

E-news update September 18 2006

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POLICY

- 1.1. Swiss push polluter tax in fight vs climate change

15 September 2006, Reuters

Switzerland on Friday pushed for an international tax on greenhouse gases to help poor countries cope with droughts, floods and storms caused by global warming.

Swiss President Moritz Leuenberger told Reuters at an environment conference that a tax on greenhouse gas emissions could provide funds to help developing countries to deal with the impact of climate change.

The proposal is expected to be discussed at the November international conference on climate change in Nairobi sponsored by the United Nations.

"One idea is to have an international CO2 tax that would be paid into an international fund," Leuenberger said. "The burning issue at this meeting was the adaptation policy and dealing with the direct effects of damages."

CO2 gases, mainly from burning fossil fuels, are widely blamed for pushing up temperatures that could bring more powerful storms and raise world sea levels. Developing countries could face more droughts and food supplies could be undermined.

In Switzerland, glaciers are covered with white plastic to slow melting, while the Netherlands is building higher dams to prevent flooding, Leuenberger said.

The developing countries want to know who will pay for their adaptation policies, he added.

Jennifer Morgan, director of global climate change programme at the WWF, welcomed the CO2 international tax initiative. "This would be a positive sign that governments had realised the need to raise serious money to deal with climate change," she said.

"Finding new funding mechanisms is a positive part of moving forward and the polluter pays approach is welcome," she added.

November's conference in Nairobi is expected to focus on how to provide aid for developing countries so that they can cope with the consequences of climate change.

An adaptation fund was established in 2001 as part of the Kyoto protocol to finance adaptation projects and programmes in developing countries that are part of Kyoto.

The fund is financed by proceeds from clean development mechanism (CDM) project activities.

But Kenya's Environment Minister Kivutha Kibwana said CDM projects had not been implemented evenly and that there were very few in Africa. He added that the regional distribution of the CDM activities would be addressed in Nairobi.

One of the key issues at Nairobi will be who administers the money in this fund and how it is spent, Morgan said.

"In Nairobi, we will need to find a way forward that is both equitable and effective," she added.

1.2. ASEM seeks synergies between energy security and climate issues

7 September 2006, EU Presidency

"The ASEM 6 Declaration on Climate Change that was approved today by the leaders of nearly 40 Asian and European countries is important in many respects", said Minister of the Environment Jan-Erik Enestam when commenting on the ASEM 6 meeting results at the International Energy Audit Conference, which started today in Lahti.

Enestam welcomes the fact that the ASEM climate declaration seeks to find synergies between energy policy goals and actions on addressing climate change, reducing air pollution and improving the global environment, while also contributing to sustainable development.

"We also need concrete tools and actions to better exploit these synergies.

This is exactly where your theme of energy auditing, energy efficiency and renewables comes in, because you offer practical means for stimulating investment in clean energy and development," said Enestam in his welcoming address to the Energy Audit06 Conference.

"I believe this declaration can have a far-reaching effect on numerous climate change actions in the future. The leaders are committed to cooperating further to advance the constructive dialogue initiated in Montreal last year. This is a healthy and strong foundation for the meeting of the parties to the UN Climate Convention in Nairobi in November," stresses Enestam.

Enestam reminded the conference participants that the just closed ASEM meeting, while highly important, was one event among many other summits during the Finnish EU Presidency where climate issues are high on the agenda. "Throughout all these meetings, it will be important to ensure consistency between energy and climate issues, in order to move to a low-carbon future," emphasizes Enestam.

He will discuss the same issues as covered in the ASEM climate declaration on 14-15 September in Switzerland, where a preparatory meeting for the Nairobi Climate Conference will take place.

The link for the Asia-European Meeting (ASEM) summit declaration on Climate Change:

http://www.asem6.fi/news_and_documents/en_GB/1157981028054/.

1.3. UK-China climate change working group launched

13 September 2006, UK government press release

An agreement to establish a UK-China climate change working group was signed today by Environment Secretary David Miliband and the Chinese Minister for National Development and Reform Commission Ma Kai.

The working group will enable progress to be made on key issues. It will help feed into and shape discussions and activities under the Gleneagles Dialogue, the EU-China Partnership on Climate Change and the United Nations Framework Convention on Climate Change.

Welcoming the new working group, Mr Miliband said:

"One of the UK's key international climate change objectives is to collaborate with major emerging economies such as China to accelerate progress towards our long-term goal of moving towards a global low carbon economy and put in place an effective international framework to tackle climate change.

" We must support a shift in investment over the next 20 years to a low-carbon pathway. The near-zero emission coal demonstration project goes to the heart of our mutual interests both in energy security and climate security."

