in 2012, shrinking to 0.6422 allowances between 2013 and 2020. A ton-kilometer is a measure of the transportation of one ton over one kilometer.

The calculation will be used to split 182.6 million carbon allowances among about 900 airlines in 2012. That amount will drop to 172.5 million allowances in 2013. Each allowance represents the right to emit one ton of carbon dioxide.
EU and non-EU aviation operators flying within, into, or out of the European Union will be required to surrender enough allowances to cover their greenhouse gas emissions. They can top up their free allocations with allowances bought at auctions or on the carbon market.

According to the rules governing the inclusion of aviation in the EU ETS, the amount of free allowances in 2012 is capped at 85 percent of the average emissions of participating airlines in the 2004-2006 period. In 2013, the proportion of free allowances will shrink to 82 percent.

Because of growth in the sector's emissions since the 2004-2006 baseline period, the free carbon allowances will represent about 78 percent of forecast airline emissions in 2012.

In addition to the allowances distributed for free, about 30 million allowances will be auctioned to airlines by EU governments in 2012, making an overall cap of 212.9 million allowances. Auctions will generate about €330 million ($445 million) for EU governments in 2012. Under the legislation incorporating aviation in the ETS, governments promised to spend the auction revenues on climate-change mitigation.

Jos Delbeke, director general of the European Commission's climate change policy department, said the allowances given to airlines for free could also generate a windfall, though that would "depend on the extent to which the value of the allowances is passed through to the customer." For transatlantic flights, ticket prices could increase by €2 to €12 ($2.70 to $16) each way, the Commission said. Airlines should use revenues from the pass-through of the value of allowances to invest in better fleets and emissions-reducing technology, Delbeke said.

Because of the emissions cap imposed on airlines, aviation emissions in 2020 will be 26 percent lower than what they otherwise would have been, the Commission said.

The inclusion of aviation in the ETS has been controversial because of the requirement that all airlines landing in, or departing from, the European Union should participate, whatever their country of origin. The Air Transport Association of America and a number of U.S. airlines have filed a case at the EU Court of Justice contesting their inclusion in the scheme.

Chinese and Indian authorities also have protested the inclusion of their airlines in the ETS. The Indian government is to host a conference on September 28-29 involving a number of countries making a stand against the ETS.

Delbeke said the European Union had decided to act on aviation emissions after "one and a half decades of promises" in the International Civil Aviation Organization (ICAO), after which "nothing was done." "We are aware of the Indian meeting," and it should be "more about measures [to reduce emissions] rather than anything else," Delbeke said. The Commission said the ETS legislation allows non-EU countries to implement "equivalent measures" to cut aviation emissions "with a view to exempting [their airlines] from the system." Delbeke said the Commission is discussing equivalent measures with China, Singapore, and the United States. He added that the Commission also could consider exempting non-EU airlines if suitable, more broad-ranging measures were adopted by ICAO.

34. Court May Rule by Year's End on Airlines' Challenge to Inclusion in EU ETS

The Court of Justice of the European Union is expected to issue an opinion by late this year on a challenge to the inclusion of U.S. airlines in the European Union's Emissions Trading System (ETS), an attorney from a London law firm said on August 31st. The judge advocate of the EU
Court plans to issue an advisory opinion on October 6th, after which the 13-judge panel will issue its opinion. The court is expected to rule on the validity of including “aviation activities” in the ETS, according to Tim Baines, a senior associate at Norton Rose. Baines, who spoke during an Environmental Finance webinar, “Aviation and the EU Emissions Market,” would not comment on the merits of the arguments in the case, but he said, “It’s unwise to assume that the EU hasn’t already considered all these arguments when preparing the legislation.”

The design of the ETS is nondiscriminatory, applying to all airline operators regardless of nationality, so provisions in the EU regulations “do not constitute a fundamental obstacle against the coverage of aviation by the EU ETS,” he said.

Nancy Young, vice president of environmental affairs at the Air Transport Association of America (ATA), told reporters in an e-mail on September 1st that the organization expects the Court of Justice to issue a decision by late 2011 or early 2012. Once the Court of Justice rules, the case is expected to go back to the High Court of Justice of England and Wales, where the challenge was first filed.

The U.K. court cannot declare the EU regulations invalid, but the court could find that there are illegal aspects of the United Kingdom’s implementation of the regulations.

Young said the organization expects the U.K. court to act “fairly quickly” after receiving the EU Court ruling, “likely within a matter of a few weeks.”

The ATA, American Airlines, Continental Airlines, and United Airlines filed suit in the English court in 2009, claiming that they should be exempted from the 2009 EU regulations. The case was referred to the European court by the U.K. court in 2010 for an interpretation of the EU regulations. The case initially was filed in the British court because under ETS rules, two major American airlines—American and United—were assigned to the United Kingdom for the purposes of administration of the scheme.

The EU court held a hearing in the case in July.

ATA and the airlines argued that the EU regulations violate customary international law principles of states' sovereignty over their airspace, as well as the Chicago Convention on International Civil Aviation. They also said the regulations effectively impose an illegal tax on aircraft within the airspace of countries outside the EU without the consent of those countries.

Baines also noted pending legislation in Congress that would exempt U.S. airlines from the ETS. The bill's prospects for passage are unknown, he said. (See related story.)

The International Air Transport Association has called for the industry to improve fuel efficiency by 1.5 percent per year until 2020 and to be carbon-neutral by 2050.

35. Sweden Planning Super-Green Car Rebates Scheme

The Swedish Government will invest SEK 200 million in a super-green car rebate over the next three years. This investment aims to encourage car buyers to make the best environmental choice. A super-green car is a passenger car that meets the latest EU exhaust requirements and emits a maximum of 50 grams of carbon dioxide per kilometer.
Transport accounts for about two thirds of Sweden’s climate emissions. However, the trend of ever-increasing emissions from cars has been broken. One of the reasons for this is the growing number of green cars. The super-green car rebate was launched in the Alliance’s election manifesto so as to continue to encourage the transition to a fossil-free fleet by 2030. Following the election, the Swedish Transport Agency was tasked with putting forward a proposal for its design, and the proposal has been circulated for comment.

“The Government has taken note of the comments that have been made on the proposal during the consultation round. As a result, we are extending the premium to cover not only private individuals but also car pools, the public sector and companies, including taxi and car rental companies. What is important is to get the first cars out on the roads so that the public can see that the technology exists and that it works,” says Minister for the Environment Andreas Carlgren.

The super-green car rebate is scheduled to be introduced on 1 January 2012. A final proposal on the criteria for the car models it will cover will be drawn up in the autumn.

36. Finland Seeks Easing Of EU Directive on Sulfur Emissions From Ships’ Fuel

Finland is calling for easier terms in a proposed directive aimed at reducing the sulfur content of fuels used by ships at sea. At present the EU is wants the directive to take effect in four years, at which time the sulfur content of fuels used by ships sailing in the Baltic Sea and the North Sea should be reduced to a tenth of the current one per cent. Such a move would raise the costs of Finnish export industries – so much so that the government decided to ask the EU for some flexibility in the scheduling of the implementation, by up to a decade.

In a brief sent to the Commission, Finland asks for assurances that fuel without sulfur emissions will be sufficiently available by the time the directive takes effect in 2015. Availability of sufficient supplies of the fuel is important – otherwise the cost would be prohibitive. Finland also wants problem-free installation of sulfur filters on ships. “If these measures do not succeed Finland feels that the scheduling of the directive needs to be reconsidered”, says Minister of the Environment Ville Niinistö (Green).

Niinistö says that solutions need to be examined that would qualify as applying the agreement, but in which Finland would have sufficient flexibility. “If the Commission raises its hands in the air, saying that it doesn’t have enough time to do this in three years, then it needs to draw its own conclusions.”

Especially concerned about the sulfur directive is Finland’s forest industry, whose products are exported mainly by sea. The Confederation of Finnish Industry (EK) estimates that the directive could impose as much as EUR 1.2 billion in extra annual costs on Finland’s export industries.

Niinistö says that the calculations of cost are largely based on the fact that there is currently neither demand for or supply of low-sulfur fuel. However, he is confident that market mechanisms will rectify the situation. “In three years’ time, production of low-sulfur fuel suitable for maritime use will increase to new levels. Nevertheless we are talking about issues that are so big for the export industry that the government wants to look for solutions. We are an export-driven country, and these problems of a transitional phase need to be taken seriously.”

Niinistö emphasizes that reducing sulfur emissions will have important environmental and health benefits. He says that it will also improve competitiveness in the shipbuilding industry. He also
said that Finnish expertise in the field meets the environmental demands – possibly better than anywhere else in the world.

The proposed directive drafted by the European Commission, is now in the hands of the European Parliament and the member states. The issue will be discussed in the EU’s environment ministers’ council, in which Niinistö is Finland’s representative. Finland is seeking support from other Baltic Sea countries – Sweden, Lithuania, Latvia, and Estonia.

37. Call For Deal on Shipping Fuel Tax at Durban

The EU should lobby for a global tax on shipping fuel at this year’s UN climate talks in Durban, say WWF and Oxfam. In a report, the NGOs accuse the International Maritime Organization (IMO) of acting too slowly on CO2 cuts. Charging $25 per ton of CO2 would generate $25bn a year by 2020, the report says. It recommends that $10m of this money should be given to the UN green climate fund and the rest used to compensate developing countries for higher import costs.

The measure would increase global trade costs by 0.2%. South Africa, for example, would need $200m a year in compensation for a projected 0.14% increase.

The IMO is already considering carbon pricing, but the NGOs believe its glacial progress means the issue should be addressed in Durban. Their report is being released to coincide with a ministerial meeting called by South Africa to prepare for Durban.

38. EU Mulls Feasibility of Building LNG Infrastructure For Ships

The European Union is studying the feasibility of establishing infrastructure to provide liquefied natural gas fuel for ships throughout the Baltic and North seas, with advocates urging funding of the project from the 2014–2020 EU budget. The use of LNG for shipping is gaining broad support for short routes in the Baltic and North seas, which are subject to low-sulfur emissions rules under the International Maritime Organization. Because the two seas are designated Emission Control Areas (ECAs) under Annex VI of IMO’s International Convention for the Prevention of Pollution from Ships (MARPOL), ships operating in the area are required to meet a 1 percent limit on sulfur in emissions, or 10,000 parts per million (ppm), through the use of low-sulfur fuel or the scrubbing of exhaust emissions. In 2015, the ceiling will be lowered to 0.1 percent, or 1,000 ppm.

Studies suggest use of LNG would yield the needed emissions reductions in a more cost-effective way than other alternatives. Many in the shipping industry are pushing for public investment to help increase the use of LNG fuel.

The European Union is debating parallel rules for sulfur, despite some industry opposition.

Because Russia ratified Annex VI in August, ships will not be able to use that country’s Baltic ports to avoid the ECA sulfur restrictions, as some observers had earlier predicted.

The European Union in July funded a feasibility study for LNG filling station infrastructure throughout the Baltic and North seas, including potential regulations and industry standards, under the bloc’s Motorways of the Sea program. A parallel pilot project is converting two ferries to run on LNG. The feasibility study was “mainly” prompted by the sulfur restriction, according to
the project's July 7th inception report. However, cleaner LNG fuel also would prepare the shipping industry for potential restrictions on carbon dioxide and nitrogen oxides emissions.

A key focus of the project is on public opinion. Local communities would be involved in approving LNG infrastructure, but some portions of the public fear that LNG is a volatile, unsafe form of energy. “Central issues involve the public awareness and the often lengthy process of environmental impact assessments to be approved,” the inception report said. “It is further essential to study the regulatory framework for an LNG filling station infrastructure and to identify the possible missing links in this framework.”

A strategic decision paper recommending port and terminal layout will be released in draft form in November and will be discussed at workshops for ship owners, port authorities, and others in December and January. The proposal is to be completed in March 2012.

Advocates for LNG fuel for ships are calling for “ecological port infrastructure” to be added to a list of potential projects to be funded by the European Regional Development Fund in the 2014–2020 budget period, according to documents from several meetings on the issue over the summer. The ERDF is aimed at EU member states with lower gross domestic product, some of which abut the Baltic Sea.

Another potential source of public funding in the EU budget proposal for 2014–2020 is a new €40 billion ($56 billion) “Connecting Europe” infrastructure fund, which includes money for transportation projects of European importance.

The EU budget and structural fund rules, including for ERDF, for 2014–2020 are expected to be adopted in mid-2012.

Russia’s accession in August to Annex VI was a priority for the Helsinki Commission, which administers an environmental convention of all the countries of the Baltic Sea. The move will help strengthen regulations in the region “in a homogenous way so that we don't have any options that one can act differently in one country’s waters,” Monika Stankiewicz, HELCOM’s professional secretary, told reporters.

HELCOM is expected to decide in December when it will ask IMO to declare the Baltic an emissions control area for nitrogen oxides. The application to IMO was delayed from earlier this year by industry concerns about overly stringent emissions requirements in the region.

Germany will recommend new noise limit values for passenger cars and trucks based on a power-to-weight ratio at a meeting of United Nations Economic Commission for Europe (UNECE)'s working party on noise in Geneva.

Green transport group T&E criticized the plan, saying basing limits on a power-to-weight ratio would favor sports cars and family cars such as the BMW 3 series and the VW Golf. The proposal bears the mark of the German car industry, it claims.

The limits proposed by Germany would apply two years following the new UNECE rules enter force and drop over 10-12 years. The difference between the lower and higher M1 categories (5 decibels at stage 3) is too significant, say T&E.
The European Commission will put forward a proposal for new EU noise limits by the end of the month, and this would supersede any UNECE international limits. According to a preview of proposed EU levels given by an official in May, the commission does not intend to set different levels based on a power-to-weight ratio. Instead, the EU limits will be based only on vehicle type. According to T&E, the German proposal signals an intention to push for exemptions to future EU limits for the high-powered sports and family cars manufactured in the member state.

T&E is also concerned by the fact that Germany is proposing weaker limits for trucks applied over a long period of time. For example, more stringent stage 3 limits would not apply before the late 2020s. The new EU limits for trucks would apply from 2015.

40. New Member States' Challenged On Roads Funding

The bulk of EU funds allocated to transport in central and eastern European countries is used to build roads, which reduces the attractiveness of rail and helps justify even more investment in roads. A study issued recently by Bankwatch shows how four new member states – Poland, Czech Republic, Bulgaria and Estonia – have been massively directing EU funds at road developments since 2007. In Poland, for example, out of the €19.4bn available for transport, €10bn went on roads. In Bulgaria, roads got 65% of the funds. The Poles and Czechs have also been trying to reallocate funds initially dedicated to rail development towards roads. It is the same for Slovakia, which is not covered by the study.

In Poland, only 1% of EU funds allocated to rail have been spent. In Bulgaria, with very limited investments over the past two decades, the sector now finds itself in a virtual state of collapse, and the share of passenger and freight transport by rail is now the smallest in Europe.

The EU made a bold move in 2006 with the adoption of its sustainable development strategy, including provisions to make the European transport system more sustainable. One of the main objectives is to promote alternatives to road transport. But the experience working in central and eastern European countries shows that national authorities use EU regional funds available to them to pursue opposite goals to those in the 2006 strategy; these funds are being poured into road projects.

Governments attempting to reallocate even more funds towards roads argue that investment on rail has been more difficult to absorb. But the new study makes it clear that this is because rail sector reforms have been delayed for many years, and because it has been a low political priority. Projects that do get EU funding are sometimes not implemented because no national co-financing is given to them.

This is a vicious circle where the more rail gets squeezed, the less competitive it becomes, making road development much more attractive for investors.

Not only is excessive reliance on roads contrary to the EU's sustainability goals, it also affects its energy security since most of the oil that feeds road transport is imported. Bulgaria, for instance, imports 70% of its oil, most of which comes from Russia. It therefore makes little sense for eastern European states to make such decisions.

The lack of transparent tender procedures, faulty environmental impact assessments and poor public participation in decision-making certainly make the matter worse. The study shows this is particularly a problem in Bulgaria and the Czech Republic.
Local environmental groups are fighting year after year in a turf war with their national authorities over the type of transport system – and consequently development – that should be pursued in central and Eastern Europe. But only the intervention of EU policymakers is likely to make a significant difference.

In January, the European Commission called on member states to use regional funds more effectively to promote sustainable transport, indicating measures they could take in this direction. But such a soft approach has had little impact on their decisions. The forthcoming EU guidelines on how regional funds should be spent are an opportunity to make sure bad spenders will be punished with immediate withdrawal of funds. And the next EU budget should explicitly link funds to sustainable transport systems, the report argues. The authors fear that only a strong 'stick and carrot' approach can make a difference in the region.

**41. NGOs Finalize Ranking of City Air Quality Efforts**

Berlin, Copenhagen, Stockholm and Vienna have come out on top in an NGO assessment of air pollution schemes in 17 European cities, according to the final version of a study conducted by the Soot Free for the Climate campaign. The preliminary findings, covering 15 cities, were unveiled in Brussels in March. The NGOs involved, which include EEB and BUND, assessed actions taken in EU cities between 2005 and 2010 in areas such as traffic management and public procurement of cleaner vehicles. Compliance with PM10 limits was a particular focus.

Berlin's emission reduction efforts were rewarded, partly thanks to the introduction of a low-emission zone in 2008, which led to a significant decline in soot emissions from exhaust pipes. The city also scored highly on public procurement policy. For example, all new municipal cars must be equipped with a diesel particle filter.

City center congestion charges and strict parking policies are other examples of measures that have helped reduce emissions in cities such as Stockholm.

Rome, Düsseldorf and Milan came bottom of the ranking, despite making headway in emissions reductions. Part of the reason for this is their lack of transparency and communication, making it difficult to assess or verify achievements.

The ranking focuses on cities in the EU-15. The NGOs say they might issue a similar ranking of eastern European cities in future, depending on funding availability.

**42. Report: Italian Glaciers Melting Faster Than Ever**

Italian glaciers are 37 percent smaller than they were 24 years ago and the shrinking trend could be irreversible, according to a report from the Italian Glaciological Committee. Presenting the report to Parliament on September 23rd, Committee President Carlo Baroni said the rate of shrinkage of the glaciers, which are concentrated in the Italian Alps, has sped up since 2003. He predicted the glaciers could disappear entirely by 2050. The report did not call for steps to slow or stop the shrinking but instead urged government action to combat the mudslides, erosion, and environmental degradation expected to result from melted ice. “Even if the world were to adopt the most aggressive greenhouse gas reduction plans available, it is not clear whether it would be enough to save the majority of these glaciers,” Baroni told lawmakers. “The damage we have seen so far and that we predict for the future may well be irreversible.”
43. Britain Seeks Comment on Environmental Regulations, 287 Rules

The British government is seeking public comment on how environmental regulations can be simplified, improved, or scrapped to reduce the burden on business. The "Red Tape Challenge" is aimed mainly at companies, which are "best placed to understand the effect these regulations can have on the day to day running of a business," U.K. Business Minister Mark Prisk said September 1st in a prepared statement.

The Department for Environment, Food, and Rural Affairs (Defra) is seeking input on 287 environmental regulations in eight key areas: industrial emissions and carbon reductions; environmental permits, information, and damage; chemicals; waste; air quality; energy labeling and sustainable products; biodiversity, wildlife management, landscape, countryside, and recreation; and noise and nuisance.

Defra sponsors or works with a wide range of regulators, including the Environment Agency, which oversees rivers, flooding, and pollution; Natural England, which aims to conserve and enhance the natural environment; Ofwat, which regulates water and sewer service providers in England and Wales; Animal Health; the Veterinary Medicines Directorate; the Forestry Commission; the Health and Safety Executive; the Food Standards Agency; and local governments.

The informal consultation, which closes on September 21st, is part of a wider review of regulations the government launched in April in an attempt to end the culture of “tick-box” regulation and to focus more attention on companies posing higher risks to the environment.

For industrial emissions, Defra is seeking comment on provisions covering the sulfur content of fuels; emissions allowances for sulfur dioxide, nitrogen oxides, and dust from large combustion plants; volatile organic compounds; so-called dark smoke emissions; emissions of smoke, grit, and dust from non-domestic furnaces; ozone-depleting substances; carbon accounting; carbon budgets; fluorinated greenhouse gases; and the European Union's Emissions Trading System.

Regarding air quality, Defra is inviting opinions on provisions covering smoke control areas, asbestos pollution, and the pending inclusion of aviation in the EU ETS.

In the case of chemicals regulations, Defra wants views on provisions regarding enforcement of EU bans on the production, sale, and use of dangerous chemicals; the registration, holding, labeling, decontamination, and disposal of equipment contaminated with dangerous substances; and a ban on mercury exports.

Regarding environmental permits, information, and damage, Defra is seeking input on rules that cover industrial installations, mobile plant waste and extractive waste; allow the public a right of access to environmental information held by public authorities; and require operators to take steps to prevent serious environmental damage or, when found guilty, to take remedial action.

Other key areas under consideration include noise and nuisance rules that aim to limit the effects of noise from roads, railways, and airports; waste rules that regulate volumes and impacts of different types of waste, including household, hazardous, construction, mining, and quarrying waste; regulations covering vulnerable or rare species, habitats, and wildlife sites; and regulations covering the energy efficiency labeling of certain products and setting minimum energy efficiency standards.
In a September 2nd response to the initiative, the environmental group Friends of the Earth said many of the existing rules are necessary to give certainty about the government’s commitment to a low-carbon future and to encourage firms to invest in new green technologies and industries.

Energy and Climate Change Minister Charles Hendry stressed in a statement that Britain has no plans to draw back from its climate change commitments. However, he said regulations must not undermine efforts to reduce greenhouse gas emissions “with red-tape that is ineffective, burdensome or unnecessary.”

NORTH AMERICA

44. State and Local Clean Air Agencies Push For Clean Cars and Clean Fuel

Although motor vehicle emissions have improved dramatically across the US since the federal mobile source program was introduced in 1968, they remain a primary source of the volatile organic compound (VOC) and nitrogen oxide (NO\textsubscript{x}) emissions that result in the formation of ozone. Accordingly, to achieve and sustain healthful air quality across the country, state and local air pollution control officials have concluded that it is necessary to further control motor vehicle emissions and fuels.

