

GREENBUDGETNEWS No. 13 – 09/2005

EUROPEAN NEWSLETTER ON ENVIRONMENTAL FISCAL REFORM

Editors:



www.eco-tax.info



www.eeb.org



www.ecocouncil.dk



www.levego.hu



www.oegut.at

Quotation of the month

“I know that the Earth is getting warmer und that greenhouse gases due to human activity play a role in this process.”

George W. Bush, US-President, 7.7.2005

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1. EDITORIAL

German Elections, Flooding (as in 2002) and Ecological Tax Reform

[Kai Schlegelmilch, Christian Meyer, Stefano Panighetti, GBG, 02.09.2005] Wishful thinking? In 2002, a only few weeks before the last federal elections, the largest floods for more than a century hit Eastern Germany and neighbouring countries. Ten billion Euros worth of damage was caused in Germany alone. The topic "environment" suddenly leapt onto the political agenda, having previously been sadly neglected by the media. On the one hand, the opposition did not even have a person in their competence team in charge of environmental policy, which was quite embarrassing, to say the least. On the other hand, the government was able to stress the necessity of its climate policy including the Ecological Tax Reform (ETR), which had not proven particularly popular. In the end, election analysts found that the elections were won by the government due to its refusal to participate in the war in Iraq and the policies it initiated in response to the flooding in the context of climate change.

In August 2005, just three weeks before the next federal elections, widespread flooding is once again affecting Southern Germany, while in the USA, hurricane Katrina has devastated New Orleans and large parts of Mississippi and Louisiana. Thus, the cause for environmental taxation and the importance of climate change mitigation has been underlined once again shortly before the German elections. What is more, one can at least hope that the disaster in New Orleans might just contribute to a change of direction in American environment policy in the long term and a more open approach to the negotiations for Kyoto from 2012.

Until recently, German opposition parties were ahead in the polls, while most recent polls tend to favour the current government and a new left wing party, a coalition of communists from the former East Germany and a left-wing movement in the West opposed to the social reforms of agenda 21. However, a coalition between these two groups is not particularly likely. Now the

question is: Will flooding and environmental disaster help the government to win the elections once again, even though the polls are not yet indicating such an outcome? Perhaps this is not only wishful thinking on the part of the protagonists of ETR.

Interestingly enough, the opposition (the conservative CDU and the liberal democratic FDP) seems to have changed its mind concerning the Ecological Tax Reform; although these two parties were strongly opposed to such a reform before now, in the two last elections of 1998 and 2002.

CDU party leaders have made it clear that they didn't intend to or would not be able to reduce ecotaxes. Financial experts from the FDP have admitted that their original plan to decrease the ecotax by one third would presently not be financially possible. So the Ecological Tax Reform (thus far implemented by the Red-Green coalition government) seems to be no longer threatened by the outcome of the election. Recently, the powerful leader of the German Automobile Industry Association Bernd Gottschalk called for the withdrawal of the Ecotax Reform. However, Federal Minister for Economics and Labour Wolfgang Clement underlined that this reform was not a question of party any more, since the opposition accepted it as well.

The EFR is definitely not as much of an election topic in Germany as it used to be in the past (during the 1998 and 2002 election campaigns). Unfortunately an ecotax increase is most unlikely to be implemented either, even if the Social Democrats win the election, which is rather improbable in any case. The Greens themselves have explained that an increase in mineral oil tax would make little sense, given current high world oil prices. Further concrete modifications to the Reform are more likely to comprise the withdrawal of reduced rates for industries and other subventions, including those on air traffic. Against this background, it is a good thing that Green Budget Germany has always had and continues to maintain friendly relations with all democratic parties and organisations in Germany.

FÖS-GBG will become increasingly involved in Ecological Fiscal Reform in Eastern Europe and in Japan in the coming months – of course,

without neglecting the national debate. Indeed, Japan's parliament will discuss a possible energy tax increase to protect the climate and to finance pensions next autumn. In this context, our chairman Dr. Anselm Görres will travel around to Japan for 14 days in October-November 2005, a trip sponsored by the German Environment Ministry, in order to meet government representatives, scientists, entrepreneurs and associations. Please let us know if you are in contact with interested parties and important persons willing to meet him.

As regards the EFR in Eastern Europe, GBG-FÖS is organising an international conference at which presentations on EFR at national level in all new EU member states will be held. The quality of presentations will be particularly high, as each presentation will be given by a national expert from the state in question. This exciting event will take place in Berlin on October 12th 2005.

Furthermore, a conference on "Reducing Greenhouse Gas Emissions from Aviation" will be held in London as well. It will take place on November 21st 2005.

We are already looking forward to your participation!

The GBG-FÖS team wishes you good reading!

Reduced Membership Fee for Students

[Green Budget Germany, 18 May 05] As decided on this year's general meeting, students can now become a Green Budget Germany supporting member for just 30 Euros a year – half the price of that for a full supporting membership. Active membership, which includes a full vote at GBG meetings, is also available for an annual contribution of 200 Euros for full members.

2. ECOTAX EVENTS

ATTAC-Workshop: "Global Taxes" 9-11 September 2005, Villa Locomuna, Kassel, Germany

In this workshop we hope to identify motivating forms of action for local groups and single members. The seminar is geared towards new members.

The workshop will be held in German.

Registration and questions: joerg.walter@online.de or tel. 0711-2998326

[Program](#)

6th Annual Global Conference on Environmental Taxation 22-24 September 2005 in Leuven, Belgium

The 6th ETC will focus on the promotion of renewable energy through tax or other market-based Instruments. Various speakers include representatives of the European Commission (speaking on recent developments and projects on environmental taxation and EU politics), University Professors and other ETR experts from America and Asia.

The Flemish Minister of Labour, Energy, Environment and Ecology will also give a lecture on the implementation of taxation reform on a national scale.

<http://www.law.kuleuven.ac.be/imer/nieuws.html>

Ecotaxes in the New EU Member States Conference in Berlin on 12th of October 2005

Germany already has considerable experience with an ecological tax- and budget reform and its effects, whereas the new EU member states are making an effort to work towards such reforms at present. Due to their new membership, new EU member states are committed to the introduction of energy taxes. An exchange of experiences will help the proponents of ecological fiscal reform in the new member states to draw up proposals for implementation in their own country and – on the basis of experiences in Germany and other European States – to avoid mistakes. This introduction to ecological tax reform in the new member states will effect the German discussion in a positive way as well, because it will undermine the oft-heard argument that ETR results in competitive disadvantages on a European scale.

The event will take place in the Berliner Umweltforum, Neue Mälzerei, Friedenstraße 91, 10249 Berlin.

The conference language is English.

[Program](#)

***Reducing Greenhouse Gas Emissions
from Aviation:
A Joint Eftec and Green Budget
Germany Project***

London, Monday 21st November 2005

As the fastest growing source of GHG transport emissions in the European Union, the issue of how to reduce GHG emissions from aviation is of considerable urgency. This seminar aims to evaluate alternative policy options for the reduction of aviation emissions within the context of the current economic climate within the aviation industry. How can market-based instruments best tackle the problems of booming low-cost airlines, unprecedented growth in flight numbers, airport expansion and construction, and increased air traffic congestion? What policy options are viable? Which are most likely to be met with sufficient acceptance to be implemented?

Monday 21st November 2005, 10.00-18.00 London, venue to be confirmed.

[Program](#)

European Mobility Week Conference

To launch the European Mobility Week 2005, DG Environment of the European Commission and the UK Presidency of the EU will host a conference called: *'In Motion! Visions for urban mobility & clean air'*.

The conference will take place in the London City Hall, The Queens Walk, London SE1 2AA from 15th-16th September 2005.

[Program](#)

***The Third World Congress of
Environmental and Resource Economists
July 3-7, 2006, Kyoto International
Conference Hall, Japan***

The Third World Congress will be held at the Kyoto International Conference Hall in July 2006, organized by the Society of Environmental Economics and Policy Studies (SEEPS), the Association of Environmental and Resource Economists (AERE) and the European Association of Environmental and Resource Economists (EAERE), in cooperation with the Latin American and Caribbean Association of

Environmental and Resource Economists (ALEAR).

We invite you to submit theoretical and empirical papers that focus on environmental and natural resource economics. The closing date for submission of papers is February 1 2006. Authors will be notified of acceptance of their papers by early April 2006. The number of submissions per person is unlimited, but the maximum number of presentations per person will be limited to one. Authors must register for the Congress in order for their paper to be included in the program (the web page for registration will be available later). Paper submission is electronic, and is done through the web site (<http://www.worldcongress3.org/>).

We also welcome your contributions to organize sessions. Please send your proposals with detailed information on the aim and significance of the session and lists of possible speakers to:

wc3-info@congre.co.jp.

**3. GREEN BUDGET REFORM AT
EU-LEVEL**

***GBG Launches Ecotax Platform for New
EU Member States***

[*Stefano Panighetti, GBG*] GBG recently updated its Homepage with general information and tables concerning environmental fiscal reform in the ten new EU member states. It includes an overview of each country's tax levels and information on ecological taxation and emissions trading, as well as tables and graphs showing tax revenues and rates.

As far as the new EU member states are concerned, they will also – if they have not done so already – have to implement the new EU directives specifying minimum rates of ecological taxation and other environmental norms. This might prove to be a serious challenge for those countries with only a few energy taxes.

=> <http://www.eco-tax.info/5EUecotax/main.html>

Political Leadership Needed for Europe and its Energy Future

[*www.integer-consult.com, News July-August newsletter*] More delay of decisions reduces the response time to new unpleasant facts on Peak Oil and Climate Change and makes the emergency responses much more expensive. That's why Europe needs leadership and unity, especially on energy.

The current European (and global) political and economic situation is characterised by a high degree of uncertainty, a stalemate, lack of confidence in investment directions and areas, low interest rates and high stock indices combined with huge savings and lack of consumption and investments, politicians and business leaders waiting for each other, sometimes working to get support from other stakeholders, more of the same, business-as-usual instead of innovations, etc.

Three issues especially cause great concern today and offer potential for positive business action.

Firstly: the EU is politically stagnant and the economic performance of its members frustrates progress on many dossiers. Many proposals of the Commission are now delayed or weakened, like the proposals for efficiency of energy use, for security of energy supply and for growth of renewable energy sources. The lessons learned on voluntary agreements and indicative targets make clear that competition on low costs and fear to take risks will continue to drive the decisions of member states and companies. The result will be another series of failures and/or too modest targets for the problems to be solved. The energy market urgently needs clear direction for investors, not a continued uncertainty and weak measures that just postpone the real measures. The Shell Report 2004 shows the lack of clarity on the political will to act on security of energy supply. More delay of these decisions reduces the response time to new unpleasant facts on Peak Oil and Climate Change and makes the emergency responses much more expensive than under the – agreed – precautionary approach.

Only if the EU shows leadership on economic issues, which cannot be solved by any member state itself, like energy security, will the trust of its citizens and investors be regained and democracy reinforced. A project like TREC - the Transmediterranean Renewable Energy

Cooperation - is very attractive to help solve a range of urgent and priority threats to Europe. It was outlined here in May and in brief it organises that renewable energy will be harvested on the best available places in the region around the prosperous EU. Companies in the EU have the knowledge and the investment potential and North Africa and the Middle East have the best conditions for large scale solar, wind and geothermal energy projects. This cooperation can be very beneficial and contribute to improving living standards and understanding between all peoples in this region. It will bring cheaper energy, desalinated water and jobs, and will reduce emissions and dependence on oil, etc. The current fashion to seek energy independence in each EU member state is very expensive, insufficient and completely at odds with the free trade and open markets ideology on other markets. We can now make the EU with African and Middle East partner countries the world leader in clean, abundant and cheap energy by investing in the way suggested in the above quote by Heinrich von Pierer of Siemens. If this is done, I will not quote unfriendly remarks on the huge EU investments in nuclear fusion and fission, both of which cannot solve the energy crisis.

Secondly: in Gleneagles the G8 will decide on the direction for global governance of climate change and of poverty. Regarding the issue climate change the EU leaders should be aware that the position of the USA is very opportunistic and empty. The two main justifications for their position on the multilateral UN approach are: "why should we act if China, etc. don't have to?" and "only technology can and will solve the problem". Both points are apparently not frequently enough countered by our leaders, not even by the newspapers I read.