Among the issues to be discussed by the working group are:

Scientific collaboration on climate change through phase two of the joint study on impacts and adaptation on Chinese agriculture, which runs until 2008.

Policy and market-mechanisms for promoting energy efficiency through the Renewable Energy and Efficiency Partnership (REEEP)

Policy dialogue on possible forms of long-term cooperative action on climate change, including the proposal raised at the Gleneagles Summit last year by China and other major emerging economies for a "new paradigm" for international technology cooperation.

The economics of climate change, including in due course discussions on the publication of the Stern Review into the international economics of climate change.

Development of the EU-China cooperation on near-zero Emissions power generation technology through carbon capture and storage, based on the ongoing work of the near-zero emissions coal initiative signed with China last year.

UK China Sustainable Development Dialogue Mr Miliband also announced his support for the UK-China Sustainable Development Dialogue ahead of the first Ministerial meeting planned for October, which will be attended by the Environment and Climate Change Minister Ian Pearson.

Defra is supporting a package of initiatives focusing on the Sustainable Consumption and Production and urban development themes.

New initiatives include:

Sustainable Consumption and Production, focusing on taking forward specific proposals emerging from the joint UK China working group on SCP, involving pilot projects, training and capacity buildings on issues affecting the environmental impacts of electronic products (eg computers, televisions, mobile phones), the textiles product chain and the public procurement and sustainable trade sectors.

Capacity building activities on Sustainable Industrial Development - including incorporating sustainable development as a core focus for the UK-China Chemicals working group.

Establishment of a joint working group on Forestry - with a view to exchange good practice on integrated sustainable forest management, including forest landscape restoration, the role of forest certification and how to tackle illegal logging.

1.4. Upcoming Launch of Joint Implementation

12 September 2006, UNFCCC

The Joint Implementation Supervisory Committee (JISC) after only 8 months of work (Feb-Sep) has reached the stage of completing the necessary procedures and modalities for formally launching the JI Track 2 process. In the upcoming Fourth Meeting of the JISC, on 13-15 September, it will take up the remaining JI project submission formats and guidance documents, as well as the JI accreditation procedures and application forms, all of which are required to allow JI Track 2 to become operational.

It is anticipated that shortly after the completion of the work of JISC 4, the JI Track 2 process will be formally launched. The secretariat will be in a position to receive notifications from independent entities of proposed JI projects to be made publicly available with a view to receiving comments from Parties, stakeholders and UNFCCC accredited observers. Following the required 30 day period for public comments, and subsequent due account of comments, the JISC will receive from independent entities the first determination reports of JI projects for their approval.

Further information on the Fourth Meeting of the Joint Implementation Supervisory Committee is at www.unfccc.org.

ENERGY AND EMISSIONS

2.1. The Commission has unveiled concrete plans to manage its portion of ITER

http://ec.europa.eu/research/headlines/news/article_06_09_13_en.html

The European Commission has published its blueprint for the Joint Undertaking, popularly known as 'Fusion for Energy', the proposed entity to manage Europe's obligations to the international ITER fusion energy project. It is expected it to be in operation by mid-2007. Under the ITER agreement, Europe is responsible for approximately half of the high-technology components required to build the fusion reactor.

The new Joint Undertaking will work with industry and research organisations to produce the needed parts for the reactor. It will consist of a governing board, composed of the members of the Joint Undertaking, i.e. EURATOM, EU Member States and other associated countries. Regular day-to-day activities will be the responsibility of the Director, to be named at a later date.

"Building upon the success of the integrated Euratom fusion research programme, the Joint Undertaking will be a dynamic new organisation that will play a leading role in the construction of

ITER and enhance Europe's role in the technological development of fusion energy," Commissioner Potočník said recently in a statement.

The undertaking will be responsible primarily for managing the EU's financial contribution to the ITER project. As part of long and complicated negotiations ensuring construction of the ITER site within Europe (in Cadarache, France), the EU has agreed to shoulder about half of the construction costs of the project. The current estimate of the cost for the thirty-year project is set at €10 billion. With a price tag like that, it is second only to the International Space Station as the most expensive international scientific undertaking. The reactor is expected to be up and running by 2016.

The stated objectives for 'Fusion for Energy' are, among other things, to oversee preparation of the ITER site in Cadarache, to arrange for European industry to manufacture the components that Europe has agreed to provide, to prepare for the exploitation of ITER, i.e., for scientists to carry out experiments with it.

The Joint Undertaking will also contribute to the implementation of the "Broader Approach", an agreement between the EU and Japan aimed at collaboration to accelerate the development of fusion energy. In addition, the Joint Undertaking will prepare in the future a programme of activities for the future development of DEMO, a demonstration reactor expected to come after the construction of ITER.