In December 1999, EPA adopted landmark “Tier 2” regulations which required light-duty vehicles, including sport utility vehicles, to be 90 to 95 percent cleaner. To enable automakers to meet the new standards, EPA required oil refiners to remove about 90 percent of the sulfur in gasoline. A dozen years later, notwithstanding a substantial and sustained effort and remarkable progress, air pollution in the U.S. remains a serious and widespread problem. More than 125 million people still live in areas that exceed at least one of the health-based National Ambient Air Quality Standards (NAAQS), with 120 million of these residing where ozone (also known as smog) levels exceed that federal standard.

Fortunately, additional controls are available at very modest cost and state and local air officials called on EPA to introduce a “Tier 3” program of more rigorous light-duty vehicle emissions standards that follow closely the Low-Emission Vehicle (LEV) III requirements being pursued by the California Air Resources Board (CARB). A critical piece of this program, and one that will ensure cost-effective implementation of these tighter standards, is further improved gasoline quality, particularly a reduction in average gasoline sulfur levels from approximately 30 parts per million (ppm) today, enacted as part of the 1999 Tier 2 program, to an average of 10 ppm. Such a reduction in sulfur levels will immediately improve the NO\textsubscript{x} control effectiveness on all existing Tier 2 cars (see above figure) and will be equivalent to eliminating over 33 million cars from the
nation’s highways. Further, overall, this program has the potential to yield reductions in emissions of NO$_x$, carbon monoxide and VOCs on the order of 29 percent, 38 percent and 26 percent, respectively, by 2030. (see Figure below)

CARB has estimated the costs of its LEV III program to be about $100 per vehicle. The cost of the federal Tier 3 program would likely be slightly higher, approximately $150 per vehicle on average, because under California’s existing requirements new vehicles in the state are almost halfway to achieving the LEV III standards.

Based upon a new study conducted by MathPro – an expert refinery consulting firm – the price of reducing the average gasoline sulfur content to 10-ppm would be similarly modest, likely less than one cent per gallon. Further, lowering sulfur in gasoline is a very cost-effective means by which to achieve substantial emissions reductions, at about $3,300 per ton of NO$_x$ removed.

The emissions reductions to be achieved from the Tier 3 vehicles and gasoline will be accompanied by substantial health and welfare benefits. For example, the NO$_x$ reductions anticipated to result from this program will lead to reduced levels of ambient particulate matter (PM) that, in turn, will translate into more than 400 avoided premature deaths and 52,000 avoided lost workdays each year. The benefits of the ozone reductions to occur from Tier 3 vehicles and gasoline will lead to even greater health benefits.

45. DOE Strategy Emphasizes Clean Vehicles Over Power Plants

In a policy shift that could dramatically alter the clean-energy landscape, the Department of Energy has decided to increase its research and development focus on clean vehicle and transportation technologies at the expense of clean electricity technologies. DOE has released its first Quadrennial Technology Review, in which the department determined that both energy security and emission-reduction goals can be advanced by focusing on vehicles, and that substantial near-term technological progress is possible. About half of the department’s research budget is oriented toward electricity generation, while just a quarter of the R&D spending goes toward vehicles and transportation. Under Secretary for Science Steven Koonin said DOE officials determined that the funding mix was out of balance.

Developers of electric vehicles are the clear winners under the proposed shift in focus, and renewable energy producers would likely receive a shrinking piece of the clean-energy research budget. Electric utilities, on the other hand, could see great benefits from the focus on EVs. And the department determined that natural gas vehicles are already commercially viable and don’t need DOE’s financial support.
Congress will have the final say on the priorities in DOE's research budget.

46. Valley Study Links ER Visits With Bad Air Days

Children's asthma-related emergency room visits rise in the San Joaquin Valley at a similar rate as fine particulate levels do -- even on days where air quality is considered in the moderate range. That's a key finding of a yearlong study by the Central Valley Health Policy Institute at Fresno State, which examined the short-term impacts of air quality changes in Bakersfield, Fresno and Modesto.

The results are also compelling for the proportional findings, meaning that asthma-related visits climb in lockstep with increased pollution, even on days considered "yellow" or moderate. "The study really validates the difficult things we ask of businesses and households," said David Lighthall, the health science adviser for the San Joaquin Valley Air Pollution Control District, which funded the $125,000 study. "It gives our board and staff reassurance to continue making tough regulations to reduce the exposure, particularly for fine particulates."

The study calculated that children with asthma in the three regions surveyed make an extra 1,596 hospital visits a year as a result of elevated fine particulate matter (PM 2.5), and 217 because of high ozone levels, according to Tim Tyner, the co-author of the report and the associate director of the Center for Clinical and Translational Research at the University of California at San Francisco-Fresno, a partner in the study. Each of those ER visits costs an average of about $1,500, and hospitalizations can cost 10 times that, Tyner said.

While exacerbated childhood asthma as a result of the fine particulate matter was the most significant correlation found, the study also discovered other health connections, such as increased emergency visits for children with pneumonia and adults with asthma and cardiovascular problems.

It was also troublesome to see the correlation even on days when air pollution is at levels parents might consider healthy for their asthmatic children. The correlation began at a level of 20 to 30 micrograms per cubic meter, which is below the national fine particulate standard of 35.

Particulate pollution tends to burden the valley more heavily from October to March. Summertime ozone pollution didn't pose as serious a short-term health threat, though experts cautioned there are numerous national reports linking that pollutant to longer-term health consequences such as respiratory and heart problems.

47. States Form Northeast Electric Vehicle Network

Transportation, energy and environment officials from 10 northeast U.S. states and the District of Columbia have joined forces to create the Northeast Electric Vehicle Network. The Network was formed to foster a clean energy economy and reduce the region’s dependence on oil and its emissions of greenhouse gases and other air pollutants. Participants in the Northeast Electric Vehicle Network are Connecticut, Delaware, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont and Washington, DC. These jurisdictions will work together to attract public and private investment in infrastructure for clean vehicles.
As part of their existing collaboration through the Transportation and Climate Initiative, the participating states will promote all clean vehicles and fuels. They will facilitate deployment of electric vehicle charging stations and related infrastructure throughout the Northeast and Mid-Atlantic states.

The network's efforts will be supported by a $994,500 Electric Vehicle Readiness Grant awarded to the New York State Energy Research and Development Authority (NYSERDA) on behalf of the Transportation and Climate Initiative. TCI works to reduce greenhouse emissions, minimize reliance on high-carbon fuels, improve efficiency of freight movement, expand the use of innovative information technology, promote sustainable growth and reduce vehicle-miles traveled. This grant, announced in September by the U.S. Department of Energy, will fund the development of guidelines for the siting, permitting, and installation of EV charging stations.

Some cities are already relying on advanced vehicles. In July, the City of New York added 50 new electric extended range Chevrolet Volts to its fleet for use by city agencies, including the New York Police Department and New York City Department of Parks and Recreation.

Next steps for the initiative include collaboration with the private sector, utilities and local governments on a blueprint for EV deployment; and definition of a set of consistent infrastructure standards.

In New Jersey, nearly 40 percent of the state's greenhouse gas emissions come from the transportation sector. Bob Martin, commissioner of New Jersey's Department of Environmental Protection, said cleaner vehicles and fuels are critical for reducing statewide greenhouse gas emissions as required by the New Jersey Global Warming Response Act.

President Barack Obama has called for one million plug-in vehicles to be on U.S. streets and roads by 2015. The Northeast Electric Vehicle Network's contribution to that goal would be about 20 percent or 200,000 electric vehicles.

Among the things network members will work on is the location of charging stations. The network also will look into making sure car owners can upgrade the plugs in their garage with ease and will tackle other permitting issues.

48. Greens Sue Obama Administration Over Smog Rule

Public health and environmental groups have sued the Obama administration to overturn a decision that scrapped tougher standards on smog pollution which causes lung and heart problems. Earthjustice, the American Lung Association, the Environmental Defense Fund and others sued the administration after the White House on September 2nd directed the Environmental Protection Agency to kill the draft Ozone National Ambient Air Quality Standard.

"We contend that decision was illegal and irresponsible," David Baron, a lawyer for Earthjustice, told reporters in a conference call. "It was illegal because it was based on politics instead of protecting peoples’ health which is what the Clean Air Act requires." He said the decision leaves thousands of people at risk of illness and premature death stemming from emissions of smog-forming chemicals.

The suit was filed in the U.S. Court of Appeals in Washington, D.C.
President Barack Obama said in September the decision was part of an effort to reduce regulatory burdens for business. The EPA has been under pressure from businesses and Republicans in the House of Representatives to delay or weaken a raft of rules on emissions of mercury, greenhouse gases and other pollutants.

49. NRDC Sues Railroads Over Diesel Pollution

NRDC and two of its environmental justice allies—East Yard Communities for Environmental Justice and Center for Community Action and Environmental Justice—have filed a lawsuit against BNSF and Union Pacific, the two largest freight moving railroad companies in the country. This lawsuit targets diesel pollution created by seventeen yards in the state.

NRDC said that they brought this lawsuit because there is a better way to move freight in this country. Millions of Californians are exposed to toxic levels of pollution from BNSF and UP’s operations. The California Air Resources Board (CARB) has found that communities even 8 miles away from some of BNSF and UP’s rail yards suffer from increased cancer risk. These health impacts are created by diesel exhaust emitted by the trucks, trains, and other vehicles that are used to move cargo in and out of BNSF and UP’s facilities. Almost every week, the scientific community releases new studies showing the toxicity of diesel exhaust, which is associated with premature death, cancer, cardiovascular and respiratory disease, and even obesity and diabetes. Some researchers have even found a correlation between diesel exhaust and premature birth and lower IQ in children. Communities closest to rail yards, and particularly kids and the elderly, are the most susceptible.

The lawsuit is precedent setting because it asks a court to recognize that diesel particulate matter is a hazardous waste under the federal Resource Conservation and Recovery Act. RCRA provides for comprehensive regulation of solid and hazardous waste, and protects public health and the environment from “imminent and substantial endangerment.”

First, despite any clean-up initiatives the railroads have adopted, CARB data reveals that the health risks for communities near rail yards still remain unacceptably high. For example, regarding BNSF’s San Bernardino rail yard data from the state indicates that even after all of BNSF’s mitigation measures are implemented, communities close to that yard still face a cancer risk in 2015 that is nearly 50 times greater than what the Ports of Los Angeles and Long Beach say is acceptable for freight projects. And in 2020, that risk remains high—nearly 30 times greater than what the ports deem tolerable.

Second, the railroads have a menu of pollution-control solutions at their fingertips. For starters, the railroads should be expeditiously modernizing their locomotives and equipment. Older locomotives and equipment are extremely polluting and need to be replaced with cleaner models. NRDC is asking the court to require BNSF and UP to invest in cleaner equipment and bring those replacements into urban rail yards immediately to provide relief to fence line communities.

Third, BNSF and UP say that they are already complying with environmental regulations but this is misleading since rail yards as “facilities” are not regulated.

Fourth, one of UP’s yards is just 350 feet from Stevens Middle School in Long Beach. CARB has concluded that for every $1 spent to clean-up pollution from this industry, the state gets up to $8 back in health impacts avoided.
50. Inhofe Argues IG Report Invalidates EPA Climate Rulemaking

EPA's Inspector General issued a report recently alleging procedural missteps in the promulgation of EPA's endangerment finding, which established the basis for the agency's climate change regulatory efforts. EPA critics on Capitol Hill led by Senate Environment & Public Works ranking member James Inhofe asserted that the IG report undermined the entire regulatory regime.

The IG determined that EPA did not meet requirements for peer review in its finding that greenhouse gases endanger human health. The report said EPA "generally followed" procedures for ensuring the quality of its data but recommended that it update its peer review handbook to reflect Office of Management & Budget requirements.

EPA and its supporters pushed back strenuously, strongly disagreeing with the IG's conclusions and saying that the agency properly followed the procedures. In any case, EPA supporters said, the IG report was critical of adherence to administrative procedure, not of the science of climate change. They said the report incorrectly cited a requirement for additional independent peer review of material that had already undergone extensive peer review.

Inhofe said the report called into question the "scientific integrity of EPA's decision-making process" and demanded immediate hearings in the Environment & Public Works Committee.

51. Committee Approves Policies To Shape Palo Alto Into Electric Vehicle Mecca

Palo Alto moved recently to cement its position as ground zero of the zero-emission vehicle movement. A city council committee signed on a set of guidelines for creating a citywide network of electric vehicle charging stations and encouraging adoption of the emerging technology. The move came hours after the unveiling of new charging stations at the City Hall parking garage.

"We are at the high-tech center and everybody likes EVs (electric vehicles)," Debra van Duynhoven, assistant to the city manager for sustainability, told the four-member Policy and Services Committee. The city has good reason to push for an electric car-centered future, van Duynhoven said. Not only are there "a lot of EVs here already," electric carmaker Tesla Motors has put down roots on Deer Creek Road and Fisker Automotive opened a dealership this year to sell the eco-friendly Karma. Electric vehicle technology pioneer Better Place is also headquartered in the Stanford Research Park.

Based on a statewide California Energy Commission estimate, the city's utilities department anticipates anywhere from 3,000 to 10,000 electric vehicles to silently fill Palo Alto's streets by 2020. The city, meanwhile, is averaging 20 permit requests per month for charging stations, van Duynhoven wrote in a report.

The half-dozen policies just approved clear the way for the city to study what sort of electric vehicle charging network it should pursue. The city could install and operate one, farm the project out to a private company, or pursue a hybrid of those two options. Private sector interest will be tested and the feasibility of a private-public network explored, van Duynhoven said.

One of the city's biggest challenges going forward will be figuring out what to charge for fill-ups, both at public stations and at home. The committee, however, agreed to set a policy establishing incentives for nighttime charging, when the demand for energy is not as great. In
that vein, the city anticipates localized upgrades to the city’s electric distribution system will be
necessary as more people switch to the zero-emission cars, van Duynhoven wrote in her report.

The committee also signed off on policies aimed at encouraging communitywide adoption of
electric vehicles, from streamlining the process for obtaining a permit to build a residential
charging station to making them mandatory in new commercial developments.

Some committee members, however, expressed concerns about the aesthetics of the charging
stations. "We don't want push back on a good program because the utility aspects of these
really are off-putting to the community," Council Member Karen Holman said. Council Member
Larry Klein said it would be a mistake for the city to get involved at that level. "I don't think we
want to go down the route of trying to find the best possible design," he said. "I don't think that's
a role the government does very well at all." The committee ultimately voted 4-1 to pursue a
policy establishing design guidelines, with Klein dissenting.

Widespread adoption of electric vehicles could help Palo Alto reach its goal of slashing 2020
greenhouse gas emissions by 15 percent below the 2005 baseline, according to van
Duynhoven's report. The city could see its commute emissions drop by at least 4 percent and as
much as 13 percent depending on the actual number of electric vehicles that materialize in the
next nine years. Similarly, the city could see overall emissions fall anywhere from 1.5 to 5
percent, the report said.

52. Study Sees Potential Policy Disconnect Between CAFE, Electric Vehicles

A new study by the international consulting firm Deloitte indicates that the Obama
administration's push for higher fuel efficiency standards for gasoline and diesel vehicles could
undercut the administration's own electric vehicle (EV) targets intended to drive a market for
advanced energy technologies. The report follows the September release of the Department of
Energy's first-ever Quadrennial Technology Review (QTR), which recommends a shift in the
DOE budget toward the advancement of vehicle electrification.

Administration officials say further study is needed to evaluate how the DOE technology policy
meshes with other agencies’ regulatory agendas, including the development of corporate
average fuel economy (CAFE) standards by EPA and the Department of Transportation. But
these discussions are only in the beginning stages, the officials note.

The new report -- "Unplugged: Electric vehicle realities versus consumer expectations" -- is
being released as part of a series of reports by Deloitte on the policy implications of EVs for
both the automotive and utility sectors, according to a Deloitte spokesperson. The October 4th
report on consumer expectations was designed to give automakers a global overview of the
hurdles involved in moving these vehicles to market, although many of the implications of
increased electrification are not yet known, says the Deloitte spokesman.

But policies to increase the number of EVs on the road could face countervailing effects for
electrification if those policies do not match consumer expectations, according to the report. A
case in point is the move toward higher CAFE standards, according to Deloitte officials. "At 50
miles-per-gallon, the majority of consumers around the world lose interest in electric vehicles --
and if today's gasoline or diesel vehicles consistently hit 75 miles-per-gallon, interest in pure
battery electric vehicles falls off the cliff," Joe Vitale, automotive sector leader for Deloitte, said
in a statement.
Craig Giffi, vice chairman and automotive practice leader for Deloitte, said in a release that the “irony in the United States is the higher [CAFE] standards become, and the closer auto manufacturers come to meeting them by using a combination of more fuel efficient gasoline engines and electrified technology, the less interested consumers become in pure battery electric vehicles that use no gasoline.”

But a spokesman for General Motors -- a major player in EV development -- told reporters that the price of oil is a key consideration that continues to drive GM's interest in building and selling EVs. As long as high price volatility continues in the fossil energy markets, automakers will be interested in electrification, says the spokesperson. Studies are routinely conducted by the automakers and others on the prospects and hurdles for electric drive vehicles because it is a new market opportunity, says the GM spokesman, who says the Deloitte report is certainly not the last study to be done on these issues.

### 53. California Adopts Emissions Trading Scheme

California's emissions trading scheme (ETS) adopted recently by the state's Air Resources Board has been described by the European Commission as a further important step towards the development of carbon markets worldwide. This is the first state-administered scheme in the US. The plan was unanimously adopted by the board after a contentious public hearing. California is the world's eighth largest economy.

A commission spokesman said Brussels is actively working with the state's authorities to make the Californian and European ETS schemes compatible but discussions are at an early stage. It is not yet possible to say if the two systems can be linked. The EU is also holding discussions with other countries. In September, the Swiss government said negotiations with Europe were progressing well. The move should increase liquidity in Switzerland's scheme. This scheme began in 2008 but over-supply of allowances and the limited size of the market means trades are rare.

According to a law passed by the state in 2006, California must return to 1990 emissions levels by 2020. This represents a 15% cut from a business-as-usual scenario.

During phase 1 of the California ETS (2013-14), the state will provide the majority of carbon allowances. A second phase will begin in 2015. The state expects 85% of emissions to be covered. The first carbon auctions will begin in August 2012. Businesses are allowed to emit up to 90% of the benchmark set for their sector. Eight percent of a company's emissions can be covered using state-certified offset projects. These credits can be bought, but only from US sources.

Carbon allowances worth about $10bn are expected to be traded by 2016, making it the world's second-largest scheme after the EU ETS. The US congress has already rejected the idea of having a national cap-and-trade system, leaving states to set up their own. Other states are likely to follow if California's ETS is successful.

### 54. Watchdog Says Canada May Miss Modest New Climate Targets

Canada is spending billions of dollars on poorly planned climate change programs and could miss its modest 2020 target for greenhouse gas emission cuts, Scott Vaughan, Commissioner for the Environment and Sustainable Development and Parliament's environmental watchdog said recently. Vaughan's critical report is the latest attack on the record of the Conservative
government, which critics say cares little for the environment and is far too close to the influential energy industry.

Vaughan said a probe of the government's 2010 climate change plan revealed almost C$9.3 billion ($8.8 billion) had been earmarked for 35 different programs. "There are some basic management weaknesses that we saw in terms of the plan ... right now it's looking to us to be disjointed, confused, non-transparent (with) a lack of good coordination between many of the programs," he said.

After taking power in 2006 the Conservatives walked away from the Kyoto climate change accord - which committed Canada to cut emissions to an average of 6 percent below its 1990 level by 2012 - on the grounds it would harm the economy. The government now promises to reduce greenhouse gas emissions by 17 percent below 2005 levels by 2020.

Vaughan said that target might also be too ambitious, given the chaotic state of the 2010 climate change plan. "The overall federal-wide coordination of these climate change programs really needs to get its act together and if they don't then we have some doubts whether or not they're going to be able to meet any target," he told reporters.

In response, Environment Minister Peter Kent said Ottawa "is continuously improving environmental policies and programs" and would reach its 2020 goal.

The official opposition New Democrats said the report showed the Conservatives had planned to break their international obligations. "It's extremely alarming to see that they have failed to put in place a proper management system ... there are huge holes in their climate change plan," said Megan Leslie, the party's environment spokeswoman.

Vaughan also complained about "incomplete, poor or non-existent environmental information" on the impact of developing the oil-rich tar sands of northern Alberta. The federal government said in July it would spend C$50 million a year on monitoring air and water quality in northern Alberta as well as the effects of oil sands development on biodiversity. Vaughan said the plan would be "a game changer" if it was implemented as planned.

55. U.S. EPA Proposes Changes To Air Pollution Rule

The U.S. Environmental Protection Agency has proposed changes to a rule that aims to cut smog-forming chemicals from power plants in 27 states. The changes could result in slightly more pollution, but save the measure's health benefits. The changes in the so-called Cross State Air Pollution Rule will result in the government issuing 1 percent more credits to allow industry to pollute in 10 states, which could result in 1.3 percent more of the emissions, an EPA source said. The change was a routine tweak of the rules and was based on new information about current pollution levels from local and state governments, the EPA said.

The health benefits of the rule would not be changed, it added. "Today's proposal will maintain the significant health benefits of the rule -- saving up to 34,000 lives a year," it said.

The proposal will go through a public comment period before the EPA issues a final standard.

The EPA does face heavy political opposition on a raft of air pollution rules from Republicans and some Democrats in states that are highly energy-dependent. The Republican-controlled House of Representatives last month passed a wide-ranging bill that would block a raft of EPA
clean air rules including the Cross-State rule and on mercury emissions. And last month the EPA did buckle to pressure when the White House directed it to drop new rules to limit smog pollution. The EPA also delayed plans to issue rules on greenhouse gas emissions for a second time last month.