Regarding "the China argument": in the Kyoto Protocol – not ratified, but signed by the USA in 1997 – it is agreed that the allocation of emission rights is done – as strongly desired in Kyoto by the USA – by 'grandfathering'. As a direct consequence the developing countries would have very low emission rights and no room for growth as promised in Rio 1992. Therefore no need was seen in 1997 to include the China/G77 countries in the first budget period of the Kyoto Protocol until 2012. It was therefore agreed that the developed countries would report their reductions in 2005 and then show to the developing countries

that and how economic growth is possible without GHG-emissions.

Regarding "the technology argument": history shows that technological innovation can only be focused on improvements that are not demanded by consumers or 'the market' by government intervention. In Kyoto the USA has strongly argued and won the debate that governments should not chose technologies, nor implement technology forcing policies and measures, but create a market force to reduce the GHG-emissions: "cap & trade". This was agreed, it is happening in many countries and to now propose "technology programmes" is an insult to all involved and a – very transparent – sham for inaction. "Kyoto" is the lowest-cost technology stimulating approach, which makes the polluter pay! See some winning technologies below under 'Solutions'

Thirdly: globalisation, free trade and another "China argument", continue to influence business conditions in Europe. My visit to China in April and several contacts led me to the conviction that it is the 'national' or self interest of all countries involved to slow the speed of globalisation and organise that the outsourced manufacturing will very soon no longer destruct natural resources and human's social rights. The Millennium Ecosystems Assessment and the new facts on acidification of oceans by CO₂ convincingly show (if you like more politically correct "suggest") that "we" cannot afford to repeat the OECDs dirty path of growth as no further outsourcing and consequent plundering of natural resources is possible. A growing number of experts and politicians in China and other developing countries are aware and desperate, but business-as-usual is still dominant and many of the free riders get rich and will set no new rules. As Kofi Annan repeatedly said "Rich countries have a common interest to help all other countries develop quickly, in a clean way with a fairer distribution of wealth."

This means that corporations should take this responsibility of CSR seriously and if not, be forced to bring only the best available technologies and human resource management practices to all outsourcing and purchasing projects and no longer maximise profits by "slash and burn" and ignorance of side-effects. "Development first" is a good priority, but it must be a sustainable development.

This week the combined oil + CO₂ price exceeded USD 78 per barrel. The WTI oil was traded above USD 61 and CO₂ above euro 29 or USD 35 per ton, which means USD 17 per barrel. And more oil CEOs, analysts and politicians are now admitting that the supply of oil and gas will NOT be "NO PROBLEM until 2030" as they have said for so long.

Dimas to Forge Ahead With CO₂ Emissions Aviation Cap

[Euractiv.com, 25.07.2005] Under plans leaked to the Financial Times, the Commission is to come up with a proposal to include aviation in the EU's emissions trading in the autumn, adding up to €9 to prices of plane tickets.

According to a paper seen by the daily newspaper, the proposal to be put forward by Environment Commissioner Stavros Dimas in the autumn accepts that including aviation in the EU emissions trading scheme could add up to €9 to the price of a return ticket.

"As regards the coverage of flights, the Commission believes that all emissions from any flight departing from the EU should be included," the FT quotes the report as saying. Non-EU airlines would be included in the scheme so as not to penalise European companies, it adds.

The proposal to include aviation in the EU-ETS was due to be approved by the College of Commissioners before the summer break but was taken off the agenda out of concern that it would contradict the Commission's chief objective of reviving Europe's economy.

Some companies in the aviation sector are strongly opposed to the plan, arguing that technological improvements are enough to curb emissions. Others, including British Airways, say that emissions will have to be reduced if the industry does not want to be used as a cash cow to fund non-aviation projects such as development aid.

Air travel is estimated to contribute to about 3.5 percent of climate change linked to human activities, according to a UN panel. This share is expected to grow to 5 per cent by 2050.

=>Link:http://www.euractiv.com/Article?tcaturi=tcu:29-142890-16&type=News&_lang=EN&email=46351

EU Leaders Want to Promote Low Carbon Technologies in China

[Cogen Europe, 25/07/2005] According to a leaked document, the UK Presidency is exploring the possibility of setting up an EU-China Partnership on Climate Change and the Security of Energy Supply, which shall be launched at the EU-China summit on 5 September 2005 in Beijing. The partnership shall "in particular aim to realise the benefits provided by low carbon technologies" and shall meet three main objectives by 2020:

- Develop the technology to move towards zero emissions coal power
- Help China to meet its national goal of halving the energy intensity
- Halve the cost of key sustainable technologies

The European delegation will be headed by the President of the European Council Tony Blair and includes the High Representative Javier Solana and Commission President José Barroso. Among other initiatives, they will try to adopt together with the Chinese leadership an "EU-China Action Plan on Energy Efficiency and Renewable Energies". The measures that are envisaged seem rather vague at this stage and aim primarily to establish closer contacts between both sides. Fields of co-operation for the "use of alternative sources of energy including cogeneration and renewable energies" shall be identified, the document reads. Industry shall be able to contribute to this process by participating at a biennial conference on EU-China energy co-operation.

Read the full document:
<http://www.cogen.org/news.htm>

EU to Push for Legally Binding Global Restrictions on Greenhouse Gas Emissions instead of a Technology-based Pact

[BBC, 28.07.2005] A spokeswoman's comments came after the announcement of a voluntary pact, based on new technology, between the US and five Asia-Pacific states. She also told BBC News that the new pact was unlikely to bring a significant reduction in emissions. The EU's intention to pursue further legally binding reductions could lead to political disputes later this year.

The new pact will allow signed-up countries – currently the United States, Australia, China, India, South Korea and Japan – to set goals for reducing greenhouse gas emissions individually, with no enforcement mechanism. The core approach is to develop clean technologies, such as low-emission coal-fired power stations, which can be used in developing countries as their energy needs increase.

The signatories argue it complements, rather than weakens, the 1997 Kyoto agreement, which imposes targets on industrialised countries to cut their emissions. Speaking at the announcement, which came during the Regional Forum of the Association of South-East Asian Nations (Asean) in Laos, US Deputy Secretary of State, Robert Zoellick, said the six nations "view this as a complement, not an alternative" to Kyoto.

Both the US and Australia have refused to ratify Kyoto, which came into effect earlier this year – partly, they say, because big developing countries like India and China escape emissions limits.

Australian Foreign Minister Alexander Downer told BBC News: "Our view is you really need to focus on technological change to solve the climate change problem... and you do have to involve the major developing countries, which are very substantial emitters." A Chinese spokesman called the pact a "win-win solution" for developing countries.

But environmental groups argue that the new agreement undermines the Kyoto Protocol, and will make the process of agreeing a successor treaty more difficult. The Geneva-based World Wildlife Fund for Nature (WWF) said: "A deal on climate change that doesn't limit pollution is the same as a peace plan that allows guns to be fired."

The European Commission's environment spokeswoman Barbara Helferrich told the BBC News website that Europe remained committed to further legally binding reductions in emissions. "We welcome any initiative that can combat climate change, but this has to be seen in a global context," she said. "If it is simply technology and clean coal, it is no substitute for agreements like the Kyoto Protocol and we do not expect it to have a real impact on climate change. There will have to be binding global agreements, but on what scale and what basis is yet to be decided."

The designated forum for making those decisions is the next round of United Nations climate

negotiations, which opens in Montreal in November – shortly after the Asia-Pacific grouping holds its first meeting in Adelaide. There is concern in environmental circles that the United States and Australia will present the new pact as evidence that a "son-of-Kyoto"-style treaty is not needed. Europe, which for many years has been the leading pro-Kyoto force, is unlikely to agree.

Europe Can Reach a Low Emissions Future

[UNEP EU environment news, Juni 2005] A new report, launched by the European Environment Agency (EEA), sets out a number of scenarios assessing what changes would be needed to ensure a low global emissions future at the lowest cost.

According to the report, more than half of the reductions required in the EU would be based on achievable technologies inside Europe, meaning more efficient electricity and heat generation and use of energy in households, industry, services/agriculture and transport, a switch to low-carbon fuels and increases in renewable energy mainly from wind and biomass. The remaining reductions would be achieved by international emissions trading involving the rest of the world.

http://org.eea.eu.int/documents/newsreleases/ghg_report2005-en

4. TRANSPORT

Study on Domestic Kerosene Taxation

[German Federal Ministry for the Environment, 02.08.2005] A study on the possible introduction of a national kerosene taxation in Germany (of particular importance given the context – on EU level, negotiations on an EU-wide kerosene taxation have come to a halt). The study assesses the potential legal obstacles and finds that there is no one left which hinders a country to introduce a tax on domestic flights.

English version:
<http://www.umweltbundesamt.org/fpdf-l/2905.pdf>

German version:
<http://www.umweltbundesamt.org/fpdf-l/2853.pdf>

Carmakers Set to Miss EU Emissions Goal - Paper

[Planetark.com, 25.07.2005] European carmakers are unlikely to meet their voluntary target for reducing emissions of carbon dioxide, an industry newspaper reported on the 23rd of July, raising the prospect that lawmakers will force them to act. "They will (miss) their target by a little bit," Automotive News quoted an unidentified European Union source as saying. "It's pretty common knowledge within the Commission, but it's politically incorrect to say it."

Eager to head off compulsory steps, the European auto industry promised in 1999 to cut emissions of carbon dioxide (CO₂) - the greenhouse gas linked to global warming - to 140 grams per car per km driven by 2008 and to 120 g/km by 2012, versus 185 g/km in 1995. Their Japanese and Korean counterparts pledged to reach the same level in 2009. But the paper quoted the EU source as predicting European carmakers' CO₂ emissions would be in the range of 145 g/km to 148 g/km in 2008.

A report by the European Commission, the EU's executive, last month said CO₂ emissions from cars fell by 11.8 percent between 1995 and 2003 in the bloc's 15 old member states – not enough to meet voluntary targets. "Major additional efforts will be required in the coming years in order to deliver the target to which the industry has committed itself," the Commission said at the time.

South Korean car producers were lagging behind companies from Europe and Japan in reducing car emissions, it said. Cutting pollution from cars is part of the EU's drive to meet its commitments to combat global warming under the Kyoto treaty on climate change.

Although emissions from new models have decreased, carbon dioxide levels from road transport have risen by 22 percent since 1990 because more people are driving more cars. Passenger vehicles are responsible for half of all emissions.

Carmakers have made progress so far by introducing more fuel-efficient engines and fostering demand for diesel motors, which consume less fuel than petrol engines. But progress has slowed as consumers tend increasingly to buy more powerful cars and

regulations require more safety equipment that adds weight to vehicles.

EU Targets Sport Vehicles in Car Emissions Rules

[*planetark.com, 18.07.2005*] Popular sports utility vehicles (SUVs) in Europe will no longer benefit from a loophole that lets them escape tough emissions standards under draft proposals presented by the European Union's executive on 15th July.

The European Commission put forward the tougher new limits on pollution from new cars for comment from industry and other groups before a formal proposal at the end of this year. The rules, dubbed "Euro 5", could go into force by mid-2008 and are the latest in a series of regulations designed to reduce car emissions that pollute the air and damage human health. The previous Euro 4 rules went into force in January this year.

"Our ideas are ambitious, but realistic. The new emission limits will open the way to cleaner cars," Industry Commissioner Guenter Verheugen said in a statement. "This is good for the health of our citizens and the environment. Industry gets a clear perspective and the time to prepare to produce clean, high quality cars without endangering its competitiveness," he said.

The proposals seek emissions reductions in new cars with diesel and petrol or gasoline engines. Diesel cars would be required to reduce emissions of particulate matter by 80 percent to 5 mg/km compared to the 25 mg/km set in Euro 4, the current rules. Nitrogen oxide (NOX) emissions must be dropped by 20 percent.

In petrol-powered cars, a reduction of 25 percent in NOX and hydrocarbons emissions is foreseen, as well as the introduction of a particulate emission limit. Particulates can cause cancer and cardio-vascular problems, while NOX is blamed for lung disease and contributing to ozone formation, environmentalists say.

SUVs, which are becoming more popular in Europe, have previously been exempt under a rule that gave looser standards to heavy vehicles. The Euro 5 rules stipulate passenger cars that weigh more than 2500 kg may not use "less ambitious" standards for light commercial vehicles, the Commission said. The new standards are applicable to all cars imported into the EU. That means top producers from the United States and

Asia must join European auto giants from countries like Germany and Italy in cleaning up new car emissions.

