

The International Institute for Sustainable Development (iisd) presents

CLIMATE-L NEWS

ISSUE 20

February 18 to March 12, 2004

Compiled by Richard Sherman <rsherman@iisd.org>

Edited by Kimo Goree <kimo@iisd.org>

Published by the International Institute for Sustainable Development (IISD) <<http://www.iisd.org>>

Distributed exclusively to the CLIMATE-L <<http://iisd.ca/scripts/lyris.pl?join=climate-l>>
list by IISD Reporting Services <<http://www.iisd.ca>>

Editor's note: Welcome to the twentieth issue of CLIMATE-L News, compiled by Richard Sherman <rsherman@iisd.org>. If you should come across a news article or have a submission for the next issue, please send it directly to Richard <rsherman@iisd.org>. CLIMATE-L News is an exclusive publication of IISD <<http://www.iisd.org>> for the CLIMATE-L <<http://iisd.ca/scripts/lyris.pl?join=climate-l>> list and should not be reposted or republished to other lists/websites without the permission of IISD (you can write <kimo@iisd.org> for permission.) If you have been forwarded this issue and would like to subscribe to CLIMATE-L, please visit <<http://iisd.ca/scripts/lyris.pl?join=climate-l>>.

Funding for the production of CLIMATE-L (part of the IISD Reporting Services annual program) has been provided by the Government of the United States of America (through the Department of State Bureau of Oceans and International Environmental and Scientific Affairs), the Government of Canada (through CIDA), the Swiss Agency for Environment, Forests and Landscape (SAEFL), the United Kingdom (through the Department for International Development - DFID), the Danish Ministry of Foreign Affairs, the Netherlands Ministry of Foreign Affairs and the Government of Germany (through the German Federal Ministry of Environment - BMU, and the German Federal Ministry of Development Cooperation - BMZ). General Support for the IISD Reporting Services annual programme during 2004 is provided by the United Nations Environment Programme (UNEP), the Government of Australia, Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management, the Ministry of Environment and the Ministry of Foreign Affairs of Sweden, the Ministry of Foreign Affairs of Norway, Swan International, the Japanese Ministry of Environment (through the Institute for Global Environmental Strategies - IGES) and the Japanese Ministry of Economy, Trade and Industry (through the Global Industrial and Social Progress Research Institute - GISPRI). If you like CLIMATE-L News, please thank them for their support.

CONTENTS

KYOTO PROTOCOL

- 1) ALL PROVISIONS OF THE KYOTO PROTOCOL NOW LEGALLY BINDING IN THE EU, EC, March 10, 2004

- 2) EU TRUMPETS 'LEADERSHIP' ROLE AS UN CLIMATE ACCORD BECOMES BINDING, FOR BLOC, AFP, March 10, 2004
- 3) KYOTO AN ECONOMIC 'DEATH CAMP,' FLAWED, Petroleum News, March 7, 2004
- 4) SAUDI ARABIA SAYS RUSSIA WILL NOT RATIFY KYOTO PROTOCOL, New Zealand Herald, March 5, 2004
- 5) EU FIRM ON CLIMATE CHANGE, TO PUSH RUSSIA ON KYOTO, Planet Ark, March 4, 2004
- 6) COMMISSIONERS CLASH OVER DEADLINE FOR MOSCOW, EU Observer, March 3, 2004
- 7) DAVID SUZUKI SLAMS AUSTRALIA OVER ATTITUDE TO GLOBAL WARMING, AFP, March 3, 2004
- 8) EC'S PRODI REJECTS CALL TO DROP KYOTO PROTOCOL, China View, February 27, 2004
- 9) RUSSIA CAN'T RATIFY KYOTO, OFFICIAL SAYS, Globe and Mail, February 26, 2004
- 10) U.S. WILL REJOIN KYOTO TALKS, ANDERSON PREDICTS, CTV, February 24, 2004
- 11) MINISTER PEKKARINEN IS NOT TAKING FINLAND OUT OF KYOTO AGREEMENT, Helsingin Sanomat, February 18, 2004