Those changes were blasted by environmentalists. But the EPA said a slight tweaking of the Cross State rule would be a normal technical change based on new information and environmentalists agreed.

Adding pressure on the Environmental Protection Agency to relax air pollution rules, 25 states urged a federal court recently to require the agency to delay its rule on mercury emissions and other pollutants from power plants by at least a year, saying the measure is too costly.

"In the past, EPA has designed its regulations pretty carefully to make sure that they wouldn't be forcing any facilities to shut down," Jeff Holmstead, the former EPA assistant administrator for air and radiation under President George W. Bush, said about the brief, filed electronically with the U.S. District Court for the District of Columbia. "But now, it looks like there are senior folks at EPA whose main goal is to shut down as many coal-fired power plants as possible."

The EPA is under court order to finalize the so-called maximum achievable control technology rule for utilities, also known as utility MACT, on November 16. But the states want the agency to delay the finalization of the rule, which is designed to reduce emissions of mercury and acid gases from power plants fired by coal and oil, until at least November 16 next year.

Last month, the House of Representatives passed a bill called the Transparency in Regulatory Analysis of Impacts on the Nation, or TRAIN, Act that would block EPA rules including utility MACT. The bill faces an uphill battle in the Democratic-led Senate and the White House has said President Barack Obama would veto the measure.

The EPA says its raft of new air pollution rules will save more money in health costs and hospital visits than they will cost utilities. Mercury pollution, which accumulates in fish that people eat, can harm the nervous systems of and development of babies. The EPA has also said the rules will create jobs in pollution control devices.

56. Californian Cities America's Smoggiest; Polluted for A Third of the Year

California's cities are so polluted they pose a serious health risk to their millions of residents for 135 'smog days' a year, experts have revealed. America's worst, the Riverside-San Bernardino area and Los Angeles, also had 27 'red alert' days in 2010 where air quality was so bad healthy people could develop breathing difficulties or even have a heart attack.
A new environmental study has ranked every American metropolitan area by smog and Baltimore, Washington DC and Philadelphia make up the rest of the top five, followed by Houston, Atlanta, Sacramento, St Louis, and Louisville.

The skylines of Los Angeles, pictured above, and Houston, pictured below, both shrouded in a thick cloud of smog. The millions of residents in both cities had dozens of days where they were breathing dangerous levels of ozone last year.

In total the five worst cities, with more than 25 million residents between them, had 274 smog days combined last year.

A smog day is when ozone was within the range of 60 to 70 parts per billion of air for more than eight hours. It becomes a red alert day when it exceeds that range.

Controversially the Obama administration was going to consider lowering these levels this month to improve standards, but has now shelved it for two years. (See story below.)

Environment America, who has published the data, also say 48 per cent of all Americans live in areas with unhealthy levels of smog pollution. ‘Americans deserve clean air. But on far too many days, people all across the country are exposed to dangerous smog pollution,’ a spokesman said. ‘Pollution from power plants and vehicles puts the health of our nation’s children and families at risk.

‘Studies show that on days with high concentrations of smog pollution in the air, children and adults suffer more asthma attacks, increased respiratory difficulty, and reduced lung function. Exposure to smog pollution can exacerbate respiratory illness and even cause premature death.’

The Environmental Protection Agency (EPA) set the national standard for smog based on the latest science on air quality and public health. But the EPA’s own independent scientists say the current standard, set in 2008, does not adequately protect public health. As a result, Environment America’s report says people nationwide have been ‘exposed to days of poor air quality each summer without even knowing it.’

A state by state comparison has also been carried out with California dominating with 135 days smog days in 2010, more than a third of the year. Texas, Utah, Maryland, Pennsylvania, New Jersey, Ohio and New York each had at least 30 of these days in 2010. Seventeen states experienced at least one “red alert” day for unhealthy air, indicating pollution levels high enough in a particular area so that anyone could start experiencing adverse health effects.
And only nine states did not record any days in 2010 on which levels of smog pollution exceeded the standard, which were Alaska, Hawaii, Idaho, Montana, Nebraska, North Dakota, South Dakota, Vermont and Wyoming.

57. EPA To Enforce Bush-Era Smog Rule

The United States will enforce a Bush-era standard on smog pollution after the White House killed a tougher plan, the country's top environmental regulator has announced. Lisa Jackson, administrator of the Environmental Protection Agency, told a congressional hearing her office will enforce a standard limiting ground level ozone, or smog, to 75 parts per billion. That is the level of a 2008 rule made under the administration of George W. Bush.

Polluters and Republicans have attacked air pollution rules the EPA is forging, saying they will raise costs for companies and erase jobs. Bowing to the critics, President Barack Obama this month killed the EPA smog plan that would have cut levels to between 60 and 70 ppb.

After the hearing the EPA sent a letter informing regional directors that state and local air agencies will have to comply with the 75 ppb rule. The agency will implement the standard mindful that "in these challenging economic times EPA should reduce uncertainty and minimize the regulatory burdens on state and local governments," the letter said. It plans to propose revisions to the standards in 2013. Areas currently considered in violation of the existing ozone standards are highlighted in the figure below.
Jackson had wanted to tighten the smog limit, which can harm hearts and lungs, after an independent panel advised her agency levels of 60 ppb to 70 ppb were necessary to protect human health. Even at current levels, doctors and public health groups warn that ozone, a key smog ingredient, is harmful, especially for those already suffering from lung diseases. "We don't really know what level of ozone is truly safe," said Dr. Monica Kraft, director of the Asthma, Allergy and Airway Center at Duke University and president-elect of the American Thoracic Society. "We are concerned that there won't be any change (in standards) until 2013, even though the levels we have now already can actually worsen lung disease and cause more symptoms, visits to the emergency departments and deaths."

Under the proposed rule, factories and oil, natural gas and power generators would have been forced to cut emissions of ozone, nitrogen oxides and other chemicals, which form smog when they react with sunlight.

Ozone, of all air pollutants, is the most dangerous as it has direct effects on lung tissue. Its irritating activity can cause coughing, wheezing and shortness of breath even in healthy people, and is especially damaging for those already ill, the elderly, children and people predisposed for lung problems such chronic allergies.

"Ozone is basically putting your lungs on display for suntanning. It burns the airways the same way sun burns your skin," said Dr. Albert Rizzo, a pulmonary specialist and an American Lung Association national board chairman. Ozone exposure peaks on hot and humid sunny days and can increase flair-ups for people with chronic asthma or bronchitis. For people with heart problems, ozone can inhibit the release of oxygen into the bloodstream and increase the chance of heart attacks or strokes.

EPA Administrator Lisa Jackson, supported by a broad range of environmental groups, has said the ozone rules would save as much as $100 billion in health costs, and help prevent as many as 12,000 premature deaths from heart and lung complications.

Jackson said in a statement the EPA would revisit the ozone standard, in compliance with the Clean Air Act, but she shied away from commenting on the White House's decision.

Areas projected to be in nonattainment if the standard had been tightened are summarized below.
Jackson had previously noted that the Bush-era rule was not legally defensible. But Republicans who want to block far more EPA air rules than just the ozone rule forced Obama to compromise. (See story below.)

58. House Passes Bill to Block EPA Clean Air Rules

The House of Representatives passed a bill recently to block regulations that force industry to reduce unhealthy air emissions, such as mercury from coal-fired power plants, but the White House has promised to veto the measure and keep new clean air rules in place. The vote was 249 to 169, largely along party lines.

Lawmakers in the Republican-controlled House have targeted Environmental Protection Agency air rules, saying they would kill jobs and burden businesses with billions of dollars in additional costs at the worst possible time. "The Obama Administration is moving too fast and showing little regard for the economic consequences of their energy and environmental policies," said Representative John Sullivan, who sponsored the bill.

The Transparency in Regulatory Analysis of Impacts on the Nation, or TRAIN, Act was also supported by less than 20 Democrats, most of them from coal and other energy-producing states.
The bill would also likely delay the EPA rule introduced in July that would cut smog and soot from coal-fired plants. That rule, the Cross State Air Pollution Rule, would add costs to power generators such as Southern Co, and American Electric Power, and would force coal-fired power plants in 27 states east of the Rocky Mountains to slash the amount of pollution they give off. The rule is slated to take effect in January.

The TRAIN Act, which must be passed in the Democratic-controlled Senate and signed by Obama to become law, would set up an interagency panel led by the Commerce Department to assess the impact of EPA rules on the economy.

Democrats in the Senate have promised to quash the bill. Even if they do, parts of the measure could reappear later in the year as part of a broad spending bill that Democrats would find hard to vote against.

With an eye to next year’s elections, Republicans will likely tout the House’s passage of the bill as evidence they tried to save American energy jobs.

Deliberations in the EPA review panel the bill sets up would delay several agency rules including regulations on mercury emissions slated to be laid out in November. The heavy metal accumulates in fish that can lead to neurological problems in people who consume them.

Environmentalists criticized TRAIN’s passage in the House, saying it would change the process for setting national air standards and lead to premature deaths from heart and lung illnesses. “Sacrificing tens of thousands of American lives will not create more jobs,” said Michael Brune, the executive director of the Sierra Club. “Burdening the American people with billions of dollars in health bills will not lead to economic growth.”

The proposed TRAIN Act attempts to bar the Environmental Protection Agency (EPA) from issuing regulations to reduce air pollution from power plants across state lines and curbing mercury and other toxic emissions. Twenty seven east coast states, including NC, would be affected by the Cross-State Air Pollution rule; the mercury rule would affect many industries across the country. These rules, which were finalized earlier this year, are life-savers for Americans suffering from heart disease, asthma and other chronic respiratory diseases. Delaying the rules for one year would have the following impacts:

- Up to 25,000 lives lost
- More than 11,000 heart attacks
- More than 120,000 asthma attacks
- Over 12,000 more hospital and emergency room visits
- Hundreds of thousands of more days of missed work or school.

According to the Asthma and Allergy Foundation of America, asthma prevalence and death are highly correlated with poverty, urban air quality, indoor allergens, lack of patient education and inadequate medical care.

The Congressional debate on air pollution comes on the heels of the President’s recent decision to delay regulations to reduce smog – a rule which would have prevented 12,000 premature deaths, 5,300 heart attacks and tens of thousands of asthma attacks and other respiratory illnesses each year.
The reasoning is that more regulation costs too much at a time when the economic outlook for the country is quite bleak. It deters investment, puts the brakes on economic recovery. But looking at the facts, the:

- Top 10 utilities combined profits in 2010 – $28.4 billion.
- Return on investments for the smog rule – $37 billion in value for a cost of about $20 billion by 2020.
- Costs associated with implementing current Clean Air Act standards in 2010 – $1.3 trillion in public and environmental health benefit at a cost of $50 billion.
- According to the National Resources Defense Council, that’s more than 9% of the GDP at a cost of .4% of the GDP – a 26 to1 benefits to costs ratio.

59. CARB Fines Diesel Businesses for Air Quality Violations

California's Air Resources Board settled 37 cases of air quality violations during the second quarter, mostly by trucks and buses for failure to properly conduct and pass self-inspections aimed at measuring vehicle smoke emissions to ensure state requirements are met.

The four companies paying the highest amounts were:

- County of Imperial, Department of Public Works, fined $27,000.00 for failure to properly self-inspect its diesel trucks to assure the vehicles met state smoke emission standards, as required under the Periodic Smoke Inspection Program (PSIP).
- Marquez Brothers International Inc., fined $24,000 for failure to comply with diesel fleet self-inspection requirements, and for violations of the Transport Refrigeration Unit (TRU) regulation.
- Brotherhood Trucking Inc., fined $17,617.50 for failing to properly self-inspect its diesel fleets and dispatching drayage trucks that either did not meet emission standards or were not entered into the Drayage Truck Registry.
- West Coast Refrigerated Trucking Inc., fined $15,750 for failing to properly inspect its diesel fleet and for not upgrading all its TRU engines as required by the TRU regulation.

Of the $223,295 collected, approximately $172,000 went to the California Air Pollution Control Fund to support air quality projects and research to improve California's air quality. Roughly $52,000 went to the Peralta Community College District to fund emission education classes at participating California community colleges under the California Council for Diesel Education and Technology program.

60. United States Files Lawsuit for Alleged Violations of the Clean Air Act

The United States, on behalf of the U.S. Environmental Protection Agency (EPA), today filed a civil complaint against MotorScience, Inc. and the owner of the company, in the United States District Court for the Central District of California, for allegedly causing the importation of more than 24,000 uncertified vehicles that do not comply with the Clean Air Act’s requirements, the EPA announced. Engines operating without proper emissions controls can emit excess carbon monoxide, hydrocarbons and oxides of nitrogen which can cause respiratory illnesses, aggravate asthma and contribute to the formation of ground level ozone, or smog.
The complaint alleges that MotorScience, an engine certification services consulting firm located in California, used false or incomplete information to obtain Clean Air Act certificates of conformity for four of its clients. The certificates allowed the importation and sale of more than 24,000 recreational vehicles in the United States. EPA previously voided 12 certificates submitted by MotorScience on behalf of the four clients. The complaint alleges that vehicles imported under these voided certificates violate the Clean Air Act. The complaint further alleges that MotorScience caused its clients to fail to create and maintain records, which its clients were required to keep under the Clean Air Act.

The Clean Air Act prohibits any vehicle or engine from being imported and sold in the United States unless it is covered by an EPA-issued certificate of conformity indicating that the vehicle or engine meets applicable emission standards. The certificate of conformity is the primary way EPA ensures that imported vehicles and engines meet emission standards.

The complaint seeks civil penalties and actions by the company to remedy the violations and mitigate any excess pollutant emissions caused by the violations. This enforcement action is part of an ongoing effort by EPA to ensure that all imported vehicles and equipment comply with the Clean Air Act’s requirements.

61. Fuel Demand in U.S. Rises on Highway Diesel Use, API Says

U.S. fuel demand rose last month as the consumption of distillates, including diesel used by drivers, jumped to a record for August, according to the American Petroleum Institute. Total deliveries of petroleum products, a measure of demand, increased 0.3 percent to 19.7 million barrels a day last month from a year earlier, API said in a report. Year-to-date consumption averaged 19.1 million barrels a day, down 0.3 percent from the same period in 2010.

Demand for highway fuel rose as truck traffic increased with the U.S. recovery from floods, earthquakes and tropical storms and as manufacturing expanded unexpectedly, API said. The distillate gain made up for gasoline deliveries that reflected the lowest level of August consumption in the past decade.

“The manufacturing index is continuing to perform well, and distillate deliveries are directly related to manufacturing output in the U.S.,” Raghavan Narayanan, senior economic analyst at the API in Washington, said in a press interview. “Following hurricanes and floods, there’s usually a recovery phase that goes on and we see lots of trucking demand.”

Total fuel deliveries rebounded last month after dropping in July, the only monthly decline this year.

The increase in demand for distillates “accords with data that suggest modest growth in manufacturing, but consumers remain cautious,” John Felmy, API’s Washington-based chief economist, said in the report. Consumption of distillate fuels, a category that includes diesel and heating oil, rose 11 percent to 4.25 million barrels a day from the same period last year. Demand for ultra-low sulfur diesel, the type used on highways, climbed 13 percent to average 3.87 million barrels a day, the report noted. Heating oil use tumbled 4.9 percent to 371,000 barrels a day.

Jet-fuel use climbed 3.8 percent to an average 1.54 million barrels a day last month compared with the same period in 2010.
“U.S. consumer activity and industrial activity traced divergent paths in August as distillate fuel deliveries hit record highs for the month while motor gasoline deliveries fell to a 10-year low,” according to the API report. Gasoline demand declined 1.3 percent to 9.133 million barrels a day in August compared with the same month last year, the report showed.

Gasoline futures on the New York Mercantile Exchange fell 2.6 percent in August to $3.0320 a gallon. Prices have risen 4.4 percent this year.

U.S. crude-oil production fell 5.5 percent to an average 5.14 million barrels a day, according to the API report. Output in the lower 48 states dropped 6.3 percent to 4.59 million barrels a day, the institute said, while Alaskan production increased 2 percent to 549,000 barrels a day.

62. EPA Maintains Framework for Border Environment Policies

On September 16th, the Environmental Protection Agency released a draft framework for the U.S. Environment Program, Border 2020, that maintains the structure developed over the prior two binational efforts. The document focuses on improved chemical safety, the use of “action plans” that prioritize near-term targets, and policies to address local needs.

EPA and its Mexican counterpart, the Secretariat of Environment and Natural Resources, or SEMARNAT, have opened a written comment period that ends Nov. 30.

As was the case with Border 2012, the program mission is “to protect public health and the environment in the U.S.-Mexico border region, consistent with the principles of sustainable development.” The program extends the “bottom-up” structure developed under the prior programs, Border XXI and Border 2012. Local task forces are supported by regional, binational workgroups, informed by policy forums handling multi-regional or borderwide issues, while national coordinators monitor and manage the program’s implementation. The borderwide working groups coordinate federal efforts with state, tribal, and local governments.

There are six goals under Border 2020:

- Enhancement of joint-preparedness efforts for environmental response;
- Materials management and site mitigation;
- Reduction of conventional air pollutants and greenhouse gases;
- Improvement of water quality and infrastructure sustainability;
- Improvement of public health through chemical safety; and
- Enhancement of compliance enforcement, pollution prevention, and the promotion of sound environmental practices.

“Fundamental principles” are intended to “provide the expectation for how we will approach and consider complex and critical challenges faced by border communities,” the document said. These are climate change, disadvantaged communities, children's health, environmental education, and the strengthening of relationships between border tribes and their host states.

Border 2020 is the third multiyear, binational agreement between the two countries. It is implemented under the La Paz Agreement signed by then-presidents Ronald Reagan and Miguel De la Madrid.
63. House Transportation Panel Votes to Exempt U.S. Airlines from EU ETS

On September 8th, a House committee unanimously approved a bill that would exempt U.S. airlines from an EU trading scheme set to cap emissions on all flights leaving or landing in the European Union starting in January 2012. “The EU Emissions Trading System (ETS) is illegal, extraterritorial, and of questionable benefit,” Rep. Thomas Petri (R-Wis.) said at a markup by the House Committee on Transportation and Infrastructure.

The European Union Emissions Trading Scheme Prohibition Act of 2011 (H.R. 2594) would direct the secretary of transportation to prohibit U.S. aircraft operators from participating in the ETS. It also would instruct the administrator of the Federal Aviation Administration and other government officials to negotiate or take action to ensure U.S. aviation operators are “held harmless” from an emissions trading scheme imposed by the European Union.

The legislation, which was introduced by Committee Chairman John Mica (R-Fla.) and ranking member Nick Rahall (D-W.Va.), is also under the jurisdiction of the House Committee on Foreign Affairs, which must take action on the bill before it goes to the House floor. A spokesman for that committee said there is no pending action on the bill. A Republican spokesman for the transportation committee said the bill is expected to pass easily once it gets to the House floor. There is currently no version of the bill in the Senate.

Committee members said the ETS violates U.S. sovereignty and international law agreements, including the Chicago Convention of 1944 and the Air Transport Agreement between the United States and the European Union and its member states.

Lawmakers also said the scheme would tax the aviation industry without guaranteeing environmental benefits. Funds that could be used to develop new technologies for reducing emissions would instead be funneled into the cap-and-trade scheme, Petri said. And there is no assurance that the revenues would be used to further environmental initiatives in the aviation sector, the legislation states. Aviation emissions in the United States have dropped 15 percent since 2000, Petri said, and the ETS could threaten that progress.

The Court of Justice of the European Union is expected to issue a decision by late this year on an industry challenge to the inclusion of airlines in the ETS.

64. Small Businesses Support Strong National Energy Innovation Standards

Small business owners support strong national standards to increase energy innovation, according to a new national opinion poll of 1,200 small business owners released recently by Small Business Majority. The poll, conducted by Greenberg Quinlan Rosner Research, found that 87 percent of small business owners agree that “improving innovation and energy efficiency are good ways to increase prosperity for small businesses.” It also found strong support for higher mileage standards for passenger vehicles and the Environmental Protection Agency’s regulation of greenhouse gas emissions from power plants, refineries and other major emitters.

When asked about the biggest challenges facing their small businesses, only 13 percent identified “government regulations” as their top concern. Instead, 43 percent of business owners said the rising costs of doing business—including the cost of fuel, electricity, heating and cooling costs—was a top concern and 46 percent cited uncertainty about the economy.
Small business owners also overwhelmingly support EPA regulation of carbon emissions. By a 3:1 margin, small business owners across the nation support the EPA regulating carbon emissions that cause climate change.

Support is also high in states with large manufacturing sectors like Michigan with 73 percent and Ohio with 75 percent of small business owner’s supportive of the EPA regulating carbon emissions. The supportive trend continued in other oversampled states of California, 71 percent and Minnesota, 73 percent.

On the issue of passenger vehicle fuel efficiency, Small Business Majority finds that 87 percent of small business owners overwhelmingly support adopting strong standards now, and 80 percent support requiring the auto industry to increase mileage to 60 mpg by 2025. In July, President Obama announced an agreement with automakers to adopt a federal 54.5 mpg standard by the year 2025. Small business owners say stronger gas mileage standards will help American automakers innovate, improve efficiency and compete in the global economy; 73 percent of poll respondents believe the federal government should do more to make American car companies innovate and 71 percent believe American car companies do not innovate enough.

Other findings from the poll include:

- 68 percent of small business owners have installed energy-saving measures such as energy efficient light bulbs, appliances, windows and insulation.
- 78 percent recycle.
- 12 percent have bought hybrid, electric or alternative fuel vehicles.

65. Airmen Work to Cut Fighter Jets’ Fuel Consumption

The 301st Fighter Wing flies 25-year-old F-16 Vipers with a contingent of pilots and maintainers who are overwhelmingly part-timers. But the Fort Worth-based wing, the largest in all of the Air Force Reserve, is still on the cutting edge, serving as a test bed for two major environmental studies related to fuel consumption.