Industry reacted cautiously on Friday. One automobile industry official, who asked not to be named, said there would not be enough time to adjust to the rules, which would come into force between 18 and 36 months – depending on the car – after formal adoption by the European Parliament and member states.

The Commission expects the rules to go into force by mid 2008 at the earliest. "A lead time of 18 months is definitely not sufficient for the industry," the official said. He also disputed the need to clean up gasoline engines, which he said did not harm the environment.

Environmentalists said the proposals did not go far enough. "Overall it's a very disappointing package," said Jos Dings, director of the European Federation for Transport and Environment. He said the technology was there to make the goals stricter.

Message is Clear: Aviation Must Help Fight Climate Change

[*e5 weekly news No.26, 2.08.2005*] The European Commission took one step closer to including aviation in the EU emissions trading scheme this week as it published the results of a two-month consultation on limiting the sector's impact on climate change.

"The message from the many citizens and organisations who expressed their views is very clear: it is time for the air transport sector to start contributing to the fight against climate change," said Environment Commissioner Stavros Dimas. "And there is an understanding and acceptance that this must happen even if it leads to a modest rise in ticket prices." Aviation's share of overall EU greenhouse gas emissions is rapidly increasing. From 1990 to 2003, EU greenhouse gas emissions from aviation rose by 73 percent. While new technologies may bring significant improvements in the decades to come, these will need to be developed and introduced much faster than at present if they are to match the expected growth in air-traffic.

The public consultation conducted by the Commission has shown broad support for action from the aviation sector itself, as well as NGOs and the public. The Commission has also

published a study showing that it would be feasible to include airlines in the EU emissions trading scheme. It concludes that it would be legally possible to include aviation in the EU ETS provided that all aircraft operators are treated in the same way, regardless of nationality. Over 5,500 individuals and 200 organisations submitted responses to the consultation, with 99.5 percent of respondents agreed that the air transport sector should be included in efforts to mitigate climate change, although opinions differ over how this should be done.

All options from the studies will be considered by the Commission now as it prepares to put forward an EU strategy for tackling emissions from the sector. This strategy is scheduled for after the summer break.

UK Aviation Sector Promises Cleaner Planes

[*GreenBiz.com, 8.07.2005*] The British aviation industry has presented a sustainable aviation strategy with specific targets to reduce the industry's impact on the environment. But green NGOs criticized the plans as not being radical enough.

During its 2005 Green Week, the European Commission organized a one-day stakeholder debate on the need to reduce the impact from increasing air traffic on climate change. The Commission is expected to present a communication with proposed actions in this field in July. One of the elements of the commission's strategy will be the inclusion of the aviation sector into the EU's emissions trading system.

A group of leading U.K. airlines, airports, aerospace manufacturers and air navigation service providers started a campaign on "sustainable aviation" on June 21. With their campaign they are trying to counter arguments that aviation is becoming a major contributor to climate change and environmental pollution, and that growing air traffic in the next years will only worsen this situation. In its report "Sustainable Aviation," the U.K. aerospace sector promises to:

- improve fuel efficiency by 50 percent per seat kilometer
- reduce NOx emissions by 80 percent
- reduce noise by 50 percent (for new airplanes) by 2020

- work towards practical solutions to include the aircraft CO₂ emissions in the EU's emissions trading scheme
- undertake common reporting of total CO₂ emissions and fleet fuel efficiency by end of 2005
- introduce plans for mitigation of noise and traffic congestion around airports

Environmental groups called the sustainable aviation strategy "spin" and "greenwash". They claim that the proposed measures will be undone by the tripling of air travel in the next 30 years. They want more radical policy measures such as large taxes on air travel, imposing VAT on air tickets or ending air port expansions.

The "Sustainable Aviation" report is available for download in PDF format online:

<http://www.sustainableaviation.co.uk/doc/summarydocument.pdf>

Renewables "a Win-Win Solution for the EU"

[*Environment Daily 1907, 24.06.05*] The EU should aim to source 25 percent of its energy from renewables by 2020, the European parliament's industry and energy committee said in a report adopted on the 22nd of June. New studies show Europe can aim even higher than the 20 percent by 2020 target recommended by the full parliament in 2004, it said.

The report calls renewables "exceptionally important", saying they can address simultaneously health, environmental, economic and geopolitical (energy security) challenges. It calls for "more systematic" policies, including "higher incentives" to encourage more renewables, alongside greater energy efficiency.

Incentives for renewables should be harmonised across the EU "in the longer term", it says. The committee's preferred option would be "a single European legislation" on feed-in (fixed tariff) systems, though the report also suggests that quotas or tendering could be alternatives, if "current weaknesses" can be addressed.

If adopted by the full parliament – a vote is expected in September – the report's conclusions will not be binding on the EU. However, the committee's demands do reflect a rising political tide for renewables.

Last year the European Commission warned that the EU was not on track to meet its existing target of a 12 percent share for renewable energy by 2010 and proposed putting off until 2007 any decision on 2020 targets

Renewables report:

<http://www2.europarl.eu.int/oeil/file.jsp?id=5199472>.

Energy Companies Join Greens in Call on Government

[*Friends of the Earth, 29.07.2005*] The British Government has faced pressure from a coalition of energy companies and environmental groups demanding action on climate change. Friends of the Earth and Greenpeace have been joined by the UK Business Council for Sustainable Energy and eight energy companies including United Utilities and British Gas to demand the Government puts its words into action.

The call comes in a joint letter to the Secretaries of State for the Environment, Transport and Trade and Industry. The letter, copied to the Prime Minister, John Prescott and Gordon Brown, urges the Government to take advantage of the current review of the UK Climate Change Programme to embrace the "bold and practical policy framework" required "in order to move to a low-carbon future".

The letter is accompanied by a list of priority areas for action, including:

- Tax measures to encourage moves towards greater energy efficiency.
- An effective cap and trade scheme to encourage industry to reduce emissions.
- Tougher regulations for the built environment.
- Support for a more localised energy generation - to encourage local and micro generation schemes.

Friends of the Earth Executive Director Tony Juniper said: "The Government must take the lead in achieving a low carbon economy. That is the common message now coming from scientists, green groups and even big power companies. All agree that Ministers need to put in place a clear framework for action to bring down our carbon dioxide emissions."

Greenpeace Policy Director Simon Reddy said: "The power sector produces one third of the UK's carbon emissions and even they are calling on Tony Blair to take real action. We're in a climate

crisis, even the utilities see that now, and we need the Prime Minister to get moving on the steps we've outlined today. The action needed requires joined-up government and only the Prime Minister can ensure that happens."

Notes

[1] Copies of the letter, which is signed by Tony Juniper, Executive Director, Friends of the Earth; Stephen Tindale, Executive Director, Greenpeace; Dr John Roberts CBE Chairman, UK Business Council for Sustainable Energy and Chief Executive, United Utilities; Ian Marchant Deputy Chairman UK Business Council for Sustainable Energy and Chief Executive, Scottish and Southern Energy; Charles Berry Executive Director Scottish Power; Mark Clare, Managing Director, British Gas; Andy Duff Chief Executive, RWE npower; Paul Golby Chief Executive, E.ON UK; Vincent de Rivaz Chief Executive, EDF Energy; Nick Winser Chief Executive, National Grid Company; are available from the press office at Friends of the Earth.

Financing Highways in Hungary

[*Zoltán Szabó, Clean Air Action Group, 23.08.2005*] In the past decade, the idea of building new highways has been sold to the citizens by Hungarian politicians as the only way to achieve high GDP growth. It has been presented as essential and indispensable in terms of development policies. Curiously, both sides of the political agenda shared this view.

After years of struggle against unsustainable transport policies, the Clean Air Action Group turned to the Constitutional Court of Hungary in August 2005 for rejecting the latest bright idea of the government on how to finance the construction of hundreds of kilometres of new highways promised to voters. The situation is quite sensitive, since the national budget deficit has been soaring, so the government must find additional sources for its enormously expensive road building plans. Complying with the Maastricht criteria, it is prohibited to raise the budget deficit even further. Thus, the latest scheme involves many complicated accounting tricks so as to appear that the financing does not come from state money.

In its petition to the Constitutional Court, the Clean Air Action Group emphasises that other development policies (such as research and

development, education, IT) would better support the wellbeing of citizens and at the same time not pose a heavy burden on the environment. It is clear that Hungary cannot afford to spend much on road infrastructure, even more so if the long term financial, health and environmental implications of such an unsustainable mode of transport are taken into consideration. By outsourcing the financing to a commercial bank consortium which would issue bonds to raise revenue, the government obviously follows one goal: to make it appear that the national budget is not involved, so the budget deficit does not increase. Nevertheless it remains an open question whether the EU will overlook such dubious accounting.

The petition can be found (in Hungarian) on www.levego.hu

5. EMISSIONS TRADING

Paving the Way for U.S. Emissions Trading

[*ClimateBiz News July 2005*, Jason Margolis] Five years ago, Richard Sandor was a man with a vision: a world in which private companies, universities, and nongovernmental organizations would band together to voluntarily cut greenhouse-gas emissions, making a little money by trading pollution credits along the way. Today, that vision is a reality, in the form of the Chicago Climate Exchange commodities market. But so far, the operative words seem to be "a little money." Will the market pick up steam, or will it languish in the absence of federal emissions regulations?

The Oakland airport seems perfectly situated. Unlike many urban airports, which require an expensive taxi trip or hour-long train ride to reach the city where you thought you'd just arrived, downtown lies mere minutes away. Such convenience is possible because the runways sit on a former wetland at the edge of San Francisco Bay. But this prime location could prove costly.

We're all intimately familiar with the basic global-warming scenario by now: greenhouse gases are warming the atmosphere, polar ice caps are melting, sea levels are rising – and coastal cities like Oakland could lose their shorelines. If global

temperatures rise 4 degrees Fahrenheit by next century, a relatively conservative prediction, Oakland's runways flood. And that's just the start of the city's potential problems: rising seas could cause billions of dollars in property damage, fill groundwater aquifers with salt water, and jeopardize wetland ecosystems.

City officials are not sitting idly by waiting to see if or when such things could happen. In spring 2005, Oakland became the second U.S. municipality to join the Chicago Climate Exchange (CCX) – North America's first and only voluntary, but legally binding, emissions-trading market.

Since trading began in 2003, CCX has grown to include 90 participants. Its members include private companies – Ford Motor Co., IBM, and Motorola, Inc., to name a few – as well as universities, nongovernmental organizations, and the city whose name it bears.

While critics say its voluntary nature and limited goals don't amount to much, members contend it's a refreshing way to get things done in the absence of federal regulation. Oakland's move "is a statement that says everybody has to come to the plate and do something about this," says the city's vice mayor, Jane Brunner, who led the effort to join CCX and hopes it will inspire others to follow. "It's time for the United States to take this issue on."

The exchange was created by Richard Sandor, who serves as its chair and CEO. A former chief economist with the Chicago Board of Trade – w here he became known as the "father of financial futures" – Sandor was named one of Time magazine's "Heroes for the Planet" in 2002 for helping found CCX.

Will the Windy City change the world? The Brooklyn native professes a strong belief in the power and salvation of self-regulation. Even if the hammer of government isn't coming down, he says, the private sector can set standards first.

"Is [the Chicago Climate Exchange] radical?" Sandor asked an audience at the Commonwealth Club in San Francisco this spring. "Yeah, it is, but it isn't ... the New York Stock Exchange started regulating companies in capital markets 150-odd years before the [Securities and Exchange Commission] was created."

This "radical" multi-sector commodities market is based on the relatively straightforward cap-and-

trade concept. There's the cap: an emissions limit imposed on all participants. And there's the trade: anyone who exceeds the cap can buy credits from those under the cap, in order to remain in compliance. Through this system, the overall level of emissions is collectively lowered. (Cap-and-trade systems have been used for years by the U.S. EPA to help combat pollution, and one was recently approved by the agency – to the consternation of many, including a coalition of states filing suit – as a way of dealing with mercury.)

During the pilot phase, which lasts through 2006, each CCX participant must agree to reduce greenhouse-gas emissions 1 percent per year, using their average output from 1998 to 2001 as a baseline. (These aims were established by a consensus of charter members, and Sandor says CCX will update its post-2006 objectives in summer 2005.) Members must monitor their own progress and, accordingly, their need to buy or sell credits; all reports are externally audited.