PROJECTS, POLICIES AND MEASURES

- 12) EU STUDY: AIR TRAVEL CHANGES CLIMATE, Washington Times, March 12, 2004
- 13) BHC FUNDS ENERGY TRAINING PROGRAMME, Accra Mail, March 12, 2004
- 14) CANADA SAYS IT MAY EMULATE CALIFORNIA ON AUTO EMISSIONS, New York Times, March 12, 2004
- 15) NEW RESEARCH HIGHLIGHTS OPPORTUNITY FOR INCREASED CO2 EMISSIONS SAVINGS, Cordis, March 11, 2004
- 16) CITIES, TRIBES TEAM UP FOR RENEWABLE ENERGY, SolarAccess.com, March 11, 2004
- 17) RAINFORESTS ABSORBING LESS CARBON DIOXIDE: STUDY, ABC News Online, March 11, 2004
- 18) POWER GIANTS AGREE TO REPORT CLIMATE EMISSIONS TO SHAREHOLDERS, GreenBiz.com, March 10, 2004
- 19) GREENHOUSE GAS DEAL CONSIDERED BY STATES, The Age, March 7, 2004
- 20) TOKYO GOVT MAY MEASURE FIRMS' CO2 LEVELS, Yomiuri Shimbun, March 6, 2004
- 21) STATE TO SAVE RS 22 CRORE BY SUPPORTING CDM, Business Standard, March 6, 2004
- 22) MEASURES URGED TO EASE CLIMATE CHANGE, China Daily, March 5, 2004
- 23) GROUP CALLS FOR US RENEWABLES DRIVE, Green Consumer Guide, March 5, 2004
- 24) EU READY TO GO IT ALONE, EU Politix, March 4, 2004
- 25) CLIMATE CHANGE COULD RELEASE OLD CARBON LOCKED IN ARCTIC SOILS, RESEARCHERS SAY, American Geophysical Union, March 2, 2004
- 26) UK CARBON DIOXIDE LEVELS RISE, Green Consumer Guide, March 1, 2004
- 27) MAKING MONEY OFF CARBON DIOXIDE, AFP, March 1, 2004
- 28) AIR CONDITIONERS BLOW KYOTO TARGET OUT THE WINDOW, Sydney Morning Herald, February 28, 2004
- 29) AVIATION SHOULD BE INCLUDED IN EMISSIONS TRADING, Edie weekly summaries, February 27, 2004
- 30) AUDITORS RISK REPUTATION OVER CLIMATE CHANGE, Accountancyage.com, February 26, 2004
- 31) GERMAN INDUSTRY AND GREENS AT LOGGERHEADS OVER EMISSIONS PLAN, DW-World, February 25, 2004

- 32) OIL INDUSTRY CAN DEVELOP CREATIVE SOLUTIONS TO ADDRESS CLIMATE CHANGE, AME Info, February 25, 2004
- 33) ADDRESSING CLIMATE CHANGE, Kuensel Online, February 24, 2004
- 34) PENTAGON DOWNPLAYS REPORT ON CLIMATE CHANGE THAT IT COMMISSIONED, AFP, February 24, 2004
- 35) GREENHOUSE GAS INVENTORY EXPERTS MEETING IN WGTN, New Zealand Ministry for the Environment, February 23, 2004
- 36) CANADA PLACES CARBON DIOXIDE UNDERGROUND TO CLEAN AIR, The Seattle Times, February 20, 2004
- 37) ARGENTINA ASSESSES VULNERABILITY TO CLIMATE CHANGE, IPS, February 18, 2004

CLIMATE IMPACTS

- 38) GLOBAL WARMING WORSENING: WRI, the Hindu, March 12, 2004
- 39) CHILLING GLOBAL FORECAST, Sydney Morning Herald, March 11, 2004
- 40) ENVIRONMENT HIGH ON GLOBAL AGENDA, World Bank, March 10, 2004
- 41) SCIENTIST URGES US CLIMATE HELP, BBC, March 10, 2004
- 42) SCIENTISTS SAY CORALS ENDANGERED, News-press.com, March 8, 2004
- 43) EUROPE'S SUMMER OF 2003 WAS HOTTEST IN 500 YEARS, STUDY SHOWS, Bloomberg, March 5, 2004
- 44) CLIMATE CHANGE SET TO POKE HOLES IN OZONE, Nature, March 3, 2004
- 45) NATURAL DISASTER DEATHS RISE SEVENFOLD, Reuters, February 25, 2004
- 46) PACIFIC'S LOW-LYING TUVALU BRACED FOR MORE 'KING WAVES', AFP, February 20, 2004
- 47) REEF THREAT WON'T SWAY AUSTRALIA, CNN, February 22, 2004
- 48) SCIENTIST 'GAGGED' BY NO 10 AFTER WARNING OF GLOBAL WARMING THREAT, Independent, March 8, 2004