The first test, earlier this year, tested the F-16s’ ability to burn a synthetic biofuel in lieu of JP-8, the standard military fuel for years.

The wing is also involved in an Air Force study to find the most fuel-efficient methods of takeoffs, landings and transits to reduce, even slightly, the amount of gas burned in training sorties.

The Air Force, the reserve and the Air National Guard own 1,200 F-16s nationwide, and the high-performance fighter is a prodigious fuel drinker. Overall, the Air Force spends in excess of $7 billion a year on fuel for its entire cargo and tactical fleet.

The 301st Fighter Wing, based at Naval Air Station Fort Worth, has about 2,000 people, about 75 percent of whom are traditional reservists with civilian jobs. Although the unit has numerous support squadrons, the backbone of the wing is the 457th Fighter Squadron, its 27 jets and the maintenance crew that keeps them operational. Eighteen times a day, on average, an F-16 takes off from the naval air station, bound for training areas near Brownwood, Possum Kingdom Lake or Lawton, Okla.
In the spring, some of the wing's F-16s took off with a fuel that was only 50 percent JP-8; the rest was an alternative fuel called synthetic paraffinic kerosene, which has less sulfur and releases fewer emissions into the atmosphere.

A few months later, the 301st was asked to participate in an Energy Analysis Task Force project involving the F-16's flight profile. The study, which began in May and ends this month, involves studying the flight data recorders for clues on how to get the best fuel efficiency when the F-16s are flying to the training ranges and back. No one is suggesting trying to squeeze savings from the actual training exercises, when the jets burn the most fuel on high-speed turns and steep ascents.

66. Chamber Says Rejecting Keystone Would Cost United States Critical Oil Supply

On September 23rd, U.S. Chamber of Commerce President Thomas J. Donohue warned that Canada would find an alternate route and an alternate market for its oil sands crude if the United States does not permit the Keystone XL pipeline to be constructed between Alberta and Texas. “In the face of years of American delays, a burdensome U.S. regulatory regime, and environmental opposition, Canada can find another route and another customer,” Donohue said in a speech delivered at the Global Business Forum in Banff, Canada. “It can ship the oil west to the coast of British Columbia and on to Asian markets” notably China, he said.

Donohue was referring to the three years that it took the State Department to issue a final environmental impact statement, released in late August that found no significant impacts from constructing the $7 billion pipeline network. This finding came despite objections raised by environmental groups and the Environmental Protection Agency over potential contamination of the Ogallala Aquifer in Nebraska and increased greenhouse gas emissions. The State Department has said it will make a final determination by the end of 2011 on a presidential permit for the project, which is required because the pipeline would cross an international border with the United States.

Donohue said the United States cannot afford to forgo a stable source of energy from Canada, which currently accounts for 22 percent of U.S. oil imports and 95 percent of natural gas imports. “Those who can secure an affordable and abundant supply will have stronger economies, more jobs, a higher standard of living, and a great competitive advantage,” Donohue said. “The importance of a stable energy supply is why China is cutting deals in every part of the world to secure huge amounts of energy to fuel its growth. It's why Brazil is not wasting a single moment in leveraging recent discoveries. It's happening in Argentina, too. It's why Canada—and Alberta, specifically—is experiencing an energy boom.”

Donohue noted that U.S. refiners have already signed 20-year contracts with TransCanada Corp. on Keystone XL, which upon completion will have the ability to transport 700,000 barrels per day. “I should also point out that up to 25 percent of the pipeline's capacity will be U.S.-produced crude oil from Montana, the Dakotas, and Oklahoma,” Donohue added.

A day earlier, in Washington, D.C., proponents and opponents of the pipeline discussed whether the Keystone project is in the national interest. At a seminar on September 22nd at the Woodrow Wilson International Center, Sen. John Hoeven (R-N.D.) stated his support for Keystone XL because it would provide a route for moving “stranded” oil from the Bakken oil fields in North Dakota to Gulf Coast refineries. Hoeven is among the pipeline project's chief backers.
However, opponents of the project such as Anthony Swift, energy policy analyst for the Natural Resources Defense Council, and Lorne Stockman, research director for the nonprofit Oil Change International, dismissed the energy security argument, saying major refiners on the Gulf Coast were angling to export the oil from Canada.

Stockman said Valero, which is poised to take 100,000 barrels per day from the Keystone XL pipeline until 2030, plans to refine the oil into diesel fuel for export. Swift also argued that the Pipeline and Hazardous Materials Safety Administration has no idea how the oil sands crude will affect the structural integrity of pipelines. Supporting a provision in the House Energy and Commerce’s Pipeline Infrastructure and Community Protection Act (H.R. 2937) that calls on PHMSA to study the impact of oil sands on pipelines, Swift said it is better to know the impacts before moving ahead with its transport.

Despite pledges by TransCanada to build a pipeline of higher integrity than normal pipelines, Swift said Keystone I, a TransCanada pipeline, has reported 12 spills to the National Response Center and two to state agencies since June 2010.

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**ASIA PACIFIC**

67. Plan To Gradually Tighten Air Quality Standards In China

The environmental authorities are proposing to strengthen the standards on air quality, which could lessen the number of official blue-sky days for many cities. The new standards on air quality will include regulations on the monitoring of particulate matter with a diameter of less than 2.5 microns (PM2.5), which are not currently included in determining the air pollution index (API), said Zhao Hualin, director of the pollution prevention department of the Ministry of Environmental Protection.

At present the API is derived from measurements of Sulfur Dioxide, Nitrogen Dioxide, PM10, Carbon Monoxide and Ozone, however, particulate matter finer than 10 microns has a far more harmful effect on human health than larger particles because they act as carriers of many pollutants.

"The central government has the responsibility to protect residents’ health," said Ma Jun, director and founder of the Institute of Public and Environmental Affairs. "We need to improve the system now. Monitoring and publicizing the information on PM2.5 is the first step." Ma said that car exhaust emissions are one of the major sources of PM2.5 in cities.

"Departments, including environmental protection, transportation and other related departments, should make united efforts to reduce the emissions of PM2.5, thus making sure the air quality ratings do not drop if the API is revised," Ma said.

Major cities like Beijing, Nanjing and Guangzhou will face more serious air pollution ratings if PM2.5 is included in the API.
Perched atop the U.S. Embassy in Beijing is a device about the size of a microwave oven that spits out hourly rebukes to the Chinese government. It is a machine that monitors fine particulate matter, one of the most dangerous components of air pollution, and instantly posts the results to Twitter and a dedicated iPhone application, where it is frequently picked up by Chinese bloggers. One day this month, the reading was so high compared with the standards set by the U.S. Environmental Protection Agency that it was listed as "beyond index." In other words, it had soared right off the chart. But China's own assessment that day, Oct. 9, was that Beijing's air was merely "slightly polluted."

Three years later, the difference between the Americans and the Chinese is at least in part about what they're measuring. Chinese monitoring stations around the capital track large particulates of up to 10 micrometers. The number of those particles has dropped as a result of reforestation programs that lessen the dust storms that blew in from deserts. The Chinese have also been successful in reducing sulfur dioxide emissions by limiting coal heating and imposing stricter emissions standards. The U.S. monitor tracks particles less than 2.5 micrometers. Car and truck exhaust is a major source of fine particulate pollution, a particular problem in Beijing, where the number of registered cars has skyrocketed from 3.5 million in 2008.

68. China's Fuel-Saving Strategies To Be Extended

The threshold for subsidies on fuel-saving vehicles in China was raised on October 1st, the Ministry of Finance (MOF) announced, further extending efforts to reduce emissions in the world's largest auto market. A statement on the website of the MOF said that the gas consumption standards necessary to meet the requirements for a 3,000 Yuan ($470) purchase subsidy have been adapted in line with technical specifications.

For example, the fuel consumption standard for cars weighing between 1.2 and 1.32 tons will be lowered to 6.3 liters or less for each 100 kilometers, compared with the previous level of 6.9 liters. The new rules will also reduce the 16 original vehicle weight categories to seven classes, while implementing a coherent standard of 6.7 liters for all cars weighing more than 1.32 tons. It is estimated that more than 70 percent of the current 427 fuel-saving models will no longer be eligible for the subsidies.
China started to distribute subsidies to qualified automobiles with engines of 1.6-liter or smaller in June 2010, as part of an effort to fulfill the country's goal of cutting emissions for each unit of GDP unit by 45 percent by 2020.

Xiang Dihai, an official with the MOF's economic construction department, recently told a forum in Tianjin that the policies had achieved remarkable results in encouraging sales of fuel-saving vehicles. According to Xiang, the government has disbursed 12 billion Yuan in subsidies for 2.51 million energy-saving cars, driving 210 billion Yuan of sales while helping to save 710,000 tons of fuel. "Auto demand in the next five years will continue to grow, and the level of subsidies for fuel-saving cars will also evolve in accordance with technical progress," Xiang said. "A mature market should mainly rely on innovation from automotive manufacturers, while the government's support is just guidance," he added.

However, Xu Changming, a researcher with the State Information Center under the National Development and Reform Commission, said the new rules would have a negative effect on the growth of China's auto market, which is currently at a 10-year low. At present, market growth is as low as 3 percent, compared with 32 percent in 2010. "Growth may even come to a standstill if the subsidies are removed," Xu said. "If sales continue to fall, the government will lose much more in tax revenues from the auto-related industries than it saves with the MOF's new policy," he said.

69. China's Proposal Unveiled Ahead Of Durban Climate Talks

China will urge implementation of the Bali Action Plan and inclusion of all developed countries into the Kyoto Protocol at the next month's climate talks in Durban, South Africa, said a senior official. Describing the proposal as constructive, Chinese Vice-Minister of the National Development and Reform Commission Xie Zhenhua said China's call to implement of the Bali Action Plan means the second commitment period of the Kyoto Protocol should be upheld, as a major disagreement in Durban may be focused on the issue.

During an interview with Xinhua, he said some countries expressed recently their unwillingness to have the second commitment period after 2012 when the first commitment period expires because of the lack of "environmental integrity" as some developed countries, such as the United States, refuse to accept legally binding emission reduction targets as stipulated in the Annex 1 of the Kyoto Protocol. "We hope the Durban conference would not be in a deadlock because of that issue," Xie said, adding that China called on those developed countries to make commitments that are comparable with requirements of the Annex 1 of the Kyoto Protocol.

As for developing countries, their volunteer efforts for emission reduction should also be embodied under the UN Framework Convention on Climate Change, Xie said.

The seasoned environment affairs official said China's proposal is in accordance with the principals of "common but differentiated responsibilities" and "respective capacities," and is realistic because relative targets are actually commitments already approved by individual countries. Therefore, the proposal has won a lot of support, Xie said, adding that "the BASIC countries (Brazil, South Africa, India and China) will make the proposal together with the 77-nation Group." Actually the BASIC countries have raised the idea in a preparatory conference for Durban, and "many parties considered it as constructive," he said.
Meanwhile, Xie admitted there would be difficulties in Durban as the conference's multilateral mechanism would possibly lead to a result "not satisfactory, but acceptable to all parties." "For a multilateral mechanism, I think that might be the best outcome," he said.

**70. China Urban Tide To Grow By 100 Million In 10 Years**

More than 100 million rural Chinese people will settle in towns and cities in the next decade, testing provision of welfare and services as a new generation of migrants turn their backs on farming, according to a new government report. The National Population and Family Planning Commission report forecast that by 2020, China's urban population would pass 800 million, and many of the new residents are rural migrants who lack old-age and medical insurance in the towns and cities they want to call home, according to media reports.

The study, based on survey data from 2010, is the latest to underscore how important, and how challenging, the ramifications of China's tide of urbanization are. "Our country still faces many challenges in achieving healthy urbanization;" said the report, according to a summary from the Xinhua news agency. "At present, we still have not formed a sensible array of cities and towns, and overall urban capacity urgently needs to be strengthened," it said. "The migrant population strongly desires to be absorbed into the areas where they live, but there is a stark conflict between supply and demand of urban public services."

China's census last year found the country had 1.34 billion people, and 670 million were residents of towns and cities. Many new urbanites are young rural migrants with no plans to return to villages and farming after years in factories and on building sites, unlike their parents' generation. Although their wages have risen in recent years, this "new generation" of migrants also needs better housing, healthcare and schooling opportunities. The report found 52 percent of Chinese rural migrants had no social welfare insurance.

In June, migrant workers rioted in far southern China's manufacturing belt, trashing government offices and police vehicles after a pregnant peddler was roughed up by guards, triggering anger about mistreatment. A string of strikes at Japanese-owned vehicle parts makers last year also showed the growing assertiveness of younger Chinese workers. China has about 153 million migrant workers living outside their home towns, and by 2009, 58.4 percent of them were "new generation" migrants born in 1980 or after, according to an earlier National Bureau of Statistics survey.

**71. Indian Children Most Affected By Air Pollution: Study**

A study on ‘Impact of air pollution in specific areas of Guwahati and Shillong on vulnerable groups’ has identified schoolchildren as the most-affected. The study carried out by the Center for North East Studies and Policy Research in two of the biggest cities of the Northeast on vulnerable groups like schoolchildren, laborers, rickshaw pullers, traffic police personnel, petrol station workers and roadside vendors also says that 40 per cent of the respondents comprised schoolchildren, who invariably complained of respiratory, skin and eye problems, mostly attributed to vehicular pollution.

Khanapara (Guwahati) and Police Bazaar (Shillong) topped the list of the most air-polluted areas of the respective cities, the study mentioned. The survey was conducted among 1,000 individuals in select areas of Guwahati and Shillong.
“Clean water and clean air are the basic human rights. The hazards of air pollution are increasing dangerously and each one of us has a role to play in our own right,” Sanjoy Hazarika, trustee of C-NES, told the media. He informed them that the study report would soon be submitted to the Pollution Control Board, Assam. “We are also planning to carry out similar studies in other cities of the NE,” Hazarika said.

A majority of the respondents, according to the report, said they do not conduct a regular pollution check-up of their vehicles in spite of it being a mandatory requirement. “It has also come to light that most of the emission testing centers are incompatible for advanced engines like Bharat Stage III and IV,” the report said.

The report added that the Suspended Particulate Matter (SPM) and Respirable Suspended Particulate Matter (RSPM) levels in Guwahati’s Bamunimaidam, Dispur/Khanapara, Gopinath Nagar and Shantipur areas are much above the National Ambient Air Quality Standards.

On changing weather pattern, the report pointed out that the highest temperature in Guwahati has touched 7 degree Celsius higher than what was recorded six years back.

72. Diesel Tax Hike, Carbon Levy Planned For 2012 in Thailand

The Finance Ministry will raise the tax on diesel in January and prepare to collect a carbon tax from carmakers and other manufacturers in a bid to curb carbon-dioxide emissions. It says the flood crisis has cost about Bt12 billion a month in lost excise-tax revenue. "We will raise the diesel tax in January but do not know yet by how much," Finance Minister Thirachai Phuvanatnaranubala said recently after meeting with excise officials.

The Democrat-led government in April cut the excise tax on diesel to Baht 0.005 per liter from Baht 5.31, a reduction that was due to end in September. The current government extended the cut to December. The cut has cost the government about Bt9 billion a month in revenue losses.

The tax rise is necessary as the government has to earn more revenue, Thirachai said. Moreover, the excise tax on diesel is part of the government's revamp of fuel-tax policies and its plan to float energy prices while maintaining tax incentives for gasohol.

He also said his ministry planned to impose a new carbon tax on carmakers. Other manufacturers should also be subject to this tax, he said, noting that plastic production and coal burning caused emissions of greenhouse gases that contribute to global warming.

The Excise Department also plans to increase existing excise-tax rates as part of the government's tax reform. As the government plans to cut corporate income tax, which will result in some revenue losses, increased excise levies will make up the shortfall, he said. In the long run, excise tax will be a major source of government revenue, he insisted. Vehicles, beer, liquor, cigarettes and oil are major items under the current excise-tax system.

The Finance Ministry will also consider privatizing the Playing Cards Factory and the Liquor Distillery Organization, currently under the supervision of the Excise Department. "We will also consider whether to privatize other state enterprises," Thirachai said.

Benja Louichareon, director-general of the Excise Department, said the flood crisis had caused tax losses of about Bt12.32 billion a month as carmakers and other manufacturers had been hit hard. "Honda's and other plants will be allowed to delay tax payment until they can resume their
production," she said. Honda's car plant was hit hard by flooding. If stocks of goods are damaged, manufacturers can get tax refunds, she said.

Benja added that the department collected Bt399.78 billion in the previous fiscal year that ended in September.

73. Study Indicates That Aerosol Particles Dry Out South Asian Monsoons

Summer monsoons that provide up to 80 percent of the water South Asia needs have gotten drier in the past half century, possibly due to aerosol particles spewed by burning fossil fuels, climate scientists said recently. Monsoon rains are driven by looping air circulation patterns over India, and the aerosols appear to have interfered with these patterns, researchers reported in the journal Science.

Between 1950 and 1999, the drying was most pronounced in central-northern India, with a 10 percent drop in average June-September rainfall, the researchers said. The rest of India experienced a decrease of about 5 percent over the same period, they added.

This does not seem to be a direct consequence of greenhouse gas emissions, even though the burning of fossil fuels and biomass that produces the aerosol particles also emits climate-warming carbon dioxide, the researchers said.

Over South Asia, aerosol particles have actually slowed down climate warming by reacting with sunlight and reflecting some of it back into space, said study co-author Yi Ming of the U.S. National Oceanic and Atmospheric Administration's Geophysical Fluid Dynamics Laboratory in Princeton, New Jersey. That same cooling effect tends to slow down the north-south air circulation that delivers the monsoon rains, Ming told reporters in a telephone interview.

The Northern Hemisphere, including India, tends to emit more aerosol particles because it is more heavily developed than the Southern Hemisphere, Ming said. This could offer hope that the aerosol drying of the monsoon could be reversed. This is because developed countries such as the United States and much of Europe have taken steps to cut down on particle pollution, which means less gets into the air. Ming and his colleagues project that if India and other Asian countries continue to develop their economies, they too will cut back on particle emissions. "The aerosol levels will be cut a lot out of concern for human health, like what happened in the U.S. and Europe," Ming said. "Once countries are rich enough, they want to clean their air."

This could begin to reverse the monsoon's drying trend in 20 to 30 years, he said. However, it would do nothing to reduce the emissions of carbon dioxide associated with more developed economies, and dealing with that, Ming said, "will be a very difficult policy challenge."

74. Analyst Argues For Using Electric Rickshaws To Curb Air, Noise Pollution

With the conflict between auto rickshaw unions and drivers on one hand and the commuters on the other increasing, imaginative solutions are being sought. One such proposal is using electricity-powered auto rickshaws in Mumbai. Transport analyst Ashok Datar, who has been driving an electric car for the last five years, said electric auto rickshaws will contribute to improving the "noise and air pollution profile" of the city. "The real long term planning which we should not forget is shifting auto rickshaws to electrical mode. For this, we must ask the manufacturers to make electric auto rickshaws, which should be made tax-free too," Datar
suggested. "In fact, none of the parking restrictions should be imposed on electric rickshaws as they neither cause air pollution nor noise pollution," Datar added.

An official from the state transport department said he was inclined in favor of technologies which help reduce pollution. "Electric auto rickshaws) will help in improve the traffic situation in the city, which is getting worse by the day. Also, electric-powered rickshaws will not be at the mercy of the erratic CNG supply," he added.

But, union leader Thampy Kurien was not convinced. He pointed out that around six years ago, Mahindra & Mahindra had launched a nine-seater electric auto rickshaw and Bajaj, too, had come out with a three-seater electric rickshaw. "At the level of technology, maintenance, infrastructure availability to support the operations, it was found not feasible. I don't favor the idea," said Kurien.

State transport commissioner VN More said he was unsure how the battery-operated auto rickshaws will operate. "Though, technically the idea seems beneficial, issues such as infrastructure and technology to support daily operations and their feasibility will have to be looked into," said More.

75. September Surprise In Sales Growth in China

September vehicle sales in China turned out stronger than expected with volumes up 8 percent year-on-year to 1.6 million units, the second highest monthly gain this year. The passenger vehicle market remained strong, recording double-digit growth for the fourth consecutive month. Sales totaled 1.2 million units, up 12 percent from a year ago. The seasonally adjusted annual rate came to 13.8 million units, up 4 percent from August, showing car sales in September surpassed previous projections.

The carmakers filled up dealer inventory during the last month of the quarter as expected, but there were other important elements in the sales rise. One key reason is policy. It has been more than a year since the government's 3,000 Yuan subsidy for fuel-efficient cars came into effect. Most cars with 1.6-liter engines or smaller have been eligible for the incentive, and while it's not as high as the purchase tax cut that expired at the turn of the year, it has still effectively kept sales from falling. The subsidy even increased at the beginning of October, a change in policy that prompted carmakers to ramp up production and wholesale sales to prepare for the expected sudden rise in car purchases.

Exports are another important factor driving volume, particularly for Chinese brands. Auto shipments in the first nine months of the year totaled 345,000 units, exceeding the previous highest annual export volume recorded in 2008. About 30 percent of Chery's wholesale sales came from exports, while overseas shipments for other major exporters such as Geely, Great Wall and JAC all surpassed 10 percent. Growing sales in emerging markets, key destinations for Chinese car exports, are driving the demand. Seeing the importance of the markets overseas, Chinese carmakers are expanding both their distribution channels and diversifying export product portfolios faster than ever.

Due to local trade protection systems in many markets, some carmakers have also changed their export strategy away from shipping finished products to exporting knocked-down vehicles for assembly overseas. While Chinese carmakers are losing market share at home, surging exports are helping them stay in the game.
Though barely impacted by the recent changes in policy, sales of light commercial vehicles rebounded to 421,000 units in September, down 1.5 percent year-on-year, but 24 percent higher than August. The minibus segment finally ended its sales decline of seven months in a row with 193,000 units delivered in September, up 1 percent from a year ago.

Other segments also performed better than in the past few months due to increasing demand from the transportation sector.