The 1 percent annual reduction isn't overly impressive to some observers. "The companies might do that without even trying, so there's not a lot at stake financially," says Michelle Manion, a senior analyst with the Union of Concerned Scientists, who calls the goals "insignificant." Manion says UCS declined an invitation to join CCX, because it was already self-imposing more aggressive guidelines.

Manion's argument has some merit. In Oakland, for example, Vice Mayor Brunner didn't bat an eye when asked if the city could meet the 1 percent goal. She says they would've met the goal easily, with or without the motivation of CCX. But Scott Wentworth, an engineer with the city's energy-reduction program, says CCX adds a punch: "What gets measured gets done."

Indeed, in 2003, the only year for which data tabulations are complete, CCX blew past the initial goal, with members managing to cut overall emissions by 9 percent. That's nearly 20 million metric tons of carbon dioxide – the equivalent of Norway cutting its emissions by a third.

CCX participants trade units called Carbon Financial Instruments, or CFIs, that are equal to 100 metric tons of carbon dioxide. Prices fluctuate depending on the number of buyers and sellers; at the time of this writing, the trading price was \$1-\$1.50 per metric ton. So, as an example: Ford Motor Company's baseline is just over 2 million

metric tons of carbon. If Ford had emitted, say, 10 percent more in 2003, it would have cost the company about \$300,000.

That's chump change for a company like Ford – and that, critics say, is a problem. "The [trading] price is not high enough to have an impact on the way people think about carbon dioxide," says economist Geoff Heal of the Columbia Business School. In other words, the penalty for going over the cap isn't harsh. Right now, there are also more sellers than buyers. That's good environmental news – more people come in under the cap than over it – but bad news if you're trying to create a vibrant market.

Across the pond, by contrast, where Kyoto-bound countries are also trading emissions, the European Union's exchange is much stronger, with more than 12,000 industrial plants on board. This spring, a unit of carbon in the E.U.'s "Emission Trading Scheme" was worth about \$18. So, using the same example, if Ford were a Swedish company that had polluted 10 percent more than its baseline, it would cost \$3.6 million to balance out: a tougher pill to swallow. (As it happens, Ford cut its emissions in 2003 by nearly 23 percent.)

At present, a company or organization can't make much money by being under the cap, either. For example, Amtrak beat its emission goal by 26,600 metric tons in 2003. With current prices for carbon credits, that would net the company about \$40,000.

While it may not sound like much, Sandor has faith in the long-term payoff. Ultimately, he says, being a good environmental steward does equate to money in the bank. In the meantime, he and participants say, there are reasons to join beyond immediate financial gain.

Outside observers aren't so sure. "I believe that [CCX] is a helpful institution, but the absence of regulatory action by the federal government greatly reduces the number of parties that would be interested, and motivated to participate," says W. Michael Hanemann, professor of environmental economics at the University of California-Berkeley. "Why would you spend money buying an emissions reduction credit from somebody when you're not under a compulsion to reduce emissions?"

"This is a good practice ground, but it's certainly not a substitute [for federal regulation]," adds

Manion of UCS. "Voluntary programs are never going to be a substitute for strong mandatory reductions that have to be imposed by the government. There's just no way around that."

But Sandor is quick to point out the "first-mover" advantage: companies that have already started monitoring carbon emissions will have a competitive edge, a head start for the day when regulation does come

"It just makes sense to learn about [carbon monitoring] and get good at it," agrees Dorothy Schnure of Vermont-based Green Mountain Power Co. Schnure says GMP joined CCX because, in addition to fitting with the company's values, the market is good preparation in a world moving toward mandatory monitoring

The Bush administration may not be crusading against global warming, but across the country, at least 150 cities and counties are implementing local climate-action plans. And state governments are also stepping in to fill the void, from the regional greenhouse-gas initiative created by nine states in the Northeast to California Gov. Arnold Schwarzenegger's (R) recent announcement of that state's plans for cuts. If regional and local standards take off, says economist Neal, "the Chicago Climate Exchange would acquire a new degree of relevance."

Sandor, for one, relishes the market's pioneering role. Long before the government funded a massive project to put a man on the moon, he points out, there was a 12-second flight in North Carolina. "It's like the Wright brothers," he says. "We want to prove that it can be done."

6. SPECIAL: CLIMATE CHANGE

Katrina Should be A Lesson To US on Global Warming

[*Spiegel-Online, 30.10.2005*] Seems like everything is President Bush's fault. One day after Katrina hammered the Gulf Coast, German commentators are laying into the US for its stubborn attitude to global warming and Kyoto.

Hurricane Katrina is big news for German commentators, whatever their ilk. For some, the powerful storm which slammed the Gulf Coast on Monday, is a symbol of the sort of environmental

terrors awaiting the world thanks to global warming and proof positive that America needs to quickly reverse its policy of playing down climate change. For the more conservative, it is simply another regrettable natural catastrophe.

Regardless of how one views it, Katrina has not only devastated parts of Louisiana and Mississippi and killed dozens, it also has threatened the US and its trading partners with economic instability. The Gulf Coast states refine about 30 percent of America's oil supply and Katrina's damage is threatening to cause already-high oil costs to skyrocket. The fun-loving town of New Orleans, beloved for its moody, French-inspired bars, crooning jazz riffs and free-for-all Mardi Gras spirit, has transformed into a watery ghost town, with 80 percent of the city's 480,000 residents obeying the mayor's call to evacuate. The pictures tell it all: frantic racing through chest-deep water, flooded city streets and uprooted trees. The storm even ripped off a chunk of the roof of the New Orleans Superdome, where close to 10,000 people had run to for cover.

The toughest commentary of the day comes from Germany's Environmental Minister, Jürgen Trittin, a Green Party member, who takes space in the **Frankfurter Rundschau**, a paper friendly with the Social Democrats, to bash US President George W. Bush's environmental laxity. He begins by likening the photos and videos of the hurricane stricken areas to scenes from a Roland Emmerich sci-fi film and insists that global warming and climate change are making it ever more likely that storms and floods will plague America and Europe. "There is only one possible route of action," he writes. "Greenhouse gases have to be radically reduced and it has to happen worldwide. Until now, the US has kept its eyes shut to this emergency. (Americans) make up a mere 4 percent of the population, but are responsible for close to a quarter of emissions." He adds that the average American is responsible for twice as much carbon dioxide as the average European. "The Bush government rejects international climate protection goals by insisting that imposing them would negatively impact the American economy. The American president is closing his eyes to the economic and human costs his land and the world economy are suffering under natural catastrophes like Katrina and because of neglected environmental policies." As such, Trittin also calls for a reworking of the

Kyoto Protocol – dubbing it the uncreative title of "Kyoto 2" – and insisting that the US be included.

Die Tageszeitung also delivers a punchy plea for more attention to global warming, saying politicians should pay more attention to Katrina's alarming images than to election polls and economic forecasts. "Hurricane Katrina has delivered terrible photos. Experts are already calling it the worst hurricane of all time. But this year's hurricane season has only just begun. Flooded villages, mud slides, sandbags.... Scientists are quite calmly saying that we will see this kind of thing more often. After all, this is what they have been forecasting for years -- climate change, human-caused and irreversible. But a change of policy is not in the cards. Politics is trapped between voters and industry lobbyists. And of course, there is the killer argument: Protecting the environment impedes economic growth." This is not how it should be, the paper opines. Indeed, more "pictures from New Orleans should encourage us to follow science's advice on climate protection."

The business daily **Handelsblatt** has a more pragmatic approach to viewing the catastrophe. Instead of harping on the cause of hurricanes and other disasters, it insists that the world should better help those in danger get protection. "People will argue about the causes of climate change for a long time to come," the paper writes. "But its effects are already reality. They are called Katrina, or the flood catastrophes in southern Germany, Romania, Switzerland and Austria.... It's not enough now to just call for measures against climate change. Such policies need decades to take effect. But now we must begin taking different kinds of measures, ones that better protect people affected by extreme weather incidents." The best way to begin, says the paper, is to identify areas of the globe most in danger. In Germany, that includes areas around the Elbe and Donau rivers, while in the Netherlands, much of the nation is under sea level. More needs to be done, says the paper, to prevent building in potentially dangerous areas and to create high water emergency policies. The world, too, needs to help nations like Bangladesh, which doesn't have the means to reduce the risks its people face alone. "All of this will cost time, a lot of money and the eradication of old habits. But only in this way can people be protected and the even-higher costs of post-catastrophe damages be reduced."

The **Financial Times Deutschland** refrains from any commentary about the human costs of the hurricane and focuses on the economic impact it will have on oil supplies. "For the already-strained global energy market, Katrina is a small nightmare: The huge world-wide demand for oil has left producers and workers pushing their limits of capacity. If production platforms and refineries on the Gulf of Mexico have to shut down, the supply holes will not be easy to fill." Even if the current projects of the economic impact of Katrina are exaggerated, one thing is clear, the paper says. In the end, the storm will have proven "the vulnerability of the oil-dependent world economy."

The **Süddeutsche Zeitung** uses its feature page as a defacto editorial by focusing on the hurricane as its theme of the day. Among its articles, it cites a study by US hurricane expert Kerry Emanuel of the Massachusetts Institute of Technology that shows a rising tendency for hurricanes that exactly reflects the curve of greenhouse gases. German scientists from the Max-Planck Institute hail the study as the first proof of a real link. "If this man-made warming continues, we will have to expect stronger storms in future" Emmanuel tells the paper.

Brace for more Katrinas, say experts

[*yahoo, afp, 30.08.2005*] For all its numbing ferocity, Hurricane Katrina will not be a unique event, say scientists, who say that global warming appears to be pumping up the power of big Atlantic storms.

2005 is on track to be the worst-ever year for hurricanes, according to experts measuring ocean temperatures and trade winds -- the two big factors that breed these storms in the Caribbean and tropical North Atlantic.

Earlier this month, Tropical Storm Risk, a London-based consortium of experts, predicted that the region would see 22 tropical storms during the six-month June-November season, the most ever recorded and more than twice the average annual tally since records began in 1851.

Seven of these storms would strike the United States, of which three would be hurricanes, it said.

Already, 2004 and 2003 were exceptional years: they marked the highest two-year totals ever recorded for overall hurricane activity in the

North Atlantic. This increase has also coincided with a big rise in Earth's surface temperature in recent years, driven by greenhouse gases that cause the Sun's heat to be stored in the sea, land and air rather than radiate back out to space.

But experts are cautious, also noting that hurricane numbers seem to undergo swings, over decades. About 90 tropical storms – a term that includes hurricanes and their Asian counterparts, typhoons – occur each year.

The global total seems to be stable, although regional tallies vary a lot, and in particular seem to be influenced by the El Nino weather pattern in the Western Pacific.

"(Atlantic) cyclones have been increasing in numbers since 1995, but one can't say with certainty that there is a link to global warming," says Patrick Galois with the French weather service Meteo-France. "There have been other high-frequency periods for storms, such as in the 1950s and 60s, and it could be that what we are seeing now is simply part of a cycle, with highs and lows."

On the other hand, more and more scientists estimate that global warming, while not necessarily making hurricanes more frequent or likelier to make landfall, is making them more vicious. Hurricanes derive from clusters of thunderstorms over tropical waters that are warmer than 27.2 C (81 C).

A key factor in ferocity is the temperature differential between the sea surface and the air above the storm. The warmer the sea, the bigger the differential and the bigger the potential to "pump up" the storm. Just a tiny increase in surface temperature can have an extraordinary effect, says researcher Kerry Emanuel of the Massachusetts Institute of Technology (MIT).

In a study published in Nature in July, Emanuel found that the destructive power of North Atlantic storms had doubled over the past 30 years, during which the sea-surface temperature rose by only 0.5 C (0.9 F). Emanuel's yardstick is storm duration and windpower: hurricanes lasted longer and packed higher windspeeds than before.

Another factor in destructiveness is flooding. Kevin Trenberth of the US National Center for Atmospheric Research suggests that hurricanes are dumping more rainfall as warmer seas suck more moisture into the air, swelling the stormclouds. The indirect evidence for this is that

water vapour over oceans worldwide has increased by about two percent since 1988. But data is sketchy for precipitation dropped by recent hurricanes.

"The intensity of and rainfalls from hurricanes are probably increasing, even if this increase cannot yet be proven with a formal statistical test," Trenberth wrote in the US journal Science in June. He said computer models "suggest a shift" toward the extreme in in hurricane intensities.