COMMENT & ANALYSIS

- 49) "TOWARDS A LOW CARBON ECONOMY" by Margot Wallström, European Commissioner responsible for Environment European Business Summit, Brussels, 11 March 2004
- 50) RUSSIA'S CALL ON GLOBAL WARMING by Jonthan Lash, World Resources Institute, March 10, 2004

PRESS RELEASES & ANNOUNCEMENTS

- 51) SILICON METAL INDUSTRIES SEEKS NEGOTIATED GREENHOUSE AGREEMENT, New Zealand Ministry for the Environment, March 10, 2004
- 52) NEW BOOK: HIGH TIDE: NEWS FROM A WARMING WORLD by Mark Lynas Hardback publication: 10 March 2004
- 53) ATKINS SIGNS STRATEGIC MARKETING AGREEMENT WITH SAIC, March 1, 2004
- 54) ANNOUNCING WENGEN 2004 INTERNATIONAL AND INTERDISCIPLINARY WORKSHOP: MOUNTAIN GLACIERS AND SOCIETY: PERCEPTION, SCIENCE, IMPACTS AND POLICY. OCTOBER 6-8, 2004, WENGEN, SWITZERLAND.
- 55) EIGHTH EUROPEAN PH.D WORKSHOP ON INTERNATIONAL CLIMATE POLICY APRIL 23-24, 2004, LONDON, UNITED KINGDOM
- 56) THE RETSCREEN INTERNATIONAL RENEWABLE ENERGY PROJECT ANALYSIS

KYOTO PROTOCOL

1) ALL PROVISIONS OF THE KYOTO PROTOCOL NOW LEGALLY BINDING IN THE EU

EC

March 10, 2004

Internet: http://europa.eu.int/rapid/start/cgi/guesten.ksh?p_action.gettxt=gt&doc=IP/04/322|0|RAPID&lg=EN&display

Today, a Decision of the European Parliament and the Council enters into force, which makes all the remaining requirements under the 1997 Kyoto Protocol legally binding in all Member States. The targets of the EU and its individual Member States related to emissions of greenhouse gases became binding in 2002. The new Decision relates in particular to the way in which emissions have to be monitored and reported in accordance with the Protocol. With this step, all provisions of the Kyoto Protocol have become EU law and the EU has reaffirmed its global leadership in fighting climate change and implementing the Protocol. The Kyoto Protocol to the U.N. Framework Convention on Climate Change (UNFCCC) is the only international framework to combat global warming.

"Now we have adopted all the necessary EU legislation to carry out our commitments under the Kyoto protocol," said Margot Wallström, European Commissioner for the Environment. "This means that we are fully implementing this important Protocol even before it has entered into force at international level. As a strong bloc of soon-to-be 25 countries, the European Union has a special responsibility to show global leadership and pave the way for other countries to follow suit."

The Kyoto Protocol and agreements reached at subsequent Conferences of the Parties envisage strict accounting, reporting and review procedures of emissions to ensure transparency as well as a high quality and comparability of data. This is one of the elements that make the Protocol one of the most advanced, innovative and comprehensive environmental treaties in the world.

The new Decision (1) provides concrete procedures for accounting, reporting and review of emissions, replacing and widening the previous Greenhouse Gas Monitoring Mechanism Decision, which only covered requirements arising from the 1992 UNFCCC. In addition, it addresses reporting and monitoring issues related to the EU's "Burden Sharing Agreement", under which each Member State has accepted an individual target for limiting or reducing its greenhouse gas emissions when the EU ratified the Kyoto Protocol in 2002.

The new rules will allow Member States and the EU to monitor their progress towards meeting their reduction targets and, based on this, take additional measures, if necessary. The Decision also provides for the necessary co-ordination between the EU and the Member States during the UN compliance and review procedures envisaged by the Kyoto Protocol. Within the EU, the Commission has to assess progress annually and, if necessary, propose suitable measures.