JD Power’s auto sales growth outlook of the full year remains unchanged at 12.9 million units, up 8.2 percent from 2010. It slightly raised the forecast for light commercial vehicles by 600,000 to 4.9 million units, which is still down 8.1 percent from 2010. It believes the demand in the fourth quarter will decline 4 percent from the same period in 2010 due to some demand being pulled ahead, while the economy and capital markets are expected to slow.

76. GS Yuasa EV Battery Joint Venture To Hike Output

Japan's GS Yuasa Corp, Mitsubishi Corp and Mitsubishi Motors Corp will build a plant to boost the production capacity of their automotive lithium ion battery joint venture 70 percent, the Nikkei business daily has reported. The new factory of the joint venture, Lithium Energy Japan, would be able to produce 4 million lithium ion battery cells a year -- enough to power 50,000 electric vehicles, the paper said.

Construction on the 20-30 billion yen ($7.8 billion) plant, which will be built next to one of Lithium Energy Japan's under-construction factories in Ritto, Shiga Prefecture, is slated to begin next spring, the business daily reported. This second plant, which would start operations in 2014, would hike the joint venture's total output capacity enough to equip 120,000 electric vehicles a year, the paper said.

The Lithium Energy Japan factory currently manufactures automotive lithium ion batteries at small factories in Kusatsu, Shiga Prefecture, and the city of Kyoto, with combined output capacity for about 18,000 vehicles annually, the Nikkei said.

The overall figure is expected to reach 70,000 once construction on the plant begins in April, the paper said.

77. GM Resists Chinese Pressure to Share EV Technology

General Motors Co. is lobbying Chinese officials to okay sales subsidies for the Chevrolet Volt plug-in hybrid without requiring GM to share the technology with its Chinese partner, the New York Times reports. The government wants GM to share the Volt's technology with joint-venture partner SAIC Motor Corp. Beijing is pressuring other international automakers to do the same. Beijing may issue a formal policy on technology sharing later this month, the Times said.

The government is especially interested in three key EV technologies: electric motors, batteries and electronic controls. In return for those technologies, the government presumably would allow foreign EVs to qualify for generous sales incentives.

Last year, the central government introduced subsidies in five cities for plug-ins and electric vehicles. EVs qualify for subsidies up to 60,000 Yuan ($9,200), while plug-ins get subsidies ranging up to 50,000 Yuan. Conventional hybrids like the Toyota Prius don't qualify for those subsidies, although the central government has hinted that it might modify that policy. If it
doesn't qualify for China's plug-in subsidy, the Volt -- which its U.S. list price of 262,000 Yuan --
would be at a competitive disadvantage.

Other automakers appear ready to accommodate Beijing. In July, Nissan Motor Co. announced
plans to develop an EV with joint-venture partner Dongfeng Motor Group. That EV, which will be
marketed under the partnership's domestic brand, will share some components with the
Nissan Leaf. At the Shanghai auto show in April, Honda Motor Co. announced plans to
begin building an EV in China in 2012, while Toyota said it would build batteries, motors and
inverters in China for the locally assembled Prius hybrid.

A Ford Motor Co. executive told the Times that it, too, would share some technology with its
Chinese partner, Changan Automobile Group. Ford sells an electric version of its Transit
Connect commercial van in the U.S., where it also plans to introduce an electric Focus. But Ford
has yet to announce a timetable for introducing an EV in China.

78. Global Automakers Leverage Technology Edge to Control China JVs

To date most global automakers have set up production joint ventures with local peers in China,
as required by Chinese rules, with the foreign side holding no more than a 50 percent interest in
the ventures. Now, an increasing number of global automakers want to trade technology with
Chinese partners for more control of their joint ventures. So far at least three global automakers
have made known their intent to gain more control of their China joint ventures.

First is General Motors.

Shanghai General Motors Co. was established in 1997 as a 50-50 joint venture between
GM and SAIC Motor Corp. In 2009, tittering on the verge of bankruptcy, GM sold a 1
percent stake in the joint venture to SAIC for $84.5 million cash, as well as SAIC's
approval to sell SAIC-GM-Wuling Automobile Co.'s microvans in India. SAIC-GM-Wuling
was majority owned by SAIC. Now that it has recovered financially, GM wants its
Shanghai GM share back. "We have an option to buy that 1 percent," GM Chief
Executive Officer Dan Akerson told shareholders in June in Detroit. "It's our intention to
exercise that."

Second is Volkswagen AG.

Unsure about the prospects of the Chinese market in 1991, the German automaker let
China FAW Group Corp. control 60 percent of their joint venture FAW-Volkswagen
Automobile Co. Aside from Volkswagen-brand models; FAW-Volkswagen also produces
several Audi vehicles. But times have changed. China is now the world's largest auto
market. It has also become the largest market worldwide for the Volkswagen and Audi
brands. Hence, Volkswagen's executives have expressed wishes to the Chinese
government to significantly raise its stake in the joint venture.

The third is Suzuki Motor Corp.

The Japanese automaker set up its first China joint venture with Changan Automobile
Co. in 1993 and the second with Changhe Automobile Co. in 1995. In both joint ventures,
the Chinese side owns the 51 percent stake, leaving the rest for Suzuki and some other
Japanese investors. In 2009, Changhe was acquired by Changan's parent company,
China Changan Automobile Group. Currently Changan Automobile Group plans to
merge Changhe Suzuki into Changan Suzuki. Suzuki has agreed in principle to the merger, but it has also requested to increase its stake in Changan Suzuki to 50 percent. Now the question is how likely the three global brands will get what they want since their Chinese partners won't easily give up majority ownership of the joint ventures. GM and Volkswagen think they have something their Chinese partners would be willing to trade for: Technology. Lagging technology has been the major obstacle for state-owned Chinese companies like SAIC, FAW and Changan in their effort to develop their own passenger vehicles.

Take SAIC, for example. It has developed the first wave of its Roewe-brand cars on a platform it bought from the now-defunct MG Rover in 2005. Now it is looking for new platforms to upgrade its product lineup. GM is said to have agreed to let SAIC base its next generation Roewe 760 on the Buick LaCrosse. And there is certainly more GM can offer for its Chinese partner.

It's the same case with FAW. If Volkswagen can raise its stake in FAW-Volkswagen, it will grant FAW access to its advanced powertrain technology, including turbocharged stratified injection engines and direct shift gearbox transmissions, according to Chinese media.

79. India Stiffens Its Climate Stance

India is backing away from any verification of its climate change mitigation efforts and wants to re-evaluate the Cancun Agreements from the U.N. climate talks last year in Mexico to make them more equitable. India's new environment minister, Jayanthi Natarajan, adopted a firmer approach than her predecessor after meeting in South Africa with 150 environment ministers. She also laid out her objectives for future climate negotiations. "Our position is clear that we want second commitment period of the Kyoto Protocol," said Natarajan.

Most of India's policy shift has to do with the International Consultation and Analysis (ICA) a set of voluntary emissions control measures for developing countries. "We are not accepting ICA in the present form, as it is too intrusive," said T. Chatterjee, environment secretary. "We cannot allow such a thing."

Natarajan said that wealthier nations should provide "additional financial resources to the developing countries to address climate change." She said that by agreeing to open its domestic policies to international scrutiny, India established its commitment to climate change mitigation. "That was important flexibility shown by us to contribute to a level of confidence and trust in the process," she said.

For the Durban, South Africa, climate conference, India has proposed that trade, equity and technology intellectual property rights be included as agenda items. Natarajan said that some issues discussed in the Bali Road Map from 2007 U.N. climate talks in Indonesia will also have to be reintroduced.

The maneuvers are a reflection of Natarajan's philosophy that developed countries should fund emissions restrictions instead of extracting concessions from developing nations.

80. Borneo Auto Sector to Pick Up Momentum Soon

After suffering from the reeling impact from the Hire Purchase Act (HPA) amendments, sales momentum for the automotive segment should see a pick-up soon. Despite the less than optimistic outlook expressed by HwangDBS Vickers Research Sdn Bhd in its recent research
note, analysts from the research arm of Kenanga Investment Bank Bhd remained sanguine about the nation’s auto performance for the year. Many of the auto companies’ earnings took a nose dive for the second quarter of this year (2Q11) as year-on-year (y-o-y) sales were largely flat due to the HPA revision.

The set-backs experienced by the auto groups were also premised on the full impact experienced by the supply disruptions caused by the Japanese tsunami. Hence, most auto companies had been riding aggressively on their marketing division to make up for lost sales.

“As 2Q11 earnings were weak, we expect 3Q11 results to show improvement as production recovers, as well as, anticipation of higher sales from the new launches,” opined Kenanga Research. Although year-to-date numbers were trending southwards by six per cent y-o-y, monthly total industry volume (TIV) has demonstrated improvement after three consecutive months of decline since the March 11 tsunami attack in Japan.

July TIV recorded 50,252 units, a result which affirmed the research house’s view that the rate of decline has eased against the last few months. As such, analysts believed that the auto sector has passed the bottomed sales; hence the pick-up of the auto sector was as they observed, currently on track.

This was evident in the case of Perusahaan Otomobil Kedua (Perodua) that recently launched the new MYVI. Its July numbers registered total sales of 8,447 units which meant that the 17,000 units previously targeted could easily be realized.

Despite the sanguine outlook, analysts were also cautious of the current issue regarding the amended HPA 1967 which now required longer processing time. This as the research firm highlighted could lead to further suppressed sales growth.

The view was echoed by HwangDBS Research which trimmed Malaysia’s TIV estimate for the automotive sector this year by two per cent to 599,000 units from its earlier forecast of 611,000 units. The lower forecast implied a one per cent shrink y-o-y and the auto analyst believed that it would take a longer time to recover amid lingering cautious consumer sentiment.

On the fourth quarter front, given that TA Securities Holdings Bhd analyst, Steve Tan have recently opined to The Borneo Post that sales would most likely be sluggish during this period, Kenanga Research nonetheless had a differing sight on the matter. According to Tan, consumers would generally hold back vehicle purchases at the end of the year and wait for the coming new year as they believed that the car would garner a higher value in the future.

Kenanga Research on the other hand had an opposing thought. “While 4Qs are typically the slowest quarter of the year, we think 4Q11 should do better y-o-y as we see recovery in demand from the loss of sales arising from Japan’s supply shortage. Most of the worst hit auto-parts makers are slowly resuming full production. “However, this could end up being an intensified competitive environment amongst the auto players as they will be rolling out new promotions and car launches back-to-back to garner a larger share of the pie,” said the research team. This was apparent in Perodua’s much-awaited MYVI replacement that was launched in June and the group would also kick-off its new variant by year end. Proton’s plans to launch its new Exora facelift and Persona replacement codenamed P210-A next year signified the intense competition faced by these auto companies.
On a separate note, the research house did not think that there would be changes in the current excise duties and import tax structures as the government had so far collected an estimated RM6 billion from the automotive industries.

Tax exemption (50 per cent removal of tax) on hybrid vehicles however was anticipated to be extended again this year to demand for more sustainable road vehicles, which was in line with the nation’s commitment to reduce carbon emissions.

81. APEC Countries Urged to Invest In Energy, Transportation, Environment

On September 13th, Federal and California officials urged Asian-Pacific (APEC) countries to remember climate change and invest in the future of energy, transportation, and the environment. Transportation Secretary Ray LaHood, Energy Secretary Steven Chu, and California Gov. Jerry Brown (D) urged the joint Asia-Pacific Economic Cooperation Transportation and Energy Ministers Conference to invest and encourage development in energy and transportation, and by extension, the environment and economy.

Transport worldwide consumes about 90 percent of the world's oil energy and produces about 23 percent of the carbon emissions, Chu said. About 1 billion cars are on the roads, with 16.7 million cars purchased in China in 2010 alone, he told some of the 3,500 delegates representing 21 APEC member nations.

In many ways, transportation and energy, and the surrounding environmental issues, are “at the core of the problems and the challenges” in climate discussion, Chu said. He said it takes five to 10 years to develop a new reservoir of oil while economies “can come to life or go into a full in a few years.” Because transportation is fueled almost exclusively by oil, as economies grow, demand increases and prices rise. The volatility of price is tough on developing and developed economies, he said.

Climate change is happening despite the discussions becoming “a political debate rather than a study of science,” Chu said. “Whether it’s happening or not is like saying, ‘well, we can debate the second law of thermodynamics, and if you get enough votes, it can be repealed.’ Nature doesn’t work that way.”

The “bottom line is unless we diversify our transportation energy, we will still be chained to these volatile prices and the volatile prices of a source that is ultimately finite,” Chu said.

Technical options and solutions include electrification and biofuels, Chu said, as experts in “one of the most rapidly developing areas in science say these things really are possible.” Chu said it was “foolish of any country to plan its national strategy waiting for the scientific miracle to happen.” What needs to be done on the policy side is “to nudge everything in the right direction,” the energy secretary said.

Brown said “leaders seem to have forgotten about global warming, but global warming has not forgotten about us.” Nations are confronting the “twin challenges of climate change and massive unemployment.” Brown said, rejecting “diplomatic delay in the science” and those “who imagine we can shush away climate change by not talking about it.” Brown invoked the U.S. infrastructure development during the Great Depression and said “it’s time for a war on unemployment.”
LaHood said President Obama’s top domestic priority is “to put America back to work building America’s infrastructure. For too long, we’ve let the cynics and the naysayers tell us we have to choose either economic growth or environmental stewardship” and cannot achieve both simultaneously. He called such an argument “a false choice.”

The APEC region accounts for about 60 percent of world energy demand, with demand on the rise for the net energy importers. The International Energy Agency forecasts global energy demand will increase 40 percent between 2007 and 2030.

For the United States, the possibilities of progress are great in the transportation sector, LaHood said. The United States accounts for two-thirds of the oil use and contributes one-third of the nation’s greenhouse gas emissions. Some of the U.S. initiatives include increasing fuel economy standards to 35 mpg by 2016. LaHood thanked California for helping to push standards that will save more than 1.8 billion barrels of oil or an average of $3,000 during the lifetime of every vehicle.

The largest investment in high speed rail is in California, LaHood said. California has received $3.3 billion in federal funds and voters approved multibillion-dollar bond sales to be used for transportation, including the 800-mile rail linking Southern California and Northern California. The first phase of the project from San Francisco to Los Angeles will cost an estimated $43 billion. Construction on the first segment, a 130-mile stretch in California’s Central San Joaquin Valley, will begin in the second half of 2012.

Among the U.S. initiatives, LaHood said, is accelerating the transition from radar-based navigation systems to satellite based. The next generation technology will dramatically improve airline fuel efficiency by allowing planes to fly more directly to destinations, LaHood said. The government also is encouraging freight carriers to shift to more fuel-efficient systems, he said.


China’s State Council has assigned targets for reducing energy intensity and emissions and discharges of four types of pollutants for all provinces, autonomous regions, and major municipalities, the Ministry of Industry and Information Technology said on its website on September 7th. The targets, set by China’s highest executive body, apply to the period covered by the 12th Five-Year Plan, 2011–2015.

The targets call for a nationwide reduction of chemical oxygen demand in wastewater by 8 percent, ammonia nitrogen in wastewater by 10 percent, airborne sulfur dioxide by 8 percent and airborne nitrogen oxides by 10 percent, all from 2010 levels.

Higher targets have been set for more prosperous and developed areas in eastern China, while some underdeveloped areas in western China have low targets or will be allowed to increase pollutant emissions compared to 2010 levels.

The online document did not include targets for carbon intensity, defined as emissions per unit of production. According to an analysis by Stephanie Oshita, a visiting faculty member at the Lawrence Berkeley National Laboratory’s China Energy Group, these targets will likely be released in a later document. The target for reducing energy intensity, or consumption per unit of production, is 16 percent nationally.
On September 15th, the National Energy Administration announced on its website that electricity consumption was 9.1 percent higher in August than a year earlier but 2.7 percent below the July level.

For provincial, autonomous regions, and municipality levels, the new State Council targets call for 16 percent to 18 percent reductions in energy intensity for most areas in the eastern half of the country and 15 percent or lower for areas designated as part of the country's “Western Development Plan.” Hainan province, an island province off the coast of Guangdong province that is included in the “Western Development Plan”; the autonomous regions of Xinjiang and Tibet; and the province of Qinghai all have targets to reduce energy intensity just 10 percent. The government hopes to increase industrial development in these zones and does not want high targets to impede that.

On the high end, the municipality of Beijing and the provinces of Guangdong and Zhejiang have 18 percent reduction targets for energy intensity through 2015.

83. Australia to Develop Clean Air Plan; Review Tougher Air Pollutant Standards

Australia's federal and state environment ministers have agreed to develop a national clean air plan. Their decision coincided with their release of a National Environment Protection Council review of the National Environment Protection (Ambient Air Quality) Measure that recommended tighter air pollution standards. The ministers' plan would provide a “robust framework for identifying cost effective actions and implementation arrangements to reduce air pollution,” according to a September 16th ministerial communiqué. No timetable was given for completion of the plan.

The national plan would include the ministers' response to the council's recommendations. The council found that existing standards for six major air pollutants “are not meeting the requirement for adequate protection of human health.”

The Ambient Air Quality NEPM, which came into force in 1998, sets standards for large particles (PM-10), ozone, sulfur dioxide, nitrogen dioxide, carbon monoxide, and lead, as well as an advisory reporting standard for fine particles (PM-2.5). The standards are for ambient air quality and are not intended to operate as emission limits on individual sources.

Air quality in Australian cities is generally “good by international standards,” the review found. However, recent epidemiological studies indicate that exposures below the standards still represent a “statistically significant and measurable health risk to the Australian population.” It said the existing NEPM standards for carbon monoxide and nitrogen dioxide should be revised because health effects have been observed in Australian cities at levels of these substances that are “well below” the existing NEPM standards. Similarly, the standard for lead should be reduced and the standard for ozone should be revised, the review said.

Existing provisions that allow for occasional exceedances of the standards are arbitrary and “often misused,” according to the review. These provisions should be removed and replaced with a “natural events rule” to deal with the air quality effects of wildfires and dust storms, it said. The review also said the standards should include an exposure reduction framework, noting that EU approaches provide “an appropriate model” for limiting exposures.

84. Foreign Carmakers Balk at Japan's Proposed Fuel Economy Requirements
Foreign automakers are criticizing Japan’s proposed 2020 fuel economy target for passenger cars as discriminatory and recommending instead that the country adopt either a flexible mechanism for imports or a unified global standard being discussed by a U.N. body. Foreign carmakers are preparing to label the proposed target as discriminatory because they could have problems meeting the Japanese standards due to differing measuring methodologies for fuel economy than those used in the United States and Europe, Japanese auto industry officials told the press in early September. Japan requires using the Ministry of Land, Infrastructure, and Transport’s new method called JCO8.

The Japanese government is accepting comments through September 22nd on a proposal to improve the corporate average fuel economy (CAFE) target to 20.3 kilometers per liter (47.7 miles per gallon) of gasoline by 2020, compared with 16.3 kilometers per liter (38.8 mpg) currently. The target would be enforced on a most-favored-nation basis, meaning it would apply equally to domestic automakers and foreign automakers’ Japanese importers and dealerships. Specifically, it would apply to companies that obtain motor-vehicle type certification from the Ministry of Land, Infrastructure, and Transport, allowing them to ship vehicles without obtaining ministry certification for each car. The United States’ Big Three automakers do not have type certification.

At a meeting with the Japan Automobile Importers Association before releasing the proposal on August 19th the Transport Ministry and the Ministry of Economy, Trade, and Industry indicated that the government has no plans to alter the proposed 2020 target and that any foreign automakers/dealerships seeking leniency should lodge it as a public comment, the officials said. This effectively means Japan will not offer more lenient targets for foreign automakers, one official said.

Foreign automakers and import dealerships later told the Japanese government that Japan should proactively endorse the so-called Worldwide Harmonized Light-duty Test Procedures (WLTP) for measuring vehicle emissions and energy consumption. WLTP is being debated in the U.N. Economic Commission for Europe’s WP29 forum on motor vehicle safety and environmental standards and certification. The Japanese auto industry essentially supports WLTP because Japanese automakers sell more cars outside of Japan, where demand is contracting because of an aging population and lower birth rate.

The Ministry of Economy is neutral on the issue, but the Transport Ministry, which only recently completed introducing JCO8, is reluctant to embrace WLTP because it would mean that a big part of its automotive administration bureaucracy would become unnecessary due to the mutual recognition agreement that comes with WLTP accession, a Japanese auto industry official explained.

One foreign automaker official said that if Japan stonewalls on foreign automakers’ demand, the foreign makers could view it as a trade barrier and “take action,” for instance by refusing to cooperate with the European Commission on an economic partnership agreement.


On August 30th, the New Zealand government released a strategy to ensure environmentally responsible development and efficient use of diverse energy resources. The New Zealand Energy Strategy 2011–2020 confirms some of the goals and targets listed in the draft strategy released for public consultation more than a year ago.
The plan also includes as a companion document the New Zealand Energy Efficiency and Conservation Strategy 2011–2016. The Energy Efficiency and Conservation Strategy aims to reduce the country's energy intensity—or energy use per unit of gross domestic product—by 1.3 percent annually. The transportation, business, and residential sectors show the greatest potential for efficiency improvements, according to the strategy.

A close partnership among the national government, local governments, businesses, nonprofit organizations, and households is required to develop the right mix of policies and programs to fully realize existing opportunities, the strategy said.

Among the measures listed in the strategy are increased efficiency of new light vehicles, the use of woody biomass and direct geothermal energy in industry, and insulating a further 188,500 homes by 2013.

Acting Minister of Energy and Resources Hekia Parata said the government's goal is to "make the most of the country's energy assets: hydro, wind, geothermal, oil, gas and minerals." "We want to use those resources responsibly to secure our energy future and to lift our standard of living," she said.

Besides outlining the government's strategic directions for energy policy, the energy strategy contains several qualitative and quantitative targets relevant to the environment. For example, the government retains the target that, on average, 90 percent of electricity generation be from renewable sources by 2025, provided this does not affect security of supply. Renewable energy sources—whose use releases less greenhouse gases than conventional fuels—contributed 74 percent of electricity generation in 2010.