Cadarache, located near Lyon, was chosen as a candidate site for ITER for several reasons. It is already the home of world's largest super-conducting fusion experiment, Tore-Supra at the CEA Cadarache Research Centre, one of the biggest civil nuclear research centres in Europe. Therefore, the Cadarache site has existing technical support facilities and expertise, which significantly reduces the risks associated with the construction of a project such as ITER.

The ITER consortium countries represent over one-half of the world's population; perhaps a telling indicator of the perceived potential fusion has as the energy source of the future. Fusion does indeed have many attractive qualities. The raw materials required as fuel for a fusion reaction - deuterium and lithium - occur naturally in almost limitless quantities. In the proposed fusion reaction, there is a small amount of fuel that is only able to sustain a reaction for about a minute, therefore, there is also no possibility of a runaway chain reaction leading to a meltdown, as experienced at the Chernobyl nuclear fission reactor. Also, in contrast to the burning of fossil fuels, a fusion reaction releases no 'greenhouse' gases into the atmosphere, so it does not contribute to global warming.

2.2. World's leading companies lack plan on climate change

18 September 2006, The Independent London

Most of the world's 500 biggest companies have no programme in place, with explicit targets, to reduce their emissions of greenhouse gases, despite mounting evidence that the earth is heading towards environmental catastrophe.

The most comprehensive study of the environmental behaviour of the world's biggest corporations, by the Carbon Disclosure Project (CDP), found that emissions from these businesses are rising at an alarming rate and most are not acting to tackle the issue.

Among the worst performers in the research, which rates companies on a scoring system, were Pepsi, the soft drinks giant, Nintendo, the computer gaming group, and the financial services giant American Express. Among the 33 British companies, the company doing the least, by far, to address the issue is BAE Systems, the arms manufacturer that employs thousands of people in this country.

CDP is an international coalition of institutional investors, which together manage assets worth \$31.5 trillion. It includes the likes of Aberdeen Asset Management, Hermes Investment Management and HSBC in the UK. The research, which examines companies in the FT500 global index, is based on the extent to which businesses are aware of climate change issues and how much they are doing to reduce their emissions of harmful greenhouse gases, rather than which companies have the greatest absolute level of emissions.

Of the 500 biggest companies in the world, 360 provided information to the CDP and although 87 per cent of them recognised climate change as a key risk, 52 per cent of these businesses had no targets to reduce their emissions.

2.3. World Bank's clean energy plan sells climate and poor people short

17 September 2006, Bank Information Center/Friends of the Earth International/ Institute for Policy Studies/ International Rivers Network/Oil Change International

The World Bank's promise to seriously support alternative energy sources remains unfulfilled, according to a new report published today to coincide with the World Bank's Sept. 19-20 annual meeting.

The report is available at <http://www.foe.org/camps/intl/EnergyReportDraft091406.pdf>.

The report, published by international environment and development organizations, concludes that the World Bank's new Investment Framework on Clean Energy and Development will not be effective at combating climate change and expanding energy access for the poor.

The World Bank's Investment Framework presented in Singapore today proposes raising \$10 billion for conventional energy technologies, while selling renewable sources of energy short. The World Bank Investment Framework is a response to a mandate from the G-8 summit in Gleneagles in 2005. It aims to increase access to energy in developing countries, reduce greenhouse gas emissions in the energy sector, and assist developing countries to adapt to climate change.

Instead of combating climate change, the World Bank Investment Framework promotes coal-fired power, nuclear power and large hydropower projects.

The World Bank also proposes setting up a new \$10 billion fund to bring down the costs of conventional energy technologies that have lower greenhouse gas emissions. Yet a continued focus on fossil fuel technologies will neither bring about the required shift to a carbon-free development path, nor bring energy services to the 1.6 billion people who have no access to modern energy and often live far away from electric grids.

As they launch their critique of the World Bank's Investment Framework in Singapore, environment and development organizations call on governments and financial institutions to take the following steps:

End public subsidies for fossil fuel projects;

Step up efforts to meet the basic energy needs of the poor; and

Redirect existing dirty energy financing to renewable technologies and energy efficiency projects via a new Renewable Energy for Development Agency.

Supporting statements:

"Poor communities in developing countries are already paying the highest price of climate change, living with the impacts of heavy droughts and floods", said Pantoro Tri Kuswar of Friends of the Earth Indonesia/WALHI. "The World Bank's focus on fossil fuel projects will not bring electricity to the poor. Instead, the Bank's proposals will lead to more pollution, conflict and corruption and do little to stop climate change."