Climate change - a serious business risk for the financial industry

[WWF, 29.06.2005] The financial industry needs to systematically screen climate change risks, according to a new report by Allianz Group and WWF. Allianz, an international financial services provider, marked the publication of the report "Climate Change & the Financial Sector: An Agenda for Action" with a pledge to grow investments in renewable energies by 300 to 500 million euros over the next five years.

The report outlines specific steps for actions to better integrate risks from climate change into the insurance, banking and asset management business.

"Climate change creates significant costs for the financial industry," says Dr Joachim Faber, Allianz AG Board Member and CEO of Allianz's asset management arm, Allianz Global Investors.

"In the interest of our clients and shareholders we are obligated to take these risks into account when making decisions on insurance underwriting, investments or lending credit."

To tackle climate change risks more strategically, Allianz will address the issue at board level and examine carbon risks in banking, asset management and insurance.

"The financial industry plays a pivotal role in helping to mitigate the effects of climate change and steer the world towards clean energy", says Robert Napier, Chief Executive of WWF UK.

"WWF and Allianz want to cooperate further to develop new tools for climate risk assessment, and show how leading financial companies can help manage the transition to a clean energy economy." Allianz has commissioned a "Climate Core Group" headed by Otto Steinmetz, Chief Risk Officer of Dresdner Bank. The banking arm of Allianz Group and its investment bank Dresdner Kleinwort Wasserstein are frontrunners in climate related business areas such as emissions trading.

Allianz as an insurance provider expects that insurance premiums may rise to cover the risks associated with climate change.

"We agree with scientists who say that while natural catastrophes can not be conclusively linked to climate change, the severity and frequency of natural disasters have increased as a result of a changing climate," says Andrew Torrance, CEO of Allianz Cornhill, the UK-based insurance subsidiary.

"For our insurance business, climate change is increasing the potential of property damage at a rate of two to four per cent per year. In some cases this might result in property damage premium rises in some markets as insurers adjust their risk-based insurance cost models to reflect the increasing severity of climate change events." Addressing world leaders who are attending the G8 summit in Scotland in June, Allianz and WWF call for a clearer policy framework to adjust long-term investments and credit lending for banks and investors accordingly.

"As an investor we need greater political and regulatory security, therefore we need a clear policy framework on climate change especially with regard to the post-2012 Emission Trading Scheme allocations," says Joachim Faber.

"Businesses need to play their part but they rely on a stable and clear political direction," says Robert Napier.

"The G8 leaders must come up with a clear plan of action to combat dangerous climate change. They must ensure that the G8 sends a clear signal that emissions will be cut and carbon markets will continue long into the future."

The report: Climates have always been changing. But this time there is one big difference: the changes are

principally man-made. The issue has become urgent because the pace of change is accelerating. clear actions to slow it down...

http://www.wwf.at/downloads/wwf_allianz_climate_change_reportjune2005.pdf

7. GREEN BUDGET REFORM IN SINGLE EUROPEAN COUNTRIES

UK: Company Chiefs Urge Carbon Cuts

[HRH The Prince of Wales' Business and the Environment Programme, Press Release, 27.06.2005] Thirteen of Britain's top company bosses last Friday called for "urgent action" to curb greenhouse gas emissions domestically and internationally. In a letter to Prime Minister Tony Blair, the thirteen supported the government's aim of cutting emissions 60 percent by 2050. They argued that investing in a low-carbon future should be made a strategic objective for "UK plc". The group's members are ABN, AMRO, AWG, BAA, BP, CISCO SYSTEMS, F&C ASSET MANAGEMENT, HSBC, JOHNSON, MATTHEY, SHELL, STANDARD CHARTERED BANK and SUN MYCROSYSTEMS.

See http://www.cpi.cam.ac.uk/bep/downloads/CLG_pressrelease_letter.pdf letter

Germany: Merkel Pledges German Energy Policy Changes

[Environment Daily 1896, 09.06.05] Germany's centre-right opposition leader Angela Merkel has rejected a government target for a 20 percent renewable electricity share by 2020 and backed utility demands for "feed-in" renewable support to be scrapped.

Ms Merkel was speaking on the 8th of June at a conference organised by German electricity industry association VDEW. Polls suggest she will become Germany's next chancellor following elections that could be held as early as this September. According to the CDU politician, it would be "unrealistic to expect that renewables will be able to close the gap that emerges as a result of phasing out nuclear power." She also supported as more "economically viable" a VDEW proposal, issued in detail for the first time at the conference, to replace feed-in tariffs with quotas.

Ms Merkel restated her party's intention to scrap the accelerated closure of existing nuclear power stations. The co-governing Green party accused her of dishonesty, claiming that her real goal was

to open the door to a return to building new nuclear capacity. The CDU leader pledged to retain the government's energy tax programme. She said a CDU government would further reduce subsidies to the coal industry. She promised more favourable terms after 2008 for companies participating in the EU carbon emission trading scheme.

VDEW set out in detail its plan for renewable electricity quotas backed by tradeable certificates for renewable power. It warned that maintaining the current system would add €10bn to the national electricity bill by 2020.

Germany's environment ministry, renewable energy industry and environmentalists all attacked the plan. Environment minister Jürgen Trittin called it a ploy to enable Germany's four largest companies to undermine smaller renewable energy competitors.

See [CDU press release](http://www.cdu.de/index_8405.htm)

Reactions from renewable energy firms: <http://www.bee-ev.de/presse.php?pr=476> and [green group Bund](http://www.bund.net/lab/reddot2/pressemitteilungen_4563.htm) ; http://www.bund.net/lab/reddot2/pressemitteilungen_4563.htm.

Poland and CO₂ Emission

[*UNEP EU environment news, Juni 2005*] The European Commission took a decision on Poland's national allocation plan for CO₂ emission allowances under the EU emissions trading scheme, which will reduce the total volume of allowances by 141.3 million tonnes (16.5 percent) for the period 2005-2007. With more than 1,100 installations in Poland covered by the trading scheme, the Polish plan is the largest among the new Member States and one of the four largest in the EU. The EU emissions trading scheme ensures that greenhouse gas emissions from the energy and industry sectors are cut at least cost to the economy.

<http://europa.eu.int/rapid/pressReleasesAction.do?reference=IP/05/269>

Spain: Economy "Hugely Unsustainable"

[*Environment Daily 1909, 28.06.05*] Spain's model of economic development is environmentally destructive and wastes the

country's energy resources, according to a highly critical report issued by the Spanish sustainability observatory (OSE) last week. The observatory was established by the environment ministry and the University of Alcalá earlier this year.

The first of what will be a series of annual reports uses 55 indicators to identify where efforts to decouple economic growth from resource use and environmental impact are failing. The findings indicate that Spain's recent strong economic growth (25 percent in the last 10 years) has come at significant environmental cost.

Primary energy consumption and greenhouse gas emissions have soared by 35 percent and 45 percent respectively since 1990. Energy intensity rose 0.5 percent annually in 1990-2000, while in the rest of the EU-15 countries it fell by 12 percent. Urban sprawl grew by 25 percent from 1990-2000 – twice the EU-15 rate.

Heavy dependence on tourism and construction to fuel economic development, allied with low investment in education, research and development have been major factors in promoting unsustainability, the report states. The only positive trends identified were significant growth in renewable energy, organic agriculture and protected areas.

* In related developments, the Spanish industry ministry last week announced plans to penalise excessive domestic electricity consumption and finance minister Pedro Solbes said one day before he was studying ways to get road users to "internalise the environmental costs of fuel consumption".

Follow-up: See Spanish environment ministry press release

http://194.224.130.163/prensa/informacion/notas_pre/2005/06/21junPresentacionInformeSostenibilidadNOTA.pdf

and the Spanish sustainability observatory <http://www.sostenibilidad-es.org/>

Latvia: Natural Resources Tax

[*The Ministry of Environment of the Republic of Latvia, 16.06.2005*] New taxes are to be implemented in Latvia as announced by the Latvia's environment ministry. The new laws will reinforce those in force since 1996. They concern electrical and electronic equipment such as the interdiction of various subsidies and a change and increase of natural resources taxes.

<http://www.varam.gov.lv/varam/NOT/prese/english/050616a.htm>

Polish Renewable Energy Law Draws Opposition

[*Environment Daily 1930, 24.08.05*] Poland's economic ministry has made public a draft regulation concerning purchase of energy from renewable sources. The regulation has reignited a long-running controversy between the energy and timber/paper industries over whether timber should be reserved for material use or whether there should be official encouragement for it to be burned for energy.

Following a definition in the regulation, energy producers will still be able to use timber, as well as plants like willow grown especially for energy production, to meet quotas of energy obtained from renewable sources.

Poland's timber and paper industries object, the daily "Rzeczpospolita" reports, because increased timber use by energy industry has raised its price on the market. The newspaper reported an industry group Association of Polish Papermakers was considering complaining to the European Commission, alleging "misinterpretation" of the EU's 2001 renewable energy directive.

An environment ministry official told the newspaper the definition would stay because "there is a bigger supply than demand in the timber market, therefore part of it can be used for energy production". This seems to contradict the government's document "Poland's Energy Policy until 2025" that discourages using timber for energy purposes so as not to cause its shortages for main timber industries.

Follow-up: See the draft regulation

http://www.mgip.gov.pl/NR/rdonlyres/7A61E019-C161-48AF-97F6-BF011DFA807D/12334/ROZE2005projektdouzkodnie_n1.doc,

and Rzeczpospolita article

http://www.rzeczpospolita.pl/gazeta/wydanie_050819/prawo/prawo_a_1.html.

UK: HSBC Bank Sets Ambitious Reduction Targets for Air Emissions, Waste

[*GreenBiz, 26.07.2005*] HSBC has, for the first time, set group-wide targets for reducing its

impact on the environment. The world's second largest bank will cut its CO₂ emissions by an average of 5 percent, water and energy by 7 percent and landfill waste by 8 percent, across 90 percent of its operations by the end of 2007.

Most of the savings will be achieved over the next three years by the introduction of new, efficient technologies during upgrades to the bank's 10,700-strong property portfolio, and improvements to individual regions' environmental maintenance and management programs. The targets follow a series of initiatives introduced by the world's local bank to reduce the impacts of its operations across the world, and to support its customers in doing the same.

In December 2004, HSBC became the first major bank to commit to going carbon neutral by reducing energy use, buying green electricity and offsetting the remaining CO₂ emissions by investing in carbon credit or allowance projects. It has since published a freshwater sector guideline governing its project finance activities in the freshwater infrastructure arena. The guideline – the second lending directive launched by HSBC – sets out principles for good management to which prospective clients working in the sector should adhere

Stephen Green, HSBC Group chief executive, announced the new environmental targets, saying: "We all have an obligation to help reduce our impact on the environment, including the impact resulting from the use and operation of our buildings. In particular, reducing energy use and hence our carbon dioxide emissions will help the group in its commitment to be the world's first carbon neutral major bank."

8. GREEN BUDGET REFORM WORLDWIDE

Tony Blair: G8 Agreement on Climate Change is "Something to be Proud of"

[*Note of the British Embassy, Berlin, 8 July 2005*] Leaders of the Group of Eight (G8) countries and key emerging economies (Brazil, China, India, Mexico and South Africa) on the 8th of July agreed an important step forward on tackling global climate change at the G8 Summit in Gleneagles. The G8 communiqué and the

statement by the five issued that day will help set the scene for future negotiations under the UNFCCC.

Tony Blair, UK Prime Minister and chair of the summit said in a statement: "We came here also to acknowledge our duty to be responsible stewards of the global environment. We do not hide the disagreements of the past, but we have agreed a process with a plan of action that will initiate a new dialogue between the G8 countries and the emerging economies of the world, to slow down and then in time to reverse the rise in harmful greenhouse gas emissions. And this dialogue will begin on 1 November with a meeting here in Britain."

Leaders agreed that climate change is happening now, that human activity is contributing to it, and that it could affect every part of the globe. They also agreed to continue our dialogue beyond Gleneagles reporting to the Japanese G8 Summit in 2008. The communiqué talks of a "moment of opportunity."

The communiqué is accompanied by an action plan to exploit cleaner technologies which meet energy needs and safeguard the climate: not just in the G8 but working in partnership with the major emerging economies too. It features measures to reduce energy use and increase efficiency; promote cleaner power generation via cleaner fossil fuels and renewable energies; and measures to secure financing for these actions.