The strategy also reiterates the government's medium- and long-term carbon emission reduction targets. The provisional medium-term target, a reduction of between 10 percent and 20 percent below 1990 levels by 2020, is conditional on a comprehensive global agreement after the Kyoto Protocol's emissions-reduction mandates expire at the end of 2012, including appropriate commitments by developed and developing countries, and rules relating to land use and forestry that are important to New Zealand. The long-term target is a 50 percent net reduction of emissions by 2050, compared with gross emissions in 1990, as adopted earlier this year.

86. Pacific Islanders, U.N. Urge Action on Warming, Ocean Acidification

On September 7th, leaders of Pacific Island nations joined with U.N. Secretary-General Ban Ki-moon to call for "urgent international action" to reduce greenhouse gas emissions, warning that their continued existence is threatened by climate change. In a joint statement issued in Auckland, New Zealand, Pacific Islands Forum leaders and Ban said the threat of global warming and associated ocean acidification must be a focus for the U.N. Security Council and General Assembly, as well as other international forums.

The statement said measures to better manage oceans and coastal and fisheries resources for the benefit of small island developing states should "figure prominently" at next June's U.N. Conference on Sustainable Development, also known as Rio+20.

The 16 members of the Pacific Islands Forum and the secretary-general were meeting in Auckland for the 42nd Pacific Islands Forum summit.
Seven leaders of small island states, who met under the auspices of the main forum meetings, said their survival in particular is at stake. “Leaders felt careful consideration was needed to better understand what the loss of physical State might mean for countries’ right to exist while maintaining their sovereignty as nations and their right to manage collective resources,” leaders of the Cook Islands, Kiribati, Nauru, Niue, Palau, the Marshall Islands, and Tuvalu said in a separate statement issued on September 7th. The seven leaders said the global community had promised much, “yet very little has been seen in terms of fulfilling international commitment.”

In remarks at the opening ceremony, Pacific Islands Forum Secretariat Secretary-General Tuiloma Neroni Slade described climate change as “a danger now, not an issue for tomorrow.” “The exposure of Pacific communities to the dangers of climate change is globally and well acknowledged,” he said. “Climate change impacts remain at the center of regional concerns.” Slade commended proposals put to leaders designed to improve access to global sources of climate change finance.

The Pacific Islands Forum comprises leaders of the Cook Islands, the Federated States of Micronesia, Fiji, Kiribati, Nauru, Niue, Palau, Papua New Guinea, the Marshall Islands, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu, as well as Australia and New Zealand.

87. Australia Plans Mandatory Standards on Car CO2 Emissions

Australia’s government has released a discussion paper on the proposed introduction of mandatory standards to reduce carbon dioxide (CO2) emissions from new passenger vehicles from 2015. The introduction of tighter emission controls on passenger vehicles is part of its plan to reduce the country’s emissions by 5% by 2020 from 2000 levels.

The government said cars and other light vehicles contribute around 55mn t of CO2 equivalent each year, or about 10.1% of Australia’s estimated total emissions in 2010 of 543mn t of CO2e. All transportation accounts for about 15pc of Australia’s estimated emissions last year, with cars and light vehicles accounting for about 64pc of Australia’s transport emissions.

The mandatory vehicle emissions standards are part of the government’s plan to impose a carbon tax for three years from 1 July 2012 and then to be replaced by an emissions trading scheme (ETS). The government plans to introduce its carbon tax legislation into the lower house of parliament on 13 September where the Labor-led government relies on the support of three independents and one Member of Parliament from the Greens party.

“Mandatory vehicle emissions standards are internationally recognized as one of the most cost-effective ways for industry and consumers to reduce transport emissions,” the Australian government said. Lower emissions in cars will also give Australians better mileage from their vehicles, which means households could reduce their carbon footprint while reducing their fuel costs, it said.

The average level of CO2 emissions of the new light vehicle fleet in 2010 was about 213g/km, according to the discussion paper. The average for the passenger cars, which includes sports utility vehicles, was 205g/km, with light commercials averaging 250g/km. This compares with the EU where the average emissions are 146g/km.

But even in the absence of emissions standards, annual emissions reductions in the new vehicle fleet are being achieved by manufacturers using available technology. A 2.1pc/yr. rate of reduction in average CO2 emissions of new vehicles in Australia was achieved from the
combined impact of changes in consumer behavior and improvements in vehicle fuel consumption performance during the 2003-10 period.

The Australian government said its decision to implement mandatory carbon emissions standards for light vehicles from 2015 is consistent with these international trends. “Although Australia imports some 85pc of its light vehicles, in the absence of mandatory standards in Australia it is likely that sourcing decisions by global vehicle manufacturers will see the most fuel efficient vehicles and components being allocated to markets with mandatory standards in place.”

The discussion paper said the Global Fuel Economy Initiative, which is a collaboration of the UK-based charity, FIA Foundation, the International Transport Forum, the IEA and United Nations Environmental Program, is advocating a 50pc reduction in vehicle fuel consumption by the global light vehicle fleet by 2050.

The discussion paper does not have a final position on how it will implement the policy, inviting comments to be submitted by end-November.

88. India Proposes Guidelines for Ensuring Sustainable Urban Projects

India's Ministry of New and Renewable Energy is seeking comment on proposed guidelines to ensure the sustainability of the country's increasing number of large developments such as townships, educational and institutional campuses, special economic zones, and hospitals. The Draft Guidelines and Benchmarks for Green Large Area Developments, issued on September 23rd, cover vegetation cover; water availability and use; mobility; use of clean fuels and renewable energy; use of information and communication technology; management of solid, electronic, and hazardous waste as well as wastewater; energy efficiency; and eco-friendly buildings, among other things.

The document notes that 300 million people currently live in Indian towns and cities and that number could grow by another 300 million to 400 million within 25 years. “Increasing population coupled with continued urbanization is likely to result in the emergence of about 60-70 cities with population of more than a million by 2030,” it says.

In the past five years, the federal government has approved 439 special economic zones and many large townships are being planned. “Emergence of these new cities and the growth of the older ones are bringing in complex changes to ecology, natural resources and environment at local, regional and global scales,” the document says. “It is high time we pay heed to our planning practices and guidelines that are followed to plan our cities and make them in such a way that they promote sustainable development with little impact on environment quality.”

The draft guidelines aim to consolidate India's various existing efforts to create a low-carbon growth and urban development strategy, including the National Missions on Sustainable Habitat, a Green India, and Enhanced Energy Efficiency; Low Carbon Strategies for Inclusive Growth; the Solar Cities program; and government incentives for eco-friendly purchases such as electric vehicles or solar water heaters.

89. Number of Cars in China Hits 100m

The number of automobiles in China has surged to 100 million due to a rapid increase in private car ownership, according to a recent statement by the Ministry of Public Security. China
registered 219 million motor vehicles as of the end of August, with automobiles accounting for 45.88 percent, the statement said. The ministry separates motor vehicles into four categories: motorcycles, tractors, trucks and automobiles.

The statement said that from 2006 to 2010, the country posted an average annual growth of 9.51 million automobiles. The first eight months of this year saw 9.83 million new automobiles hit the country's roads, 79.45 percent of which were passenger cars, according to the statement.

China's major cities have had to deal with recurring gridlock and other traffic-related issues in recent years, as China is now the world's largest auto market. Several cities have tightened automobile purchase policies in an effort to combat traffic jams. Beijing created a car-quota system on January 1, allowing only 240,000 new cars to be registered in the city this year.

90. China to Invest 2 Trillion Yuan in Low-Carbon Economy

China will invest 2 trillion Yuan (about $313 billion) to promote a green, low-carbon economy in the next five years, a senior economic planning official was quoted as saying recently. The government will promote low-carbon development with a variety of projects during China's current five-year plan which began this year, Xie Zhenhua, vice minister of the National Development and Reform Commission was quoted by the China Daily newspaper as saying.

The green economy plan includes setting up 100 bases for demonstrating resource utilization and launching low-carbon pilot programs in five provinces and eight cities, Xie said at the Second China International Eco-City Forum in Tianjin, east of Beijing.

91. Toyota Bets on Hybrid for Camry in Japan

Toyota Motor Corp has unveiled a new Camry sedan, offering it only as a gasoline-electric model to jump-start sluggish sales of the model in its hybrid-friendly home market. The Camry has been the best-selling car in the United States for the last nine years, but Japan accounts for just 1 percent of the model's global sales due to shrinking demand for sedans in favor of subcompacts or minivans.

For the first time since the Camry's debut in 1982, Toyota said it would limit sales in Japan to a hybrid version, hoping to emulate the success of the Prius, which as a hybrid car enjoys exemptions on certain taxes. Hybrids now make up about 14 percent of new vehicle sales in Japan, excluding 660cc minivehicles.

"The Camry doesn't sell as much here as it does in the States, so we decided to focus on fuel economy," said deputy chief engineer Keiichi Yoneda. Toyota said it received 1,700 pre-sale orders for the car against a monthly sales target of 500 and actual sales of just 100 a month last year in Japan. In the United States, by contrast, Toyota plans to sell 360,000 of the 2012 model year Camry unveiled last month.

Pricing for the Camry hybrid, which twins a newly developed 2.5 liter engine with an electric motor, ranges from 3.04 million yen to 3.80 million yen ($39,600 to $49,500) in Japan. The U.S. version, which is slightly smaller, carries a sticker price of $27,400 for the high-end model.

The hybrid Camry gets listed mileage of 23.4 km/liter in Japan, more than double the 11.4 km/l for the preceding gasoline model, which was measured under the previous, less stringent test cycle. The previous model ranged from 2.505 million yen to 3.47 million yen.
92. Now Beijing Plans Congestion Fees to Ease Traffic

Beijing plans to impose congestion fees on autos using certain roads and to encourage residents to buy alternative-energy cars in a drive to ease chronic traffic jams and cut pollution, Chinese media reported recently. Officials hope the fees will lead more residents to use public transport, according to the plans, the state-run news agency Xinhua said. The reports did not give details of tolls that would be imposed or how those fees would be collected.

Beijing's plan will provide unspecified incentives to buy so-called new-energy cars, including electric vehicles. It pledged to upgrade equipment at electric-vehicle charging stations and build more of them, Xinhua said.

The Chinese capital has already taken several measures to reduce traffic pressure since the 2008 Beijing Olympic Games, when it began to order some vehicles off the streets on certain days depending on the license plate numbers. That policy has not had much effect on gridlock, which has continued to deteriorate.

Beijing in January began capping new car registrations at 20,000 per month, available through a lottery. But that has only slowed the pace of increased congestion, while angering tens of thousands of hopeful car owners left unable to buy a vehicle. Beijing has also increased parking fees, built parallel roads, widened certain intersections and expanded its subway system, all to try to relieve traffic congestion.

China overtook the United States in 2009 as the world's largest auto market. The rapid growth of car ownership has caused traffic nightmares in major Chinese cities, with Beijing expected to have 7 million vehicles on the road by 2012.

SOUTH AMERICA

93. China's Cars Grab Brazil Market Share

As the second-largest emerging market after China and the fifth-biggest car market, Brazil is key for China's automakers as they start a world expansion. Chery Automobile Co. and others are trying to follow in the path of Korean makers such as Kia Motors Corp. and Hyundai Motor Co. and become global players.

“A there's been a quicker uptake than I think any of us expected for
Chinese brands here in Brazil,” said Jon Sederstrom, director of research firm J.D. Power & Associates in the Sao Paulo office. “Right now, there certainly seems to be consumer interest in the new brand and a product that costs less.”

Brazil’s government, concerned that a surge in imports from China and elsewhere will cause job losses, last week raised a tax by 30 percentage points on all cars with a high proportion of foreign-made parts. President Dilma Rousseff’s government and Finance Minister Guido Mantega have repeatedly expressed worries about damage to Brazil’s manufacturers by imports crowding out locally made goods.

Before last week’s tax increase, a Chinese Chery QQ with air-conditioning, power steering, air bags, CD player and electric windows cost 23,990 reais ($13,440), including import tariffs. That’s 300 reais to 2,100 reais cheaper than the most stripped-down models -- without most of the Chery’s features -- for Volkswagen AG’s Gol G4, GM's Chevrolet Celta or Ford’s Ka in Brazil, according to data on the companies’ websites. (These cars are all produced within the region, so they don’t pay import duties.)

Chinese producers will continue to sell low-cost cars in Brazil, though they may move more of their production there to get around the new rules, Sederstrom told reporters in a telephone interview.

The increase in the so-called Industrial Products Tax means that a car with an engine of 1 liter or less will pay a tax of 37 percent. (More than two-thirds of new cars sold in Brazil have 1-liter engines.) Cars with 65 percent of their parts made in the Mercosur trade bloc in South America, or in Mexico, will be exempt from the tax increase and pay only 7 percent.

The measure will raise the cost of imported cars by as much as 28 percent and force foreign automakers to build or buy key components in Brazil, Mantega said. After the tax increase, the Chery QQ may cost more than 30,000 reais if Mantega’s estimated increase is correct.

Brazil’s motor industry is dominated by Wolfsburg, Germany-based Volkswagen, Turin, Italy’s Fiat and Detroit-based GM, which control about two-thirds of the market between them. Currently, all of the Chinese cars sold in Brazil are imported. They’re charged import duties of as much as 35 percent, plus the Industrial Products Tax and sales taxes.

Chinese automakers’ market share in Brazil expanded to 3.3 percent in August, from virtually zero in April 2010, according to Fenabrave, the national car dealers’ association. Brazil is one of several emerging markets where long-established manufacturers from Europe, the U.S. and Japan have been losing market share to new producers from China, which overtook the U.S. last year to become the world’s largest car market.

Research by J.D. Power found that for Brazilian consumers, the cost of owning a car is a more important consideration than quality, design or service, since the price is a bigger proportion of household income than in developed countries.

The appearance of Chinese cars in Brazil is part of a “Southern Silk Road” of growing trade ties between emerging markets that is revolutionizing the global economy, according to Stephen King, chief economist at HSBC Holdings Plc. in London. Chinese companies attuned to consumer tastes in developing countries have some advantages over rivals from rich nations in markets like Brazil’s, King said. “These are cars for people on relatively low incomes, who are not likely to buy the kind of cars that would typically appeal to a wealthy American or European
consumer,” King said in a telephone interview. Enhanced safety features, and the need to cater to “bigger, fatter” Westerners, have increased costs for automakers based in the U.S. and Europe, he said.

Chinese automakers “have a lot of cost advantages,” said Andre Beer, a former vice president at General Motors of Brazil, who now runs a consulting firm specializing in Brazil’s auto industry. “They don’t have all the benefits or all of the taxes that we have here,” Beer said in a telephone interview.

In the past year, Wuhu, China-based Chery, Beibei, China-based Chongqing Lifan Auto Co. and Hefei, China-based Anhui Jianghuai Automobile Group Co.’s JAC Motors have all announced plans to build plants in Brazil. A $400 million Chery plant with capacity to produce 150,000 to 170,000 cars a year is scheduled to open next year, Luis Curi, chief executive officer for Chery’s Brazilian unit, said last month in an interview.

GM’s share of the Brazilian market fell to 19.4 percent in August from 20.5 percent a year earlier, according to the National Car Makers Association, or Anfavea. Fiat’s market share fell to 22.3 percent from 23.2 percent, while Ford’s fell to 9.2 percent from 10.1 percent. Volkswagen saw its sales rise to 23.3 percent of the market from 22.5 percent.

Brazil’s car industry has managed to grow this year, even as other industries stalled, as near-record-low unemployment boosted demand for consumer goods. Vehicle sales rose 4.7 percent in August from a year earlier, while production rose 5.5 percent to a record 325,000 vehicles. Economists forecast that Brazil’s growth will slow this year. The central bank raised its benchmark interest rate at five of its six meetings in 2011, and a sluggish global recovery is cutting demand for Brazil’s iron ore, oil and soy exports.

J.D. Power reduced its forecast for 2011 growth of light-vehicle sales in Brazil to 3.4 percent in July from 9.8 percent at the start of the year, as inventories rose and the economy showed signs of cooling. Analysts covering the Brazilian economy cut their 2011 growth forecasts for a seventh straight week, to 3.5 percent, in a September 16th central bank survey. Last year the economy expanded 7.5 percent, its fastest pace in more than two decades.

Car sales also are being dampened by central bank measures to reduce credit growth. Auto loans fell to 8.4 billion reais in July, down 24 percent from December, when the central bank set capital requirements that encourage higher down payments and fewer installments on car loans. Late payments rose to 8 percent, from 6.3 percent in December, while defaults rose to 4 percent, from 2.5 percent, according to central bank data.

94. Brazil Confirms Stage III Emissions Legislation for Non-Road Machinery

The Brazilian government has published a resolution tackling diesel emissions from construction and farm machinery. Resolution No. 433 was published on 13 July 2011 by the country’s National Council for the Environment (CONAMA). It includes CO, HC, NOx and PM emission limits as well as limits on noise emission.

95. Tax Breaks for Biofuels Total $457 Million in Argentine Budget Proposal

Argentina's booming biofuel industry would get a total of 1.92 billion pesos ($457 million) in tax exemptions in 2012 under the government's proposed budget, a 14 percent rise from this year and nearly double the exemptions in 2010, when a regime to encourage biofuels production was
fully enforced. The figures were included in the budget bill sent to Congress by the government and published on September 21st on the Chamber of Deputies (lower house) website.

Lawmakers are expected to vote on the bill before the current Congress expires on November 30th. Last year Congress rejected the 2011 budget due to disagreements over debt-payment issues, and the administration implemented it by decree without any changes.

Argentina exported 857,000 metric tons of biodiesel between January and July, 11 percent more than in the same period in 2010, according to the latest figures released in August by the Argentine Biofuels Chamber (CARBIO). CARBIO has predicted that Argentina this year will become the world's No. 1 biodiesel exporter, but estimates among industry groups vary. In a report issued in January, the Renewable Energies Chamber (CADER) forecast Argentina would rise from fifth to third largest exporter behind Germany and France.

According to CARBIO, by the end of March 2012 Argentina will have an installed capacity to produce 3.5 million metric tons of biofuel annually, 1 million tons more than a year earlier. The United States, Brazil, Spain, and Italy are also major producers.

Law No. 26093 enacted in 2006 and its implementing regulations issued in 2007 exempt biofuel makers from paying fuel taxes. Total tax exemptions to the industry in the period 2010-2012 will add up to $1.1 billion.

This year's output will be boosted mostly by a new 240,000-metric-ton-a-year plant built by U.S. agrifood giant Cargill in the central province of Santa Fe, where 80 percent of the country's biodiesel is manufactured, according to CADER.

The South American nation exports about half its biofuel output, with most shipments going to Europe. Argentina's biofuel is mostly derived from soybean oil, of which it is the world's top supplier.

The country's biodiesel contains 7 percent vegetable oil. Government plans to raise that to 10 percent are going more slowly than originally expected due mostly to carmakers' difficulty in adapting engines to that type of fuel, according to CARBIO head Carlos Molina.

Cargill's plant is expected to use 30 percent of the soy oil produced at its Villa Gobernador Galvez plant, which the company says is the biggest soy processing facility it has in the world. Argentine firm Unitec Bio plans to open this year a 220,000-metric-ton biodiesel plant, also in Santa Fe.

**GENERAL**

**96. WHO Says Cleaner Air Could Prevent 1 Million Deaths Each Year**

More than 1 million lives could be saved every year if authorities in the world's major urban areas made efforts to meet international guidelines on outdoor air pollution, experts from the World Health Organization said on September 26th.

Issuing an “unprecedented compilation” of air quality data from nearly 1,100 cities worldwide, the U.N. agency said average urban air quality in 80 of the 91 countries surveyed was worse than WHO standards. WHO said 1.3 million people—the large majority of them in developing countries—die every year from heart disease, respiratory problems, lung cancers, and other
illnesses caused by urban air pollution, with the major contributors being transportation and power generation, particularly coal-fired power plants.

Annette Pruss-Ustun, a scientist in WHO's Department for Public Health and Environment, said that if all cities surveyed met WHO's air quality guideline for airborne particulate matter, about 1.1 million of those deaths could be avoided. For particles 10 microns in diameter or smaller (PM-10), WHO recommends a maximum of 20 micrograms per cubic meter (µg/m³) as an annual average. “A reduction from an average of 70 µg/m³ of PM-10 to an annual average of 20 µg/m³ of PM-10 is expected to yield a 15 percent reduction in mortality—considered a major public health gain,” WHO declared.

WHO officials declined to say which cities or urban areas in surveyed countries ranked worst for air pollution, saying this would be unfair since not all countries and not all cities provided data for the survey. Many African countries as well as Russia and other central Asian countries provided little or no data. However, a listing of the results provided by WHO showed the southwestern Iranian city of Ahwaz had the worst air quality of the 1,085 reporting urban areas, with an average annual PM-10 level of 372 µg/m³.

Ranking second from last was the Mongolian capital of Ulaan Baataar, followed by Sanandaj in Iran, Ludhiana in India, and Quetta in Pakistan, all with PM-10 levels of 250 µg/m³ or greater.

Of the bottom 21 cities with the worst recorded outdoor air quality, all but two were in India, Iran, and Pakistan, including New Delhi and Agra in India, and Karachi and Islamabad in Pakistan. Other major cities ranking near the bottom for air pollution were Cairo (No. 1,053), Lagos (No. 1,040), and Beijing (No. 1,038).

The great majority of urban populations have an average annual exposure to PM-10 in excess
of WHO’s recommended maximum level of 20 µg/m3. Only a few cities currently meet the WHO guideline values.

All of the top 50 urban areas with the lowest reported concentrations of PM-10 were in Canada and the United States, although none of them, with the exception of metropolitan Vancouver, Canada, were large cities. The average annual concentration of PM-10 in all these urban areas was less than 10 µg/m3. Albuquerque, N.M., was the largest U.S. city in the top 50 ranking.