"In continuing to lend for fossil fuel and dam projects, the World Bank has consistently missed the social and environmental double dividend that renewable energy technologies could bring", said Peter Bosshard of International Rivers Network. "The Bank's continued support for fossil fuel projects will sell poor people and the climate short."

"If the World Bank wants to be a positive force in the fight against climate change then the first step is to stop subsidizing the expansion of the oil industry," said Graham Saul of Oil Change International.

"You can't actively subsidize fossil fuels and effectively fight climate change at the same time. It's a disgrace that public institutions like the World Bank are using aid money to prop up oil companies that are already the most profitable companies in the world."

"As long as the World Bank hides the staggering greenhouse gas emissions in its portfolio, while profiting from commissions on carbon credits, its carbon trading schemes are nothing but a shell game," said Daphne Wysham of the Institute for Policy Studies.

"Being dominated by Northern polluters, the World Bank is an inappropriate institution to lead global efforts to combat climate change", said Bruce Jenkins of the Bank Information Center. "Rich countries should channel any additional resources for energy sector development through a new Renewable Energy for Development Agency."

2.4. Energy Commissioner Piebalgs presents a car that can drive 2,885 Km on one litre of fuel

14 September 2006

Energy Commissioner Piebalgs will unveil today the "Microjoule", an ethanol-powered vehicle engineered by French students. This prototype was the winner of the European Shell Eco-marathon last May, and is capable of driving around 2,885 km on the equivalent of 1 litre of fuel. The winner of the Shell Eco-Marathon will be unveiled one week before the adoption of the Commission's Action Plan on Energy Efficiency, which is scheduled for 20 September. "This project illustrates the important role that transport can play in reaching 20% savings of Europe's energy by 2020, the main objective of the

action plan", said Commissioner Piebalgs. The presentation of the "Microjoule" will take place at 12h30 in the Piazza of the European Commission's Berlaymont building.

"Microjoule" is an ethanol-powered vehicle engineered by students from the Lycee La Joliverie, from St Sebastien/Loire in France. It weighs 30kg has a length of 3m, a maximum width of 0,7m and a maximum height of 0,5m. It won the 2006 European Shell Eco-marathon, a race consisting in driving as long as possible with the lowest quantity of fuel. The "Microjoule" averaged 2,885 km using the equivalent of 1 litre of fuel, in the latest race that took place in Nogaro (southern France) on 19 May 2006.

Energy efficiency in the transport sector is going to be one of the issues covered by the Energy Efficiency Action Plan that the Commission intends to present on 20 September. The Energy Efficiency Action Plan presents an operational framework of policies and measures capable of realising the energy savings potential that exists in the EU. This potential is now estimated to be more than 20% of annual primary energy consumption. The plan will set forth coherent, cost-effective initiatives to be launched in the coming six years. These actions are designed to produce lasting market, institutional, technical and behavioural change, leading to significant improvements in energy efficiency.

CLIMATE IMPACTS

3.1. Massive surge in disappearance of Arctic sea ice sparks global warning

15 September 2006, The Independent

The melting of the sea ice in the Arctic, the clearest sign so far of global warming, has taken a sudden and enormous leap forward, in one of the most ominous developments yet in the onset of climate change.

Two separate studies by Nasa, using different satellite monitoring technologies, both show a great surge in the disappearance of Arctic ice cover in the last two years.

One, from the Jet Propulsion Laboratory in California, shows that Arctic perennial sea ice, which normally survives the summer melt season and remains year-round, shrank by 14 per cent in just 12 months between 2004 and 2005.

The overall decrease in the ice cover was 720,000 sq km (280,000 sq miles) - an area almost the size of Turkey, gone in a single year.

The other study, from the Goddard Space Flight Centre, in Maryland, shows that the perennial ice melting rate, which has averaged 0.15 per cent a year since satellite observations began in 1979, has suddenly accelerated hugely. In the past two winters the rate has increased to six per cent a year - that is, it has got more than 30 times faster.

The changes are alarming scientists and environmentalists, because they far exceed the rate at which supercomputer models of climate change predict the Arctic ice will melt under the influence of global warming - which is rapid enough.

If climate change is not checked, the Arctic ice will all be gone by 2070, and people will be able to sail to the North Pole. But if these new rates of melting are maintained, the Arctic ice will all be gone decades before that.

The implications are colossal. It will mean extinction in the wild - in the lifetime of children alive today - for one of the world's most majestic creatures, the polar bear, which needs the ice to hunt seals.

It means the possibility of a lethal "feedback" mechanism speeding up global warming, because the dark surface of the open Arctic ocean will absorb the sun's heat, rather than reflect it as the ice cover does now - and so the world will get even hotter.