Further information: G8 Presidency website: <http://www.g8.gov.uk>

Japan Squeezes to Get the Most of Costly Fuel

[INS net news update, 06.06.2005] Surging oil prices and growing concerns about meeting targets to cut greenhouse gases produced by burning fossil fuels have revived efforts around the world to improve energy efficiency. But perhaps nowhere is the interest greater than here in Japan.

Even though Japan is already among the most frugal countries in the world, the government recently introduced a national campaign, urging the Japanese to replace their older appliances and buy hybrid vehicles, all part of a patriotic effort to save energy and fight global warming. And big companies are jumping on the bandwagon,

counting on the moves to increase sales of their latest models.

On the Matsushita appliance showroom floor these days, the numbers scream not the low, low yen prices, but the low, low kilowatt-hours. A vacuum-insulated refrigerator, which comes with a buzzer if the door stays open more than 30 seconds, boasts that it will use 160 kilowatt-hours a year, one-eighth of that needed by standard models a decade ago. An air-conditioner with a robotic dust filter cleaner proclaims it uses 884 kilowatt-hours, less than half of what decade-old ones consumed.

"It's like squeezing a dry towel" for the last few drips, said Katsumi Tomita, an environmental planner for the Matsushita Electric Industrial Company, maker of the Panasonic brand and known for its attention to energy efficiency. "The honest feeling of Japanese people is, 'How can we do more?'"

A number of other affluent countries with few domestic energy resources of their own are responding in similar ways. In Germany, where heating accounts for the largest share of home energy use, a new energy saving law has as its standard the "seven-liter house," designed to use just seven liters of oil to heat one square meter for a year, about one-third the amount consumed by a house built in 1973, before the first oil price shock. Three-liter houses – even one-liter designs – are now being built.

In Singapore, where year-round air-conditioning often accounts for 60 percent of a building's power bill, new codes are encouraging the use of things like heat-blocking window films and hookups to neighborhood cooling systems, where water is chilled overnight. In Hong Kong, many more buildings now have "intelligent" elevator systems in which computers minimize unnecessary stops. Parking restrictions encourage bus and rail transit, and authorities are also pushing hybrid cars equipped with engines that shut down when idling.

Other countries, including the United States, the world's largest energy consumer by far, have lagged behind, but even American consumers are starting to turn their backs on big sport utility vehicles and looking at more fuel-efficient cars in response to higher gasoline prices. But Japan is where energy consciousness probably reaches the highest levels. The country has the world's second-largest economy, but it produces virtually

no oil or gas, importing 96 percent of its energy needs.

This dependence on imports has prodded the nation into tremendous achievements in improved efficiency. France and Germany, where government crusades against global warming have become increasingly loud, expend almost 50 percent more energy to produce the equivalent of \$1 in economic activity. Britain's energy use, on the same measure, is nearly double; the United States nearly triple; and China almost eight times as much.

From 1973 to 2005, Japan's industrial sector nearly tripled its output, but kept its energy consumption roughly flat. To produce the same industrial output as Japan, China consumes 11.5 times the energy. At JFE Holdings, Japan's second-largest steel company, plastic pellets made from recycled bottles now account for 10 percent of fuel in the main blast furnaces, reducing reliance on imported coal. Japanese paper mills are investing heavily in boilers that can be fueled by waste paper, wood and plastic. Within two years, half of the electricity used in the nation's paper mills is to come from burning waste.

Many easy steps were taken after the oil shocks of the 1970's. Now Japan is embarking on a new phase. Billions of dollars are being invested to reach a 2012 target of reducing Japan's emission of global warming gases to 6 percent below the 1990 level. These gases are released by burning oil, coal, and, to a lesser extent, natural gas - sources for about 81 percent of Japan's energy.

As host nation for the Kyoto Protocol on cutting greenhouse gases, Japan takes its commitment seriously. But it faces a big challenge. Figures released last month show Japan was 8.3 percent over the 1990 level for the fiscal year ended March 2004. "We are now at the stage where we only save energy by investing in equipment," Mr. Tomita said of Matsushita's effort. "If we can collect money in three years, we invest."

With the Japanese Prime Minister, Junichiro Koizumi, introducing its national campaign in April 2005 to meet the Kyoto targets, business is booming for energy service companies and consultants who advise companies on cutting energy bills. But Japan's flattening of industrial energy consumption has not been matched in the transportation and residential sectors, where energy consumption has more than doubled since

1973, roughly pacing Japan's economic growth over the period.

Japan may be a mass transit nation, but now there is also a car for almost every Japanese household. Since 1970, the number of buses in Japan increased 23 percent, the number of trucks doubled, and the number of passenger cars increased more than sixfold, to 56 million. With personal use accounting for the bulk of April's \$6.4 billion bill for imported oil, Tokyo is trying to encourage greater efficiency by pushing fuel taxes even higher, lifting the pump price for gasoline to \$4.70 a gallon, the highest in a decade.

During the 1990's, Japan's average fuel consumption per mile fell 13 percent. But since then, with more Japanese driving bigger cars, fuel efficiency growth has stalled. Japan finds hope in the history of its refrigerators, which have doubled in size since 1981 as their energy use per liter has plunged 80 percent.

In hopes of working the same engineering magic on cars, Japan has extended its minicar tax breaks to hybrid cars - fuel-efficient vehicles that rely on a combination of a gasoline engine and an electric motor. Hybrid sales, while still relatively low in Japan, are growing fast. And in this environment, Toyota and Honda have become the world leaders in hybrid technology.

"We're entering the age of hybrid automobiles," Hiroyuki Watanabe, Toyota's senior managing director for environmental affairs, recently told journalists at the 2005 World Exposition Aichi, in Nagoya. "I want every car to have a hybrid engine."

The next energy-savings battleground is the home front. After \$1.3 billion in subsidies, about 160,000 homes have solar power systems. Solar power remains two to three times as expensive as the electricity supplied to households. But homeowners say that with time, the "free" electricity pays for the high installation costs. And the government is willing to devote taxes to the effort, preferring to spur rural employment through solar power installations to help reduce payments for foreign oil, coal and gas. Although residential subsidies may be phased out, a Japanese government plan calls for increasing solar-power generation 15-fold during this decade.

Japanese companies, notably Sharp, Kyocera, Mitsubishi and Sanyo, produce about half the world's photovoltaic solar panels, a roughly \$10-

billion-a-year market. With large commercial projects like a 4,740-panel generator going online at a filtration plant in Nara last month, Japan produces more than the combined total of the next biggest, Germany and the United States.

Prime Minister Koizumi is a political conservative who believes that saving oil starts at home. Visitors to his official residence here walk past a boxy hydrogen fuel-cell generator, a prototype installed by Matsushita in April to power the residence and educate the nation's leadership.

"Fuel cells are the key to the door of a new era in which we utilize hydrogen as an energy source," Mr. Koizumi told Parliament in 2002. "We intend to put them into practical use within three years, either as power sources for automobiles or households."

His government has set goals for cutting power consumption even further for the four main household appliances: televisions, 17 percent; personal computers, 30 percent; air-conditioners, 36 percent; and refrigerators, 72 percent. Engineers have been attacking the problem of the power used by appliances on standby, a drainage that can account for 5 percent to 10 percent of a household's energy consumption.

Still, while energy efficiency is seen as a patriotic act, many consumers in Japan are reluctant to part with working appliances, made with the Japanese ingenuity and attention to detail that ensure they will last for decades. "The problem we are facing is over how much we induce consumers to trade in their appliances for more energy-efficient ones," Hajimi Sasaki, chairman of the NEC Corporation, a major appliance maker, said in April at a news conference billed as "Proposals Aimed at Overcoming Global Warming."

"I drive a hybrid car, and last fall I put heat-cutting film on some of our windows," he said. "And I intend to buy a new refrigerator."

Evangelical Leaders Swing Influence Behind Effort to Combat Global Warming

[Laurie Goodstein, *Süddeutsche Zeitung/New York Times*, 11.04.2005] A core group of influential evangelical leaders has put its considerable political power behind a cause that has barely registered on the evangelical agenda, fighting global warming.

These church leaders, scientists, writers and heads of international aid agencies argue that global warming is an urgent threat, a cause of poverty and a Christian issue because the Bible mandates stewardship of God's creation.

The Rev. Rich Cizik, vice president of governmental affairs for the National Association of Evangelicals and a significant voice in the debate, said, "I don't think God is going to ask us how he created the earth, but he will ask us what we did with what he created." The association has scheduled two meetings on Capitol Hill and in the Washington suburbs, where more than 100 leaders will discuss issuing a statement on global warming. The meetings are considered so pivotal that Senator Joseph I. Lieberman, Democrat of Connecticut, and officials of the Bush administration, who are on opposite sides on how to address global warming, will speak.

People on all sides of the debate say that if evangelical leaders take a stand, they could change the political dynamics on global warming.

The administration has refused to join the international Kyoto treaty and opposes mandatory emission controls.

The issue has failed to gain much traction in the Republican-controlled Congress. An overwhelming majority of evangelicals are Republicans, and about four out of five evangelicals voted for President Bush last year, according to the Pew Research Center.

The Rev. Ted Haggard, president of the National Association of Evangelicals, an umbrella group of 51 church denominations, said he had become passionate about global warming because of his experience scuba diving and observing the effects of rising ocean temperatures and pollution on coral reefs.

"The question is, will evangelicals make a difference, and the answer is, the Senate thinks so," Mr. Haggard said. "We do represent 30 million people, and we can mobilize them if we have to."

In October 2004 the association paved the way for broad-based advocacy on the environment when it adopted "For the Health of the Nation: An Evangelical Call to Civic Responsibility," a platform that included a plank on "creation care" that many evangelical leaders say was unprecedented.

"Because clean air, pure water and adequate resources are crucial to public health and civic order," the statement said, "government has an obligation to protect its citizens from the effects of environmental degradation.

"Nearly 100 evangelical leaders have signed the statement. But it is far from certain that a more focused statement on climate change would elicit a similar response.

In recent years, however, whenever the association latched onto a new issue, Washington paid attention, on questions like religious persecution, violence in Sudan, AIDS in Africa and sex trafficking of young girls.

Environmentalists said they would welcome the evangelicals as allies. "They have good friendships in places where the rest of the environmental community doesn't," Larry J. Schweiger, president and chief executive of the National Wildlife Federation, said. "For instance, in legislative districts where there's a very conservative lawmaker who might not be predisposed to pay attention to what environmental groups might say, but may pay attention to what the local faith community is saying."

It is not as if the evangelical and environmental groups are collaborating, because the wedge between them remains deep, Mr. Cizik said. He added that evangelicals had long been uncomfortable with what they perceived to be the environmentalists' support for government regulation, population control and, if they are not entirely secular, new-age approaches to religion.

Over the last three years, evangelical leaders like Mr. Cizik have begun to reconsider their silence on environmental questions. Some evangelicals have spoken out, but not many. Among them is the Rev. Jim Ball of the Evangelical Environmental Network, who in 2002 began a "What Would Jesus Drive?" campaign and drove a hybrid vehicle across the country.

Mr. Cizik said that Mr. Ball "dragged" him to a conference on climate change in 2002 in Oxford, England. Among the speakers were evangelical scientists, including Sir John Houghton, a retired Oxford professor of atmospheric physics who was on the Intergovernmental Panel on Climate Change, a committee that issued international reports.

Sir John said in an interview that he had told the group that science and faith together provided proof that climate change should be a Christian concern. Mr. Cizik said he had a "conversion" on climate change so profound in Oxford that he likened it to an "altar call," when nonbelievers accept Jesus as their savior. Mr. Cizik recently bought a Toyota Prius, a hybrid vehicle.

Mr. Cizik and Mr. Ball then asked Sir John to speak at a small meeting of evangelical leaders in June in Maryland called by the Evangelical Environmental Network, the National Association of Evangelicals and Christianity Today, the magazine. The leaders read Scripture and said they were moved by three watermen who caught crabs in Chesapeake Bay and said their faith had made them into environmentalists.

Those leaders produced a "covenant" in which 29 committed to "engage the evangelical community" on climate change and to produce a "consensus statement" within a year. Soon, Christianity Today ran an editorial endorsing a bill sponsored by Senator John McCain, Republican of Arizona, along with Mr. Lieberman, that would include binding curbs on heat-trapping gases. Mr. Ball said the strongest moral argument he made to fellow evangelicals was that climate change would have disproportionate effects on the poorest regions in the world. Hurricanes, droughts and floods are widely expected to intensify as a result of climate change.