The New York metropolitan area recorded 21 µg/m3 on average, the Chicago region 22 µg/m3, and Los Angeles 25 µg/m3.

Many European cities fell lower in the rankings, with PM-10 levels above the WTO norm. London’s average was 29 µg/m3, Rome 35 µg/m3, and Paris 38 µg/m3.

Countries reporting the highest average PM-10 pollution levels among their surveyed urban areas were Botswana and Mongolia, although results from these two nations were based on one reporting station in each country.

Countries with broader results and high average levels of pollution across urban areas were Pakistan, Iran, and India, all with pollution levels of 100 µg/m3 or greater. Those with the lowest pollution levels were Estonia, Australia, Canada, and the United States, all with levels below the WHO guidelines of 20 µg/m3.

97. UNEP to Recommend Measures on Black Carbon

Measures to address black carbon and other short-lived climate forcers (SLCFs) would bring multiple environmental benefits and should be center stage at next year’s Rio+20 summit, UNEP chief Achim Steiner said recently. Speaking at a ministerial meeting on SLCFs, hosted by Mexico, Mr Steiner said UNEP would publish a report in the next few weeks setting out possible measures to reduce levels of black carbon, ground level ozone and methane. This could form the basis of an international action plan agreed in Rio, he said. Addressing SLCFs would help keep global warming below 2°C while improving air quality and health, and stimulating green growth, Mr Steiner continued.

"While the formal, legal process [on climate change] continues to struggle, fast action on the SLCFs offers a cooperative way forward by all nations... Not as an alternative path to the legal process, but as a complimentary and perhaps voluntary one," he said.

The UN Economic Commission for Europe is considering measures to address black carbon through its convention on long-range transboundary air pollution and there are several initiatives aimed at replacing inefficient cooking stoves in poor nations.

98. Leaded Aviation Gas A Growing Health Concern

Aviation gasoline, commonly referred to as avgas, is a leaded fuel used in small aircraft. Recent concern about the effects of lead emissions from planes has motivated the U.S. Environmental
Protection to consider regulating leaded avgas. This study investigated the relationship between lead from avgas and blood lead levels in children living in six counties in North Carolina.

Geographic information systems were used to approximate areas surrounding airports in which lead from avgas may be present in elevated concentrations in air and may also be deposited to soil. Regression analysis was then used to examine the relationship between residential proximity to airports and North Carolina blood lead surveillance data in children 9 months to 7 years of age while controlling for factors including age of housing, socioeconomic characteristics, and seasonality.

The results suggest that children living within 500 m of an airport at which planes use leaded avgas have higher blood lead levels than other children. This apparent effect of avgas on blood lead levels was evident also among children living within 1,000 m of airports. The estimated effect on blood lead levels exhibited a monotonically decreasing dose–response pattern, with the largest impact on children living within 500 m.

A significant association between potential exposure to lead emissions from avgas and blood lead levels in children was estimated. Although the estimated increase was not especially large, the results of this study are nonetheless directly relevant to the policy debate surrounding the regulation of leaded avgas.

99. IEA Releases Latest Statistics On Global CO2 Emissions

While carbon dioxide emissions in developing countries continued to grow in 2009 (+3.3%), emissions of developed countries fell sharply (-6.5%), according to a new publication from the International Energy Agency. Statistics for 2009 show that emission levels for the group of countries participating in the Kyoto Protocol – a multinational agreement to mitigate climate change – were just shy of 15% below their 1990 level.

Key findings include:
- In 2009, 43% of CO2 emissions from fuel combustion were produced from coal, 37% from oil and 20% from gas.
- Two-thirds of global emissions for 2009 originated from just ten countries, with the shares of China and the United States far surpassing those of all others. (Combined, these two countries alone produced 41% of the world’s CO2 emissions).

100. ICCT Estimates Cost of Gasoline Particulate Filters

Ray J Minjares and Francisco Posada Sanchez have recently completed a study to estimate the cost of gasoline particulate filters. The gasoline particulate filter (GPF) is a device that can be installed on the tailpipe of a gasoline vehicle to capture and reduce emissions of particulate matter, a common pollutant. The European Commission is considering proposals for early adoption of gasoline particle number limit values by late 2011 or early 2012. Likewise in California in tandem with the US EPA, regulators are considering actions to lower the particle mass limit based on the cost and availability of control strategies for particulate matter emissions from gasoline direct injection engines (GDI). The cost of a GPF may therefore affect the stringency of new tailpipe standards.

Some GPF cost estimates have been given publicly. The European Commission’s Klaus Steininger has suggested a GPF cost between $57 and $184. The Manufacturers of Emissions Controls Association (MECA) currently estimates a cost between $50 and $100. The European Joint Research Center (JRC) is now undertaking a cost benefit analysis intended to evaluate GPF costs.

Based on an assessment of production costs for two GPF designs, we estimate for a 2.0L gasoline engine a cost of $106 for a stand-alone GPF and between $114 and $154 for a four-way catalyst, presented here as a three-way catalyst (TWC) with PM trapping capabilities. The true cost will depend on the choice of the system being installed, the production volume, and changes in the cost of raw materials, among other inputs. One potential difference between these estimates and those cited above is that they include labor costs, which are uncertain given the lack of recent data and potential variation between manufacturers. Nevertheless, the authors find that these GPF cost estimates are reasonably consistent with others offered to-date. [http://www.theicct.org/2011/10/estimated-cost-of-gasoline-particulate-filters/](http://www.theicct.org/2011/10/estimated-cost-of-gasoline-particulate-filters/)

101. Climate Change Negotiators See No Major Durban Deal

Global climate change negotiators have concluded their last round of discussions before next month's U.N. convention in Durban, South Africa with faint hope of extending the Kyoto Protocol beyond next year. But while negotiators see no chance for a sweeping deal to control greenhouse gas emissions, they say that the talks could yet lay the groundwork for a binding climate deal that could include the world’s largest greenhouse gas emitters, China and the United States.

"Governments are really committed to starting a process toward that (new pact) and that includes the United States and China," Christiana Figueres, the executive secretary of the UN Framework Convention on Climate Change, or UNFCCC, told reporters. "How they will get there, with what speed they will be able to get there, that still remains to be seen," she said.

Kyoto was meant to stem climate change but obliged only developed nations to reduce emissions. The United States never signed the deal and developing nations have since become
major emitters. Nations including Russia, Canada and Japan have said they will not sign on for another commitment period when the current one expires.

The European Union is the only major emitter that has expressed willingness to continue committed to Kyoto, but EU negotiators say there is no point in signing a global agreement that would only cover around 15 percent of emissions. "To really fight global warming, we need 100 percent of emissions being covered," Tomasz Chruszczow, a European Union negotiator, told a press conference.

The United States is still unlikely to sign any agreement and major emerging nations want assurance a UNFCCC agreement on green finance is in place before committing themselves to a binding agreement, negotiators said.

Seven days of talks in Panama were marked by assertions by developing nations that industrialized countries were blocking progress on the Green Climate Fund, envisioned as $100 billion in annual finance for poor countries to address climate change. A draft text on long-term finance was released that climate discussion experts said will guide developed nations toward identifying capital for the empty fund in Durban. Before Durban, a UNFCCC committee will hold a final discussion on the fund's framework while the G20 is expected to discuss green finance plans at its next meeting.

But there is little expectation that a binding deal on emissions will come from Durban, many negotiators and veteran climate talk observers said. Backers of a post-Kyoto emissions pact including Australia and Norway -- countries that recently presented a new proposal to rescue climate talks -- seek a binding agreement by 2015.

102. IEA Warns Of Ballooning World Fossil Fuel Subsidies

Global subsidies for fossil fuel consumption are set to reach $660 billion in 2020 unless reforms are passed to effectively eliminate this form of state aid, the International Energy Agency (IEA) said on recently. "Governments and taxpayers spent about half a trillion dollars last year supporting the production and consumption of fossil fuels," the energy watchdog to 28 industrialized countries said. "In a period of persistently high energy prices, subsidies represent a significant economic liability," it said in an extract of its annual World Energy Outlook, which is due to be published in full on November 9.

The IEA estimated such subsidies at $409 billion in 2010, compared to $312 billion in 2009. Oil products had the largest subsidies at $193 billion in 2010 while $91 billion went to natural gas. Iran and Saudi Arabia had the biggest subsidies.

"It's a huge amount of money," the IEA's Chief Economist Fatih Birol told reporters at a joint press briefing with the Organization for Economic Co-operation and Development (OECD), which also presented a report on the issue. "Without further reform, spending on fossil fuel consumption subsidies is set to reach $660 billion in 2020, or 0.7 percent of global gross domestic product," Birol added.

In 2010, Birol had forecast that fossil fuel subsidies would reach $600 billion as early as 2015 without further reforms. He said the slower rate of growth was partly due to efforts in certain major countries including China and India. "This is thanks to the improvements in India, China, Russia. They have made significant efforts. We have to be fair," he said, adding that only 8 percent of those subsidies reached the poorest population.
Leaders of the Group of 20 (G20) major economies committed in Pittsburgh in 2009 to phase out, over the medium-term, inefficient fossil fuel subsidies that encourage wasteful consumption. OECD Secretary General Angel Gurria urged developing and rich nations to phase out the subsidies urgently. "As they (nations) look for policy responses to the worst economic crisis of our lifetimes, phasing out subsidies is an obvious way to help governments meet their economic, environmental and social goals," Gurria said at the press briefing. Eliminating fossil fuel consumption subsidies by 2020 would cut global energy demand by 4 percent and considerably reduce carbon emissions growth, the IEA said.

103. Record Arctic Ozone Hole Raises Fears Of Worse To Come

A huge hole that appeared in the Earth's protective ozone layer above the Arctic in 2011 was the largest recorded in the Northern Hemisphere, triggering worries the event could occur again and be even worse, scientists said in a recent report. The ozone layer high in the stratosphere acts like a giant shield against the Sun's ultraviolet (UV) radiation, which can cause skin cancers and cataracts.

Since the 1980s, scientists have recorded an ozone hole every summer above the Antarctic at the bottom of the globe. Some years, the holes have been so large they covered the entire continent and stretched to parts of South America, leading to worries about a surge in skin cancers.

During extreme events, up to 70 percent of the ozone layer can be destroyed, before it recovers months later.

A matching hole above the Arctic was always much smaller, until March this year, when a combination of powerful wind patterns and intense cold high in the atmosphere created the right conditions for ozone-eating chlorine chemicals to damage the layer.

The findings, reported in the journal Nature, show the hole opened over northern Russia, parts of Greenland, and Norway, meaning people in these areas were likely to have been exposed to high levels of UV radiation.

"The chemical ozone destruction over the Arctic in early 2011 was, for the first time in the observational record, comparable to that in the Antarctic ozone hole," say the scientists, led by Gloria Manney of the Jet Propulsion Laboratory in Pasadena, California.

Scientists say man-made chemicals such as chlorofluorocarbons destroy ozone in the stratosphere. Sunlight breaks up the complex chemicals into simpler forms that react with ozone. While some of the chemicals are covered by a U.N. treaty that aims to stop their use, it will be decades before they are fully phased out of production.

Normally, atmospheric conditions high above the Arctic do not trigger a large-scale plunge in ozone levels. But in the 2010/11 winter, a high-altitude wind pattern called the polar vortex was unusually strong, leading to very cold conditions in the stratosphere that also lasted for several months. This created the right conditions for the ozone-destroying forms of chlorine to slash ozone levels over a long period.

The researchers pointed to the risk if the Arctic hole becomes an annual event and spreads. "More acute Arctic ozone destruction could exacerbate biological risks from increased ultraviolet
radiation exposure, especially if the vortex shifted over densely populated mid-latitudes, as it did in April 2011," they wrote.

104. **Conventional Vehicle Fuel Economy Improvements Leading the Way**

Electric cars and hybrids may be capturing headlines and the imagination of green-leaning consumers around the world as one automaker after another announces plans to push into the brave new world of fossil fuel-free mobility. But away from the spotlight, carmakers have been quietly delivering significant cuts in CO2 emissions with some re-engineering of internal combustion engines, technology advances, weight reduction and aerodynamic improvements.

Increasingly stringent fuel economy standards in Europe and the United States that were mandated due to climate change concerns have been the main catalyst. Yet with rising fuel prices and a waxing awareness of global warming, consumers have also been clamoring for more fuel-efficient vehicles.

"Carmakers have finally gotten the message and have made a good start in making cuts in CO2 emissions but only after they were forced to," said Dorothee Saar, an industry analyst at the German Environmental Aid Association (DUH) in Berlin ahead of the Frankfurt international car show. "Before 2008 they had only voluntary targets that were largely ignored. They're moving forward now because they know if they don't cut emissions they'll pay heavy fines. They're doing better but there is still a lot of untapped potential."

In the European Union, CO2 emissions fell 3.7 percent last year to 140 grams per kilometer after dropping 5.1 percent in 2009. Average emissions are down from 186 grams in 1995. The EU is on track to meet a 130 grams target by 2015 set in 2008 in the face of heavy resistance from the vehicle industry.

In the United States, notorious around the world for its gas guzzlers, the Obama administration announced plans in August to raise fuel economy requirements by 53 percent by 2025. The proposal requires companies to reach average fuel efficiency across their U.S. fleets of 54.5 miles per gallon by 2025.

"The industry has done what they have agreed to with the CO2 reduction goals but the problem is that they are aiming at moving targets," said Philippe Houchois, car industry analyst at UBS in London. "The CO2 targets get tougher all the time. "Everyone has made good progress because they have to with the regulations," he added. "There are no obvious laggards. But as the requirements continue to move, they are going to have to have sell more electric cars to be able to meet the targets." That is an important reason why many carmakers are turning to electric cars even if they now only represent a tiny slice of the global business -- where about 50 million cars are sold each year. Until now only a few thousand have been electric.

Even hybrids represent only a small slice of the pie so far. Out of an estimated one billion vehicles on the roads worldwide, only 47 million alternative vehicles are running as hybrids, on hydrogen or electric power, according to a recent report by the Low Carbon Vehicle Partnership.

Electric cars, a key part of a low-carbon economy, have been on the minds of consumers with a green consciousness for years. Green is a major theme at the Frankfurt Car Show with an entire building devoted to electric mobility. "Never before have the stars of the Frankfurt Car Show been so revolutionary, so green, so efficient, so quiet and so super clean as in 2011," wrote the Bild am Sonntag newspaper. But there are still many hurdles preventing electric cars from
becoming a more common sight on the roads -- in particular high battery costs, limited range and infrastructure.

Tesla Motors made a splash in 2004 with its battery-powered Roadster while Mitsubishi’s i MiEV and Nissan’s Leaf followed. Nissan with its French partner Renault has sold 8,500 Leaf cars since it was launched in December 2010. Plug-in hybrids, such as the Chevrolet Volt -- also known as the Opel Ampera -- entered markets in late 2010. Ford will introduce its C-MAX Energi plug-in hybrid in 2013. Toyota has said it will begin selling a Prius-based plug-in hybrid in 2012. Daimler and BMW have been field testing electric cars.

But battery-powered vehicles will likely remain only a small niche as long as batteries make the car prices prohibitively expensive. “The limitations of the electric cars right now are all well known,” said Houchois. “They will not be replacing combustion engines anytime soon. A lot of people aren't going to replace their cars with electric cars. The industry is reluctant too. Every electric car you sell is a combustion car you don't sell.”

Analysts and industry officials expect it to take another three to five years at least for battery technology and infrastructure to improve to a point that “range anxiety” disappears and electric cars can hope for market shares in the low single digits. The Boston Consulting Group forecast there will be just 1.5 million fully electric cars worldwide in 2020.

Cars are responsible for about 10 percent of the world’s greenhouse gas emissions, which most scientists believe are responsible for climate change that could lead to rising sea levels, more powerful storms, droughts and floods. Governments are thus under pressure to reduce greenhouse gas emissions. Many have ramped up spending, devoting billions to develop electric cars, batteries and recharging infrastructures. Many offer tax credits and other incentives for electric cars, which if recharged with renewable energy have zero emissions. The German government, for example, in May set a goal of having have one million electric vehicles on the road by 2020 and doubled federal research spending on electric vehicles to 2 billion euros over the next two years.

So with the heat on, it is no wonder that the automobile manufacturers have focused on cutting emissions. BMW, for instance, got an early start even before EU fuel efficiency standards were mandated. The Munich carmaker launched its “efficient dynamics” program to cut emissions in 2007. Its overall fleet average in 2006 was 186 grams of CO2 per km but was cut to 148 grams by 2010. It was not any single major breakthrough that helped reduce emissions by some 20 percent in four years but rather a series of small, unremarkable changes to the engine, the aerodynamics and components along with the introduction of a stop-start button, air vent control and brake energy regeneration. BMW officials are proud to point out that, despite the reduced emissions, engine performance was maintained with a fleet average in Germany of 139 kilowatts (or 188 PS).

The German dream of building a “3-liter car” -- a vehicle that can travel 100 km on 3 liters of fuel -- has gone from a far-fetched fantasy to near reality. BMW’s 2012 116d model with 116 PS needs 3.8 liters per 100 km and emits 99 grams of CO2 -- down from its 2011 model with 4.5 liters and 118 grams.

Technology advances have helped carmakers reduce emissions without sacrificing performance. Helping make engines more efficient are suppliers like Honeywell, whose turbo-chargers increase the air entering engines. Alex Ismail, CEO of Honeywell Transportation Systems, said turbo-chargers can boost fuel economy by 20 percent for petrol cars and 40 percent for diesel.
The average car sold in Europe last year was 4% more fuel efficient, emitted 4% less CO2 and
was 2.5% cheaper in real terms than a year earlier, according to a new report. The new figures,
which continue recent trends, severely undermine industry claims that legally-binding fuel
efficiency targets would make cars ‘unaffordable’. The report, published by Transport &
Environment, shows that CO2 emissions from the average new car sold in Europe last year
dropped to the milestone figure of 140g CO2/km. However like-for-like retail prices have not
increased dramatically since legally-binding CO2 targets were introduced, as the car industry
predicted; but have actually fallen every year in real terms.

Studies based on industry cost estimates for reaching the 140g CO2/km milestone consistently
claimed that retail prices would significantly increase as a result. The T&E report examined two
cost estimates carried out for the European Commission in 2001 and 2006 that were based on
data supplied by the car industry. The earlier report predicted that reaching 140g/km would
cause the retail price of the average new car to increase by €2400, the later study said €1200. 4
But in contrast like-for-like retail prices actually fell across Europe by 2.4% a year, on average,
since legally binding targets for car CO2 were first announced in 2007.

The T&E report, which examines the performance of major carmakers in cutting CO2, found that
Volvo delivered the largest cuts in CO2 on average in 2010 (9%). In contrast, average
emissions of new Honda and Mazda cars actually increased. 5 Daimler has the worst average
CO2 emissions of major carmakers in Europe, followed by Volvo. Fiat, Toyota and Peugeot-
Citroen have Europe’s cleanest fleets in terms of CO2.

Europe’s largest car market, Germany, made the second-worst progress in cutting CO2
emissions from new cars last year, with a cut of just 1.8% averaged across sales of 2.8 million
vehicles. Germany’s poor performance is unlikely to be helped in the view of T&E by a new car
c02 label agreed by Berlin in July which puts small efficient models such as the Smart and Fiat
Panda in the ‘D’ category, while the Audi Q7, a large SUV, gets a green ‘B’ rating.

Slovakia was the EU country showing the least progress with the average new car sold emitting
1.3% higher CO2 emissions than in 2009. On the contrary, Denmark made an impressive 8.9%
year-on-year reduction.

105. OPEC Again Trims Oil Demand Outlook

Weaker economic recovery is negatively impacting oil demand, the Organization of Petroleum
Exporting Countries said in its latest Monthly Oil Market Report as it reduced its forecasts for
2011 and 2012. The organization cited a weaker-than-expected driving season in the US and
ongoing economic sluggishness in the developed countries of the Organization for Economic
Cooperation and Development (OECD) as reasons for the latest downward revision to its oil
market forecast, which reduces the call on OPEC crude in the second half of this year.

World oil demand growth in 2011 has been revised down by 150,000 b/d from last month’s
report as the global economy is now expected to grow at a revised 3.6% in 2011 and 3.9% in
2012, down from previous expectations of 3.7% and 4% respectively. Revisions were triggered

4 The large difference between the cost estimates is due to the different baselines used. The higher figure is for a cut
in CO2 of 25%, the lower for a cut of 16%. Both studies therefore estimate the cost of cutting CO2 emissions to 140g
CO2/km at roughly around €100 per percentage reduction.
5 Honda’s emissions increased by 0.6%, Mazda by 0.3%
by a global slowdown in industrial activity in most of the major economies, the report said. The economic growth forecast for China, though, is unchanged at 9% this year and 8.5% next year, but India’s expansion has slowed such that its 2011 economic growth forecast has been cut slightly to 7.7%.

The worldwide oil demand growth forecast for 2011 has been revised down by 300,000 b/d since the start of this year to stand at 1.06 million b/d. This puts average 2011 worldwide oil demand at 87.99 million b/d. The report also estimates that 2012 worldwide demand will average 89.26 million b/d, down 36,000 b/d from last month’s outlook.

The US summer driving season this year missed its peak, sliding by 2% year-to-date compared to the same period last year, OPEC said.

The economic slowdown in the OECD has negatively affected oil demand in China, while India oil consumption has been dampened by measures aimed at limiting its overheated economy, the report said. In the third quarter, OPEC estimates that Chinese oil demand growth will be 200,000 b/d less than forecast in last month’s outlook.

“Looking ahead, the perception of market tightness and worries of supply shortages in the fourth quarter appear to be easing. The increasing risk of the global economic slowdown is negatively impacting industrial sectors. The middle distillates market looks well supplied as US refineries run at high levels,” the report said.

This has contributed to a build in inventories, which have been trending above their five-year average, providing a comfortable cushion ahead of the expected increase in heating oil consumption this winter.

As a result of reduced global economic growth and therefore a downward revision in oil demand, the required crude supply has been revised down in the third and fourth quarters, as OPEC crude oil production continues to increase and a partial return of Libya production is expected soon, according to the report.