But most of all, the new developments add to the growing concern that climate change as a process is starting to happen much faster than scientists considered it would, even five years ago when the UN's Intergovernmental Panel on Climate Change published its last report.

"These are the latest in a long series of recent studies, all telling us that climate change is faster and nastier than we thought," said Tom Burke, a former government green adviser and now a visiting professor at Imperial College London. "An abyss is opening up between the speed at which the climate is changing and the speed at which governments are responding.

"We must stop thinking that this is just another environmental problem, to be dealt with when time and resources allow, and realise that this is an increasingly urgent threat to our security and prosperity."

Yesterday, Jim Hansen, the leading climatologist and director of the Goddard Institute for Space Studies, in New York, issued a now-or-never warning to governments around the world, including his

own, telling them they must take radical action to avert a planetary environmental catastrophe. He said it was no longer viable for nations to adopt a "business as usual" stance on fossil-fuel consumption.

"I think we have a very brief window of opportunity to deal with climate change ... no longer than a decade, at the most," he said.

Early in his first term, President George Bush pulled the US out of the Kyoto Treaty that is meant to bind nations to lower emissions of warming gases. However, opinion in the US is starting to change, as evidenced by the huge success of the documentary on climate change, *An Inconvenient Truth*, narrated by the former US vice-president Senator Al Gore.

The two Nasa Arctic studies, released simultaneously, break fresh ground in dealing with the perennial, or "multi-winter" ice, rather than the "seasonal" ice at the edge of the icefield, which melts every summer.

Concern about the melting rate has hitherto focused on the seasonal ice, whose summer disappearance and retreat from the landmasses of Arctic Canada and Siberia is increasingly obvious. In September 2005, it retreated to the lowest level recorded. Such rapid shrinkage of the perennial ice has not been shown before. "It is alarming," said Joey Camiso, who led the Goddard study. "We've witnessed sea ice reduction at 6 per cent per year over just the last two winters, most likely a result of warming due to greenhouse gases."

Dr Son Nghiem, who led the team which carried out the Jet Propulsion Laboratory study, said that in previous years there had been some variability in the extent of perennial Arctic ice. "But it is much smaller and regional," he said. "However, the change we see between 2004 and 2005 is enormous." Britain's Professor Julian Dowdeswell, the director of the Scott Polar Research Institute in Cambridge, agreed the changes shown in the American studies were "huge", adding: "It remains to be seen whether the rate of change is maintained in future years."

The melting of the Arctic ice will not itself contribute to global sea-level rise, as the ice floating in the sea is already displacing its own mass in the water. When the ice cube melts in your gin and tonic, the liquid in your glass does not rise.

There are great volumes of land-based ice - the ice sheets of Greenland and Antarctica, and mountain glaciers - which are subject to exactly the same temperature rises as the Arctic ice, and which have also started to melt. They will add to sea levels. The West Antarctic Ice Sheet would, if it were to collapse, raise sea levels around the world by 16ft (5m), submerging large parts of Bangladesh and Egypt - and London.

3.2. Minister says Hungary to be hit hard by climate change

14 September 2006, CaboodleNews

Global climate change will impact Hungary more than other countries of the European Union because it lies in a basin, environment minister Miklós Persányi said at a conference organized by the Society of Hungarian Environmentalists (Magyar Természetvédők Szövetsége) in Budapest today.

The negative effects will appear mainly in the distribution of precipitation. Persányi said that changes in the country's climate can already be witnessed, as extreme weather events are becoming more frequent. He mentioned this summer's heatwave, record floods and the August 20 storm as examples. Persányi stressed that the country not only has to lessen its emissions of greenhouse gases, and plant more forests capable of absorbing carbon dioxide, but also prepare for the economic and social effects of climate change.

Kálmán Katona, chairman of the parliamentary committee for environment protection, said that 40% of the resources involving climate change have to be spent on adapting to the new circumstances. Half of the remaining resources should be devoted to energy-saving technologies and practices, and the other half to supporting new sources of energy that can replace those that create greenhouse gases.

The resources involved will be provided by the New Hungary Development Plan (Új Magyarország Fejlesztési Terv) and the National Regional Development Program (Nemzeti Vidékfejlesztési Program), Persányi said. He added that another important tool in fighting climate change is economic reform, as smaller energy subsidies encourage energy conservation.

The minister said that the European Union has undertaken the task of cutting emissions of greenhouse gases by 8% between 1990 and 2012. It has been calculated that 0.5 to 2% of Hungary's yearly GDP is needed to accomplish this goal.