Evangelical leaders of relief and development organizations had been very receptive, he said. "Christ said, 'What you do to the least of these you do to me,'" Mr. Ball said. "And so caring for the poor by reducing the threat of global warming is caring for Jesus Christ."

Among those speaking at the two meetings are Sir John and Dr. Mack McFarland, environmental manager for DuPont, who is to describe how his company has greatly reduced emissions of heat-trapping gases.

Such an approach appeals to evangelicals, Mr. Haggard said, adding, "We want to be pro-business environmentalists." Mr. Cizik said he was among many evangelicals who would support some regulation on heat-trapping gases.

"We're not adverse to government-mandated prohibitions on behavioral sin such as abortion," he said. "We try to restrict it. So why, if we're social tinkering to protect the sanctity of human

life, ought we not be for a little tinkering to protect the environment?"

Mr. Lieberman added: "Support from the evangelical and broader religious community can really move some people in Congress who feel some sense of moral responsibility but haven't quite settled on an exact policy response yet. This could be pivotal."

Feeling the Heat

[Süddeutsche Zeitung/New York Times Editorial, June 14, 2005] President Bush seems increasingly isolated as he continues to run from issue of global warming; says warming issue is gaining traction at home and abroad, inspired partly by his incorrigible stubbornness.

President Bush has been running from the issue of global warming for four years, but the walls are closing in. Scientists throughout the world are telling him that the rise in atmospheric temperature justifies aggressive action. Arnold Schwarzenegger and other prominent Republicans are telling him to get off the dime. His corporate allies are deserting him. And the Senate is inching closer to endorsing a mandatory cap on greenhouse gas emissions.

A result is that Mr. Bush seems increasingly isolated and his rhetoric of denial increasingly irrational. Recently, a whistleblower asserted that a senior White House official, formerly an oil lobbyist, had changed scientific reports to minimise the climate problem. The official, Philip Cooney, resigned on June, 10, although the White House insisted that embarrassing disclosures had nothing to do with his departure. Whatever the truth, this was hardly the first time Bush officials manipulated the truth for political ends.

Out in the real world, hardly anyone denies the importance of the issue anymore. In early June, Mr Schwarzenegger pledged to slow, stop and ultimately reverse California's greenhouse gas emissions by enquiring big improvements in automobile efficiency and pushing for energy sources other than fossil fuels. "The debate is over," the governor said. "We know the science, we see the threat, and we know the time for action is now."

As if on cue, the National Academy of Sciences and 10 of its counterparts around the world declared that the science of global warming is

clear enough to warrant prompt reductions on greenhouse gases. Mainstream scientists have long accepted the link between warming and human activity. What made this statement exceptional was its tone and its timing, coming a month before Mr. Bush and other leaders from the Group of 8 industrialized nations are to meet in Gleneagles, Scotland, where Prime Minister Tony Blair will put climate change near the top of the agenda.

As things stand now, Mr. Bush will be going to that meeting empty-handed despite Mr. Blair's efforts to make him take the issue more seriously. What is clear is that the warming issue is gaining traction at home and abroad, inspired partly by Mr. Bush's incorrigible stubbornness.

"The Swiss Climate Penny: An Innovative Approach to Transport Sector Emissions"

[Policy-solutions.com, July 2005] Under a voluntary agreement with the Government, the Swiss private sector proposes to launch an innovative Climate Penny Fund. Oil importers agree to contribute CHF 0.01-0.02 for each liter of gasoline and diesel sold. The measure will generate at least CHF 70 million annually to finance climate protection projects domestically and abroad, enabling Switzerland to eliminate the anticipated transport sector compliance gap and to fulfill its greenhouse gas emission reduction obligations. At reasonable cost, the Climate Penny buys time to implement transport sector policies, develop low-emission technologies/infrastructure and facilitate behavioral changes, while still delivering real, measurable and long-term climate mitigation results.

=> <http://www.policy-solutions.com/publicat.htm>

Cement CO₂ Protocol

[GreenBiz, 01.07.2005] Under the umbrella of WBCSD's Cement Sustainability Initiative, a number of leading cement companies agreed on a methodology for calculating and reporting CO₂ emissions: the Cement CO₂ Protocol. This revised edition of the Cement CO₂ Protocol, published in July 2005, incorporates changes based on extensive practical application of the protocol by many cement companies worldwide

The protocol is intended as a tool for cement companies worldwide, providing a harmonized

methodology for calculating CO₂ emissions, with a view to reporting these emissions for various purposes. It addresses all direct and the main indirect sources of CO₂ emissions related to the cement manufacturing process in absolute as well as specific or unit-based terms.

The protocol comprises two main elements: the guidance document, and an Excel spreadsheet. The spreadsheet is designed as a practical tool to help cement companies prepare their CO₂ inventories. The purpose of the guidance document is to explain the structure and rationale of the spreadsheet, and to provide calculation and reporting instructions.

<http://www.wbcsdcement.org/pdf/co2-protocol.pdf>

Combined Heat and Power Project Analysis Model

[*GreenBiz*, 01.07.2005] This software model helps users evaluate the energy production, life-cycle costs, and greenhouse gas emissions reduction for combined heat and power projects. The model evaluates both renewable and non-renewable fuels, including landfill gas, biomass, biodiesel, hydrogen, natural gas, oil/diesel, and coal. In addition, these fuels can be analyzed using multiple types of power, heating, and/or cooling equipment working under various operating conditions (base load, intermediate load and/or peak load). Available in 21 languages, the model also accounts for emerging rules under the Kyoto Protocol (including the Clean Development Mechanism (CDM), Joint Implementation (JI) and emissions trading).

U.S. Business and Climate Change: Siding with the Market?

[*ClimateBiz News* July 2005] When the U.K. assumed the Presidency of the G8 in January, Tony Blair announced that his focus would be on two of the world's biggest challenges: climate change and conditions in Africa. Much of the agenda at the July summit of G8 leaders will focus on these two daunting issues.

President Bush, for his part, will face continually mounting pressure from his colleagues in the G8 to take more substantive action on climate change. The U.S. stands alone as being the only member of the G8 which has not ratified the Kyoto Protocol. To many, this reflects what is perceived

as a lack of interest from both our government and our citizenry. But dwindling support for his policies at home, and the administration's renewed interest in patching up relationships with Europe, may push Bush to go further than we could have expected just a few months ago.

Meanwhile, action in the U.S. on climate change is occurring on other fronts – in state legislative bodies, at publicly traded corporations, and among institutional investors. Developments which occurred in early May are indicative of the American approach to climate change with a focus on voluntary action and the market rather than regulation. They signal momentum in the private sector to move the U.S. from laggard to leader on climate change action.

On May 9, General Electric (GE), the fifth largest U.S. company, announced Ecomagination, a core business initiative to bring new environmental technologies to market. By 2010, GE will double its investment in clean technology research (to \$1.5 billion annually), and double revenues from environmental products it manufactures (to \$20 billion). Ecomagination focuses on renewable sources of energy and on products which make energy production and consumption more efficient, as well as those which make clean water more available.

This announcement follows many other individual corporate actions to bring climate change action to market. For example, the country's largest financial institutions – Citigroup, Bank of America, and J.P. Morgan Chase – now all have lending policies which build greenhouse gas emissions and climate change risk into credit evaluations and criteria for loans. Ford is following Toyota's very successful introduction of hybrid vehicles by introducing more hybrid models into its product offering sooner than previously planned. And DuPont has committed to a 25 percent share of its revenues by 2010 to come from non-depletable sources, which means in part moving away from fossil-fuel based (and greenhouse gas generating) products. Yet GE's announcement stands out for the magnitude of the commitment to shift its product mix to those which support environmental improvement.

Complementary to the GE initiative, and coming the day after GE's announcement, leading institutional investors met at the United Nations in New York for a summit on climate risk. At the summit, a group of 26 fund managers,

representing over \$3 trillion in assets, released a ten-point plan identifying specific actions that U.S. companies, Wall Street firms, and the U.S. Securities and Exchange Commission should take to disclose and address financial risks associated with climate change. It also includes specific commitments by the signatories to lead by example.

Again, this announcement is not an isolated event, but rather a milestone in a movement. In November 2003 the Investor Network on Climate Change was launched at the first Climate Risk Summit. Since then investor momentum – and concern – has grown. In 2005, more than 30 shareholder resolutions addressing climate change risk were filed at U.S. companies (up from 22 in 2004). Twelve companies have agreed with the filers to report on the risks and the company's plans to address them and the resolutions have been withdrawn.

While it is unlikely that any of the remaining resolutions will garner a majority of votes, growing support for them sends a message to corporate leaders – climate change is a business issue which must be addressed.

SustainAbility's 2003 report, "The 21st Century NGO," includes a graph which identifies the stages in an issue's life cycle, and the activities which define each stage. In the Emergence phase, local activists and networks are the first to get involved, followed by international NGOs and U.N. agencies in the Expansion phase. Mainstream media attention marks the Extension phase, which is also when public figures (though few politicians) become active. This is also when commitments and action from leadership companies emerge. Finally, in the Embedding phase, politicians and regulators take action to respond to societal concerns and drive broad implementation

Climate change is now in the Embedding phase. The decision U.S. companies must make is whether to be driven by the regulators or to drive the market themselves.

FACTBOX - Reaction to Six-Nation Climate Pact

[Planetark.com 29.07.2005] The United States is leading a six-nation pact to combat global warming, but critics said it offered no targets and would undermine existing treaties such as the

Kyoto Protocol, which many nations have already ratified.

Following are quotes from officials and environmentalists on the pact. In addition to the United States, signatories to the Asia-Pacific Partnership on Clean Development and Climate are China, India, Japan, Australia and South Korea.

AUSTRALIAN PRIME MINISTER JOHN HOWARD:

"This is an historic agreement for the cause of reducing greenhouse gas emissions. The fairness and effectiveness of this proposal will be superior to the Kyoto Protocol. It demonstrates the very strong commitment of Australia to reducing greenhouse gas emissions according to an understanding that it's fair in Australia and not something that will destroy Australian jobs and unfairly penalise Australian industries."

U.N. ENVIRONMENT PROGRAMME EXECUTIVE DIRECTOR KLAUS TOEPFER:

"It is important to mention that this new initiative is not a substitute for the Kyoto Protocol, its legally binding emission reductions and its various flexible mechanisms. We also urgently need more investment in climate-vulnerable developing countries to help them adapt to the climate change that is already underway."

STEVE SAWYER, CLIMATE POLICY EXPERT AT GREENPEACE:

"It doesn't have anything to do with reducing emissions. There are no targets, no cuts, no monitoring of emissions, nothing binding," he said. "It's a technology transfer and trade agreement and if it results in the better distribution of some of the better technology then that can help," he said, but added the pact was not a credible alternative to Kyoto.

ROBERT ZOELICK, US DEPUTY SECRETARY OF STATE:

"We are not detracting from Kyoto in any way at all. We are complementing it. Our goal is to complement other treaties with practical solutions to problems."

JAVIER SOLANA, EUROPEAN UNION FOREIGN POLICY CHIEF:

"It has nothing to do with other, much bigger initiatives, which are of a global nature. This doesn't have an application to be global."

CHINESE MINISTRY OF FOREIGN AFFAIRS STATEMENT:

"This pact has no power for legal restrictions. It is a complement to the Kyoto treaty, not a replacement. We hope countries signing the pact will take effective measures, strengthen technological research and development, exchange and expand cooperation and forge a new path for effectively fighting climate change and continuing economic growth."

CATHERINE FITZPATRICK, GREENPEACE ENERGY CAMPAIGNER

"All the evidence around the world shows that voluntary schemes don't work, which is one of the reasons that the Kyoto protocol became a legally binding treaty. I think it's a tragedy that we have the Australian government and the US government doing whatever they can to undermine international action on climate change."

CLIVE HAMILTON, DIRECTOR OF THE AUSTRALIA INSTITUTE RESEARCH CENTRE

"The main beneficiaries will be Australian coal companies, some of the world's biggest greenhouse polluters. It's a Machiavellian pact."