“While (the) current OPEC production profile provides sufficient flexibility to take into account the existing uncertainties and downside risks, it is of critical importance to continue carefully monitoring oil market developments,” the report said.

**106. Land Use Changes Key to Bioenergy’s Role in Curbing Global Warming**

Bioenergy's potential for reducing greenhouse gas emissions can be maximized if land use changes associated with it are kept to a minimum, for example by burning forest and agricultural waste or by growing feedstock on marginal and degraded land, according to a technical report released by the International Energy Agency. The report, Bioenergy, Land Use Change and Climate Change Mitigation, said practically all bioenergy systems can deliver significant greenhouse gas savings if they replace fossil-fuel-based energy that causes high emissions and if bioenergy production emissions—including from land use change—are kept low.

Yet some bioenergy projects can lead to increased carbon emissions in the near-term, especially those associated with clear felling and drainage of peat swamp forests to establish oil palm plantations or other sources of biofuels.
One promising way of reducing emissions from land use change is to increase plantings of non-edible crops used for bioenergy on marginal land, decreasing the pressure on prime cropland, the report said. “Since the production of lignocellulosic feedstocks commonly requires less fuel, fertilizer and other inputs, there is also scope for higher GHG savings than when biofuels are produced from conventional crops such as cereals and sugar beet,” the report said.

Another option the report identified is to integrate the production of biomass, food, and feed.

Nevertheless, the report called for acknowledgment that conversion of some natural ecosystems into high-yielding plantations could provide a response to climate change concerns, despite leading to some near-term emissions from land use change. “Bioenergy's contribution to climate change mitigation needs to reflect a balance between near-term targets and the long-term objective to hold the increase in global temperature below 2 degrees Celsius [3.6 degrees Fahrenheit],” as reflected in the 2009 Copenhagen Accord, the report said.

“While emissions from land use change can be significant in some circumstances, the simple notion of land use change emissions is not sufficient reason to exclude bioenergy from the list of worthwhile technologies for climate change mitigation.” The report said only about 1 percent of global agricultural land is currently being used for biofuel crops.

The report was released on September 17th. Its lead author was Göran Berndes, an associate professor of physical resources at Chalmers University of Technology in Sweden.

107. EIA: Energy-Related Global Carbon Emissions to Rise 43 Percent by 2035

Global energy-related carbon dioxide emissions will rise 43 percent between 2008 and 2035 and renewables will be the fastest growing energy source over the next 25 years, according to the Energy Information Administration's International Energy Outlook 2011. World energy use will increase 53 percent by 2035 with China and India accounting for half of that growth, the U.S. energy forecasting agency said on September 19th. Energy use in nations that are not members of the Organization for Economic Cooperation and Development (OECD) will grow by 85 percent, compared with an increase of only 18 percent for the OECD economies, EIA predicted. According to the report, energy-related carbon dioxide emissions will rise worldwide from 30.2 billion metric tons in 2008 to 43.2 billion metric tons in 2035, with much of the 43 percent increase in the developing world.

Demand for renewable energy is predicted to rise 2.8 percent per year and market share to increase from 10 percent in 2008 to 15 percent in 2035. However, fossil fuels will remain the dominant energy source, accounting for 78 percent of world energy use in 2035, the report said. EIA Acting Administrator Howard Gruenspecht unveiled the latest forecast at the Center for Strategic and International Studies.

Among other predictions:
- Natural gas will have the fastest growth rate among fossil fuels, with world consumption increasing 1.6 percent per year from 111 trillion cubic feet in 2008 to 169 trillion cubic feet in 2035;
- World coal consumption will increase 1.5 percent per year from 139 quadrillion Btu in 2008 to 209 quadrillion Btu in 2035, with China accounting for 76 percent of the projected net increase and India and the rest of non-OECD Asia accounting for an additional 19 percent;
The transportation sector will maintain its current share of world energy consumption at about 27 percent with a growth rate of 1.4 percent per year; transportation’s share of total liquid fuels consumption (petroleum and biofuels) will increase from 54 percent in 2008 to 60 percent by 2035.

108. Global Carbon Dioxide Emissions Reached All-Time High in 2010

Global man-made carbon dioxide emissions rose 5.8 percent in 2010 to the highest level ever recorded as the global economy recovered from the economic downturn, the European Commission's Joint Research Center said in a report published on September 21st. The increase from 2009 levels was “unprecedented in the last two decades,” though a similar rise was seen in 1976 as the global economy rebounded from the early 1970s oil crisis, the center said.

The report, Long-Term Trend in Global CO2 Emissions, said the increase was mainly an emerging economy phenomenon, with China and India seeing increases of 10 percent and 9 percent respectively.

In most industrialized countries, emissions increased relative to 2009 but remained below pre-downturn levels, the report said. Furthermore, countries with emissions reduction pledges under the Kyoto Protocol are likely to meet their overall 5.2 percent reduction target for 2012 compared to 1990, though only because of “large emission reductions from economies in transition in the early nineties, and more recent reductions due to the 2008-2009 recession,” the report said.

According to the analysis, 33 billion metric tons of carbon dioxide were emitted in 2010, the highest-ever recorded level and 45 percent above the 1990 amount. The figures showed that “increased energy efficiency, nuclear energy, and the growing contribution of renewable energy are not compensating for the globally increasing demand for power and transport, which is strongest in developing countries,” the Joint Research Center said.

The report contained provisional figures based on the Emissions Database for Global Atmospheric Research (EDGAR) database, a long-running project of the center and the Netherlands Environmental Assessment Agency that contains emissions data going back to 1970. As well as emissions by country, the report analyzed emissions by sector, finding the most rapid growth from power generation and road transportation.

The report showed how quickly China in particular is overtaking other countries, with absolute emissions from China standing at 9 billion metric tons in 2010, compared to 5.2 billion metric tons from the United States and 4 billion metric tons from the European Union. Chinese per capita emissions also have increased rapidly, and are now higher than in France and Spain and the same as in Italy, according to the report. However, at 6.8 metric tons, Chinese per capita emissions remain below the EU average of 8.1 metric tons and far lower than the U.S. figure of 16.9 metric tons.

If current trends continue, China will “overtake the USA by 2017 as the highest per capita emitter among the 25 largest emitting countries,” the Joint Research Center said.

Significantly curbing greenhouse gas emissions will require “decades of focused policies” concentrating especially on power generation and energy efficiency, the report said.
109. Arctic Sea Ice Coverage Second Lowest On Record: Report

Sea-ice coverage across the Arctic Ocean has dwindled to its second-lowest level since satellite records started in 1979, according to the National Snow and Ice Data Center. Areas of the Arctic with at least 15 percent sea-ice totaled 1.68 million square miles, slightly above the record-low of 1.61 million square miles recorded in 2007, the center said.

Yet to be determined is whether the reported sea-ice cover will be the lowest for the year. Annual minimums are usually reached around mid-September. "We're getting close, but there's still the potential for further loss of ice," said Walt Meier, a research scientist at the Boulder, Colorado-based National Snow and Ice Data Center. Ice coverage could diminish either through more melt or from winds or both, Meier said. However, some areas, including those near the North Pole, were showing signs of ice growth, he said.

"Probably there's a little bit of both going on - there's melting and refreezing," he said.

At least one other institution has reported that this year's Arctic ice coverage was the lowest on record. A report issued recently by the University of Bremen in Germany said sea-ice coverage on September 8th fell below the 2007 minimum. The University of Bremen researchers use finer-resolution measurements that can better distinguish smaller areas of ice and open water, Meier said. But that university's methodology also has some drawbacks, he said.

Under either measurement, however, Arctic ice cover has diminished dramatically over recent decades. Recent coverage, as measured by the National Snow and Ice Data Center, was only about two-thirds the average coverage measured from 1979 to 2000.

Reduced sea ice is believed to have cascading impacts on climate in the circumpolar north and even lower latitudes. According to an academic study released recently by the U.S. Geological Survey, Yupik Eskimo residents in southwestern Alaska are living with some of those affects. The study, published in the journal Human Organization, examined observations of elders and longtime hunters in two Lower Yukon River villages. The residents detailed dramatic changes over the years in river-ice thickness, a public-safety risk because no roads connect villages in that part of Alaska, and residents in winter travel over river ice. The residents also testified to changing ranges for several animals, particularly moose and beavers, changes in vegetation and concerns about reduced availability of driftwood that used to be pushed downstream by powerful currents of spring meltwater.

With river ice reduced, spring thaws are less powerful or dramatic than they were in the past, according to the Yupik residents interviewed for the study. "Many climate change studies are conducted on a large scale, and there is a great deal of uncertainty regarding how climate change will impact specific regions," Nicole Herman-Mercer, a USGS social scientist and one of the study's authors, said in a statement.

"This study helps address that uncertainty and really understand climate change as a socioeconomic issue by talking directly to those with traditional and personal environmental knowledge."

110. NOAA-Led Study: Low-Sulfur Fuels, Low Speeds Reduce Ship Emissions

NOAA researchers and collaborators used instruments aboard a research aircraft and the NOAA-sponsored Woods Hole Oceanographic Institute's research vessel Atlantis to make a
detailed study of emissions from a container ship off California in 2010. The team found that as the container ship shifted to low-sulfur fuels and slowed down near the coast, air pollution emissions plummeted, with some pollutants dropping by as much as 90 percent.

New clean fuel regulations in California and voluntary slowdowns by shipping companies substantially reduce air pollution caused by near-shore ships, according to a new NOAA-led study published online recently in Environmental Science & Technology. The study examined a container ship operating under a 2009 California regulation requiring that ships switch to low-sulfur fuels as they approach the California coast, and also adhering to a voluntary state slowdown policy, intended to reduce pollution. The research team found that emissions of several health-damaging pollutants, including sulfur dioxide and particulate matter, dropped by as much as 90 percent.

Findings of this study could have national and global significance, as new international regulations by the International Maritime Organization require vessels to switch to lower-sulfur fuel near U.S. and international coasts beginning in 2012. The research team found reductions in emissions even where none were expected, meaning even greater reductions in air pollution, and associated respiratory health effects in humans, than regulators originally estimated.

“This study gives us a sense of what to expect in the future, for the people of California, the nation, and even the globe,” said Daniel Lack, chemist with NOAA's Earth System Research Laboratory and the Cooperative Institute for Research in Environmental Sciences. “This really is where science gets fun – a study with first-rate institutions, equipment and people, probing the effects of policy. It’s important to know that the imposed regulations have the expected impacts. The regulators want to know, the shipping companies want to know, and so do the people.”

In May 2010, a NOAA research aircraft flew over a commercial container ship, Maersk Line’s Margrethe Maersk, about 40 miles off the coast of California. Researchers on the aircraft used sophisticated custom instruments to ‘sniff’ the ship’s emissions before the ship switched to lower-sulfur fuels (by law, within 24 miles of the California coast) and slowed down voluntarily.

A few days later, scientists aboard the NOAA-sponsored Woods Hole Oceanographic Institute’s research vessel Atlantis sampled emissions of the same ship as it cruised slowly within the low-sulfur regulated zone.

Sulfur dioxide levels, which were expected to drop, did do so, plummeting 91 percent from 49 grams of emissions per kilogram of fuel to 4.3 grams. Sulfur dioxide is best known as a precursor to acid rain, but can degrade air quality in other ways, directly and indirectly through chemical reactions in the atmosphere. In particular, emissions of sulfur dioxide lead to formation of particulate matter in the atmosphere which poses serious public health concerns.

Particulate matter pollution, regulated because it can damage people’s lungs and hearts, dropped 90 percent from 3.77 grams of emissions per kg of fuel to 0.39 grams.

Black carbon levels also dropped, cut by 41 percent, the team reported. Black carbon comprises dark-colored particles that can warm the atmosphere and also degrade air quality.

In 2009, the U.S. Environmental Protection Agency and its Canadian equivalent, Environment Canada, estimated that shifting to low-sulfur fuels near coasts could save as many as 8,300 lives per year in those two countries, and ease the acute respiratory symptoms faced by another 3 million. But that 2009 assessment did not include the observed drops in several pollutant
categories that Lack and his colleagues found, so the authors suggest the impacts could be greater.

Finally, the new paper discusses the net radiative (warming vs. cooling) effect of the ship’s fuel switch. Changes in the emissions of various air pollutants – some which have a warming effect, others which have cooling effects – likely mean net warming.

The project was funded by NOAA and the California Air Resources Board and conducted in close collaboration with the Maersk Line.

“These scientific findings clearly demonstrate that ships off our coast now emit significantly less sulfur pollution than in the past,” said California Air Resources Board Chairman Mary D. Nichols. “This is good news for California and for the nation. When the federal regulations kick in for ships to use low-sulfur fuel, communities throughout America that live near shipping lanes and next to ports will see clean air benefits.”

The new paper, Impact of Fuel Quality Regulation and Speed Reductions on Shipping Emissions: Implications for Climate and Air Quality, is available at the Environmental Science & Technology website. Lack’s 28 co-authors are from 10 research institutions from both the U.S. and Canada.

111. Shipping Fuel Tax Could Reduce Carbon Emissions, Help Poor Countries

A carbon price of $25 per metric ton on shipping fuel could both reduce worldwide greenhouse gas emissions and raise funds to help developing countries cope with the effects climate change, the environmental lobby groups Oxfam and WWF said in a report published on September 8th. The proposal would raise an estimated $25 billion per year by 2020, the groups said. About $10 billion of that annual total would be dedicated to the United Nations’ Green Climate Fund to help developing countries reduce emissions and adapt to global warming. The remainder would be used to help compensate poor countries for higher costs of imported goods.

The groups said reduction of maritime emissions should be a centerpiece of the year-end U.N. climate change summit in Durban, South Africa. Collectively, maritime and air transportation emissions are the globe’s largest source of completely unregulated emissions—by some measures totaling 6 percent of worldwide emissions, about half of it from maritime transport—and are growing at about 35 percent per year.

The report said the $25-per-metric-ton levy on shipping fuel, known as bunker fuel, would increase the cost of global trade by just 0.2 percent, and less in poor countries. For instance, it said South Africa’s import costs would rise an estimated 0.14 percent but the country would receive $200 million in compensation. Bangladesh would see costs rise 0.19 percent and receive $40 million in compensation.

“The climate conference in Durban this year provides the ideal opportunity for a global agreement on shipping,” Tasneem Essop, WWF’s head of climate strategy and advocacy, said in a statement. “This can be a concrete contribution that the South African presidency of the climate change conference can make toward ensuring scaled up financing from an innovative source of funding ... [and could be] one of the pillars of a strong package of outcomes in Durban.”
112. New IMO Rules 'Must Be Implemented By All'

The International Chamber of Shipping has called on all ship-owners to implement the new energy efficiency standards agreed by the International Maritime Organization (IMO) in July, even though many are likely to be exempted. Because of a political compromise, ships registered in developing countries were given until 2019 to meet the mandatory efficiency improvements in the Energy Efficiency Design Index (EEDI). This could potentially exempt most ships.

Worldwide implementation of the agreed standards would show the industry's good faith and could discourage policymakers from pursuing a global agreement on greenhouse gas emissions from ships, according to the shipping body. It believes that few responsible operators will use the loophole since it could affect their ability to trade.

Earlier this month, two NGOs drafted a proposal to regulate shipping emissions in the hope that progress on a global shipping deal could be made in Durban. (See story above.) The EU executive has said it will table its own plan if no international agreement is reached.

The shipping industry insists the only appropriate forum for dealing with its emissions is the IMO, and it would prefer a fuel tax rather than an emissions trading scheme. According to the International Chamber of Shipping, the EEDI agreement shows the IMO is "ahead of the curve" and well placed to develop market-based measures.

The trade body will release guidance on EEDI implementation in coming weeks.

113. Study: Cost of Owning Electric Vehicles Will Fall Substantially

The total cost of owning an electric or hydrogen vehicle is likely to fall substantially and approach those of conventional cars within 15-20 years according to a new study. The report was prepared by Element Energy for, and in collaboration with, the expert membership of the Low Carbon Vehicle Partnership (LowCVP) that includes major vehicle manufacturers and oil companies. It has examined how the total cost of owning a car can be expected to change to 2030 with the introduction of lower carbon technologies. These lead to higher purchase prices than for conventional cars (with only an internal combustion engine) but have lower running costs as they use less and/or cheaper fuels like electricity and hydrogen. For ultra-low carbon cars to be widely adopted the total cost of ownership, for the first buyer of the vehicle, must be competitive.

The difference in the total cost of ownership between conventional and ultra-low carbon family cars will fall from around £5,000 pa at present to £500 – £750 pa by 2030. This is mainly because the car will become cheaper to buy as batteries and fuel cells fall in price. Fuel costs for ultra-low carbon cars will be much lower than conventional cars. With big improvements in the fuel efficiency of conventional cars annual petrol costs are anticipated to also fall, despite oil price rises. The net result is that by 2025 a tax break of £1-2k pa will be sufficient to equalize the cost of owning most electric or hydrogen cars.

LowCVP Managing Director Greg Archer said, “Drivers will need to embrace ultra-low carbon technologies like electric and hydrogen vehicles as one of the measures to avoid dangerous climate change. But for many drivers to switch these cars must be both appealing and no more

6 The first owner is assumed to keep the vehicle for 4 years and drive around 9,500 miles pa
expensive to own. This study indicates that the cost of electric and hydrogen fuel cell vehicles will fall substantially and with modest tax and other incentives could be as cheap to own as conventional cars within the next 15-20 years."

The study also shows that:

- Conventional cars will become much more efficient, a typical family car, or larger hybrid, achieving around 100mpg by 2030. As a result typical annual fuel costs are anticipated to have fallen to around £500 pa and insurance costs become an even greater element of the total cost of ownership
- The cost of owning a conventional family car for 4 years is estimated to rise slowly from around £22.5k in 2010 to £24k in 2020 and £25k in 2030 as the cost of technology needed to reduce CO2 emissions also delivers fuel cost savings.
- Before 2020, the cost of larger batteries providing longer all electric driving range is not repaid through lower running costs for a typical first owner. Cars with shorter all-electric range (such as plug-in hybrids) therefore have a lower cost of ownership pure battery vehicles. It is also uneconomic to increase the range of electric vehicles.
- New battery and fuel cell technologies will probably be needed for these cars to have a lower cost of ownership than conventional equivalents (without tax breaks) - even if petrol prices rise to £3/l (in real terms)

Greg Archer commented, "The study points to an evolution in the car park over the next 20 years as a range of technologies delivers a marked improvement in fuel economy. Drivers choosing the most efficient models should see their fuel costs fall. Initially there will only be a modest take-up of electric or hydrogen vehicles and most of these are likely to be plug-in hybrid vehicles with a lower electric range (10-20 miles), lower total cost of ownership and no risk of running out of charge. More significant take-up of battery electric and hydrogen fuel cell vehicles is possible after 2025 with tax incentives."

He added, "The Government must continue to encourage and invest in the recharging and refueling infrastructure needed to support the emerging market in ultra-low carbon vehicles and incentivize their purchase."

LowCVP’s previous work showed electric vehicles do deliver greenhouse gas savings when measured on a whole life carbon basis; but need to be recharged using renewable electricity and manufactured using lower carbon processes and materials to maximize the benefits.

114. Yergin’s "Quest" Takes Broad Look at Energy Resources

Every president since Nixon has advocated energy independence. Energy expert Daniel Yergin does not. In fact, he doesn't think that it would make the United States any more secure. Famed for his Pulitzer Prize-winning history of oil "The Prize", Yergin’s new book "The Quest" hit bookseller websites and stores on Tuesday, looking at every solution from fossil fuels to solar and nuclear energy in a far broader sweep than his previous work.

"Energy independence is a very appealing term, but it sets an impossible goal for the foreseeable future," Yergin told the press. "What we need to do is diversify our energy sources just as investors diversify their portfolios to make them safer."

7 Preparing for a life-cycle CO2 measure. Report by Ricardo for the LowCVP.
The U.S. has been enjoying a renaissance in fossil fuel production in recent years, with deep sea drilling for oil and hydraulic fracturing (also called "fracking") to release natural gas trapped in rocks. This has also caused an environmental backlash, with opposition to shale drilling mounting in states like Pennsylvania. Yergin acknowledges the concerns of those who worry about contaminating water supplies, but he believes that these new technologies can safely boost energy output without negative effects as long as proper precautions are taken. "We need to think about the risks and mitigate them in advance," he said. "The costs of avoiding a crisis are a lot lower than the costs of a crisis."

"The Quest" roams far from Yergin’s traditional focus on black gold. With an eye toward the future, he examines the mixture of energy resources that will be necessary to power the growing population and economy. "I think the challenge is the kind of growth that we're going to see in the future," he said. "We certainly need to diversify and broaden our energy portfolio to support a much larger global economy that we may be experiencing in as little as two decades."

Yergin is optimistic about new technologies combined with prudent planning to address future needs. With risks properly managed, he believes shale gas is integral to America's energy supply. He points out that it comprises 30 percent of the country's natural gas production. "We thought as a country we'd be importing large volumes of natural gas, instead we're producing it within our own borders," he said.

But shale drilling isn't the only new technology making waves in the energy world. Yergin writes about the rebirth of renewable energy sources, which he believes also hold great promise. He charts developments in wind technology, which he claims has made astronomical gains in recent years. He also discusses the potential of solar power, but predicts widespread use will only happen when costs come down.

Another pillar of energy security Yergin identifies is conservation, which he calls "the fifth fuel". He asserts that using energy efficiently is an important piece of the energy security puzzle, and he mentions past successes. Yergin believes that people can be nudged toward this goal through a blend of technological innovation, regulation, and making efficiency cost-effective. "We're twice as energy efficient today as we were in the 1970s," he said. "I think that's a reasonable goal-- why don't we become twice as energy efficient again?"

Above all, he believes that a multi-pronged approach is crucial to supporting a growing global economy. "You could be energy independent, but it could be extremely expensive," he said. "We're part of a global marketplace, and what really counts is energy security."