ALEXANDER DOWNER, AUSTRALIAN FOREIGN MINISTER

"The key to solving these problems is going to be technology. Cleaner technologies, making those technologies work better, making those technologies more economic. These things are going to be a lot more effective over time than just political declarations."

CHO HAN-JIN, SOUTH KOREAN ENVIRONMENT MINISTRY OFFICIAL

"We plan to increase the number of countries in the pact by the end of the year. We aim to announce a charter along with the partners by the

end of this year with details on technology areas where cooperation is needed."

AMIT KUMAR SINGHAL, INDIAN ENVIRONMENT MINISTRY OFFICIAL

"There is nothing secret about in this partnership. India is a member of the Kyoto Protocol under which we are not (legally) bound to reduce emission of greenhouse gases. Yes, under this new pact we have no target dates to cut emissions."

LEE SANG-HUN, OF THE KOREAN FEDERATION FOR THE ENVIRONMENTAL MOVEMENT

"Efforts to form the new pact raise the possibility of hurting the basic framework already agreed, which is the Kyoto Protocol and could be controversial."

PHIL GOFF, NEW ZEALAND FOREIGN MINISTER

"How to deal with the problem of flatulent cows and sheep? That is a tougher problem because the science has to be found to enable us to do that."

Climate pact: For good or bad?

[BBC, 28.07.2005] On the surface, there's no conflict between the new Asia-Pacific Partnership for Clean Development and Climate and the United Nations process which led to the Kyoto Protocol. So said Australia's Environment Minister Ian Campbell on 27th July; so said US Deputy Secretary of State Robert Zoellick as he unveiled the pact in the Laotian capital, Vientiane.

But as the principal architects of this new agreement, the US and Australia would say that, wouldn't they?

Support has come, though, from other quarters, including Britain's environment minister Elliot Morley, who said: "I very much welcome the fact that we are seeing co-operation between some countries which are not signatories to Kyoto; I believe that all countries should sign up to Kyoto, but the fact that people are working together... I think that's a welcome step forward. The issue is whether those European governments have enough solidarity to make tough decisions when their own positions may be rather weak "

In public at least, G8 leaders can say little else.

The final communiqué from the G8 summit held in Scotland earlier this month made clear that clean technologies, and the transfer of these technologies to developing countries, would be key to controlling the rise in global greenhouse gas emissions – so, agreements like the Asia-Pacific deal can be seen simply as a route to achieving the Kyoto goals.

Why, then, are environmental groups so down on the pact – and are they right?

"We should recognise this as a serious attempt to come up with something which is needed if the major developing nations are to be engaged," commented climate change specialist Jacqueline Karas, from Chatham House, the Royal Institute of International Affairs in London, to the BBC News website.

"The US has succeeded in engaging with three major developing economies in an effort to ensure they don't have to follow the same polluting path that industrialised countries followed in their development. But I think at the same time it is fair to say it's a serious attempt by the US to deflect attention away from their own profligate emissions - to look at technology for tomorrow rather than at cuts for today - and it may also be timed to attempt to undermine negotiations in Montreal."

In Montreal, at the end of November, delegates from nearly 200 nations will convene to try and work out a path beyond the Kyoto Protocol. The European Union believes such a treaty must include mandatory, binding cuts in greenhouse gas emissions.

"[The Asia-Pacific pact] is no substitute for agreements like the Kyoto Protocol and we do not expect it to have a real impact on climate change," the European Commission's environment spokeswoman Barbara Helferrich told BBC News. "There will have to be binding global agreements, but on what scale and what basis is yet to be decided."

This vision is the polar opposite of what's included in the Asia-Pacific agreement, which is entirely voluntary, entirely technology-based, with no binding targets for reducing emissions, no sanctions, no mechanisms, and as yet no funding.

"What is different and what is disturbing about this initiative is the attempt to organise a bloc of developing countries, including China and India,

around what's officially a complementary approach but which could be converted into an opposing bloc," Philip Clapp, president of the political lobby group the National Environmental Trust in Washington DC, said.

Looking ahead to the Montreal negotiations, he said: "I certainly wouldn't put it past the Bush administration to try to weaken Europe's position; and within Europe now, there are clearly questions, for example, about how Berlusconi's government will behave, what the French will do.

"The issue is whether those European governments have enough solidarity to make tough decisions when their own positions may be rather weak. It is good what the US is doing now, but it's all about technology in 30 years' time; whereas the EU is focussed on this monstrous overload of emissions today said Jacqueline Karas, Royal Institute of International Affairs. According to Jacqueline Karas, the European Union will have to tread softly at the Montreal meeting. "They're going to have to be careful not to set themselves up against the US in an either/or situation - if they do that they will be undermining themselves," she said. "And with developing countries there is a need for both approaches. It is good what the US is doing now, but it's all about technology in 30 years' time; whereas the EU is focussed on this monstrous overload of emissions today, but doesn't have a good record in pioneering the clean technology that will be needed in future."

There is also criticism of the new pact on the grounds that it is... well, not new at all.

"There really isn't much new here - it's just the Bush administration merely repackaging initiatives it already has under way with a large group of these countries," said Philip Clapp.

Nevertheless, for developing countries seeking a way forward beyond the Kyoto Protocol, it may prove a rather attractive package with its shiny paper of guaranteed economic growth and its ribbons of exciting new technology - perhaps more enticing than the European offering of mandatory targets and sanctions. The question remains, though, whether the attractive exterior hides a gift or a gun for the world's climate.

Warming Hits 'Tipping Point'

[The Guardian, 11.08.2005] It's a frozen peat bog the size of France and Germany combined,

contains billions of tonnes of greenhouse gas and, for the first time since the ice age, it is melting. A vast expanse of western Siberia is undergoing an unprecedented thaw that could dramatically increase the rate of global warming, climate scientists warn these days.

Researchers who have recently returned from the region found that an area of permafrost spanning a million square kilometres – the size of France and Germany combined – has started to melt for the first time since it formed 11,000 years ago at the end of the last ice age. The area, which covers the entire sub-Arctic region of western Siberia, is the world's largest frozen peat bog and scientists fear that as it thaws, it will release billions of tonnes of methane, a greenhouse gas 20 times more potent than carbon dioxide, into the atmosphere.

It is a scenario climate scientists have feared since first identifying "tipping points" – delicate thresholds where a slight rise in the Earth's temperature can cause a dramatic change in the environment that itself triggers a far greater increase in global temperatures. The discovery was made by Sergei Kirpotin at Tomsk State University in western Siberia and Judith Marquand at Oxford University and is reported in *New Scientist* on 12th August. The researchers found that what was until recently a barren expanse of frozen peat is turning into a broken landscape of mud and lakes, some more than a kilometre across.

Dr Kirpotin told the magazine the situation was an "ecological landslide that is probably irreversible and is undoubtedly connected to climatic warming". He added that the thaw had probably begun in the past three or four years. Climate scientists one day before reacted with alarm to the finding, and warned that predictions of future global temperatures would have to be revised upwards.

"When you start messing around with these natural systems, you can end up in situations where it's unstoppable. There are no brakes you can apply," said David Viner, a senior scientist at the Climatic Research Unit at the University of East Anglia. "This is a big deal because you can't put the permafrost back once it's gone. The causal effect is human activity and it will ramp up temperatures even more than our emissions are doing."

In its last major report in 2001, the intergovernmental panel on climate change

predicted a rise in global temperatures of 1.4C-5.8C between 1990 and 2100, but the estimate only takes account of global warming driven by known greenhouse gas emissions. "These positive feedbacks with landmasses weren't known about then. They had no idea how much they would add to global warming," said Dr Viner.

Western Siberia is heating up faster than anywhere else in the world, having experienced a rise of some 3C in the past 40 years. Scientists are particularly concerned about the permafrost, because as it thaws, it reveals bare ground which warms up more quickly than ice and snow, and so accelerates the rate at which the permafrost thaws.

Siberia's peat bogs have been producing methane since they formed at the end of the last ice age, but most of the gas had been trapped in the permafrost. According to Larry Smith, a hydrologist at the University of California, Los Angeles, the west Siberian peat bog could hold some 70bn tonnes of methane, a quarter of all of the methane stored in the ground around the world.

The permafrost is likely to take many decades at least to thaw, so the methane locked within it will not be released into the atmosphere in one burst, said Stephen Sitch, a climate scientist at the Met Office's Hadley Centre in Exeter. But calculations by Dr Sitch and his colleagues show that even if methane seeped from the permafrost over the next 100 years, it would add around 700m tonnes of carbon into the atmosphere each year, roughly the same amount that is released annually from the world's wetlands and agriculture. It would effectively double atmospheric levels of the gas, leading to a 10 percent to 25 percent increase in global warming, he said.

Tony Juniper, director of Friends of the Earth, said the finding was a stark message to politicians to take concerted action on climate change. "We knew at some point we'd get these feedbacks happening that exacerbate global warming, but this could lead to a massive injection of greenhouse gases. If we don't take action very soon, we could unleash runaway global warming that will be beyond our control and it will lead to social, economic and environmental devastation worldwide," he said. "There's still time to take action, but not much. The assumption has been that we wouldn't see these kinds of changes until the world is a little warmer, but this suggests we're running out of time."

In May this year, another group of researchers reported signs that global warming was damaging the permafrost. Katey Walter of the University of Alaska, Fairbanks, told a meeting of the Arctic Research Consortium of the US that her team had found methane hotspots in eastern Siberia. At the hotspots, methane was bubbling to the surface of the permafrost so quickly that it was preventing the surface from freezing over.

Last month, some of the world's worst air polluters, including the US and Australia, announced a partnership to cut greenhouse gas emissions through the use of new technologies.

The deal came after Tony Blair struggled at the G8 summit to get the US president, George Bush, to commit to any concerted action on climate change and has been heavily criticised for setting no targets for reductions in greenhouse gas emissions.

China Signs Up for Aussie Clean Coal

[The Australian, 02.08.2005] Beijing's "green" credentials for the 2008 Olympics could be boosted by revolutionary Australian technology to clean coal.

Sydney company UCC Energy has signed an arrangement with Datang International Power to use its technology for a power station which is hoped to be operating before the Olympics. But it is unlikely the new product will be used to reduce emissions in the Australian electricity industry any time soon. UCC Energy's managing director, John Langley, said on 3rd August that ultra-clean coal, which was developed in a joint venture with CSIRO, could reduce greenhouse gas emissions from processing high-value coals by 10 percent to 20 percent.

If it were used as power-station fuel, the emissions from coal-fired stations – which account for about 83 per cent of Australia's greenhouse gas emissions – could be cut by 25 percent to 30 percent. At Cessnock in the NSW Hunter Valley, UCC Energy, which is ultimately owned by the publicly listed Felix Resources, has commercialised the CSIRO-developed ultra-clean process, which uses chemicals to reduce mineral impurities in coal to less than 0.2 percent. CSIRO, which has patented the process, receives an undisclosed royalty on commercial sales of the process.

Mr Langley said UCC produced a fuel so pure that it could be fired directly into high-efficiency gas turbines. This could form the basis for substantial reductions in greenhouse gases in the power industry. UCC is working with the world's biggest producer of gas turbines, Mitsubishi Heavy Industries, to modify high temperature gas turbines to use UCC fuel. Mitsubishi has been involved in the development of the process since 1998. "What we have is coal that is processed to remove impurities which then can be turned into briquettes for shipment or for direct feed into power stations," Mr Langley said. "We've already sent bulk tonnages of the product to Japan where it has tested very well. We've also processed four different coals from China and demonstrated the process can work just as well on their high-quality coals as ours." Mr Langley said he expected that once Mitsubishi had decided on suitable modifications to turbine blades, fuel injectors and igniters, a test program would take between 12 and 18 months.

The turbine technology would then be available for Datang to incorporate into a power station using UCC fuel. Mr Langley said that while energy was used to process the coal, UCC Energy's calculations showed that the final product covered both its higher production cost and greenhouse emissions. He said the ultra-clean coal would compete with natural gas. This coal, he said, could be supplied to Japan for \$US3.30 to \$US3.60 a gigajoule compared with \$US4.50 to \$US5.00 a gigajoule for gas.

Mr Langley said the process was suitable only for high-quality coals, which meant it could be used on black coals from NSW and Queensland. But the power generation industries in both states, which are effectively government-owned, were not interested. "It seems they just don't want to be involved in developing technology that will reduce greenhouse emissions from coal," Mr Langley said.

9. READERS' GUIDE AND IMPRINT

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