See Also:

http://europa.eu.int/comm/environment/climat/home_en.htm
<http://www.noticias.info/Asp/aspComunicados.asp?nid=20099&src=0>

Kyoto Protocol

http://europa.eu.int/rapid/start/cgi/guestfr.ksh?p_action.gettxt=gt&doc=MEMO/04/43%7C0%7CRAPID&lg=EN&display=

Questions & Answers on Emission Trading and National Allocation Plans 4 March 2004

http://europa.eu.int/rapid/start/cgi/guestfr.ksh?p_action.gettxt=gt&doc=MEMO/04/44%7C0%7CRAPID&lg=EN&display=

2) EU TRUMPETS 'LEADERSHIP' ROLE AS UN CLIMATE ACCORD BECOMES BINDING FOR BLOC

AFP

March 10, 2004

Internet: <http://www.terradyaily.com/2004/040310131534.habrv018.html>

The European Commission on Wednesday hailed the EU's role as a "global leader" on the United Nations' accord on curbing climate change, as the disputed 1997 Kyoto Protocol became legally binding for EU member states. The European Union implemented the accord's requirements to cut greenhouse gas emissions two years ago. But its full provisions, forcing governments also to monitor and report emission levels, have only just come into force in the bloc. "Now we have adopted all the necessary EU legislation to carry out our commitments under the Kyoto Protocol," EU environment commissioner Margot Wallstroem said.

She pointed out that the EU was implementing Kyoto even though the protocol has not entered force internationally -- primary because the United States, the world's biggest polluter, has refused to ratify it. The accord's complex ratification rules mean it can only take effect once it has been approved by Russia, which has been dragging its feet. "As a strong bloc of soon-to-be 25 countries, the European Union has a special responsibility to show global leadership and pave the way for other countries to follow suit," the Swedish commissioner said. But the EU executive itself has not always been so united over Kyoto.

In January Wallstroem upbraided Spanish EU energy commissioner Loyola de Palacio for "astonishing" comments suggesting that the EU might have to review its commitment to Kyoto.

De Palacio had said that the EU would have to "reconsider" its commitment to slash greenhouse gas emissions if Kyoto failed to get the all-important backing it needs from Russia. "Loyola should make a distinction between her personal view and the EU view," Wallstroem said at the time. "We lead from the very front. We have to stand firm."

3) KYOTO AN ECONOMIC 'DEATH CAMP,' FLAWED

Petroleum News

March 7, 2004

Internet: <http://www.petroleumnews.com/pnnew/688445152.html>

The fate of the Kyoto climate-change treaty is dangling by a slender thread, awaiting a make-or-break decision by Russia and facing the first signs of crumbling in the European Union solidarity. Whatever happens in Europe, the global protocol would disintegrate if Russia opted out.

Kyoto's objective of cutting developed nations' emissions of greenhouse gases by 8 percent below 1990 levels between 2008 and 2012 can only survive if countries accounting for 55 percent of emissions ratify the pact.

To date, nations signing on to the Kyoto account for 44 percent, with Russia holding a pivotal veto of 17 percent. Andrei Illarionov, economic advisor to Russian President Vladimir Putin, told reporters in Calgary Feb. 25 that ratification could consign the Russian economy to a "death camp (of) poverty, weakness, backwardness." He said the protocol is "incompatible" with Russia's goal of doubling its gross domestic product by 2010.

Illarionov, relying on 4,500 years of climatological data, said the science behind Kyoto is flawed and possibly falsified. Noting that global temperatures were warmer in the 15th century, he said "there were not too many cars using fossil fuels then." As well, he said data compiled by the Intergovernmental Panel on Climate Change showed a drop in global temperature between 1940 and the late 1970s, during an age of rapid economic growth spurred by hydrocarbon exploration and consumption. Illarionov asked that if humans are responsible for global warming, why did temperatures decrease over a 40-year period.

He said Russia is demanding more information from the Intergovernmental Panel as it completes an analysis of climate change — a process it is in no hurry to complete. "When the analysis is finished the Russian government will take a decision on the Kyoto Protocol, according to the Russian national interest," he said, echoing previous comments by Putin.

RUSSIA MAY OPT OUT OF KYOTO

Eugene Khartukov, an economist with the Moscow-based PetroMarket Research Group, said Russia may opt out of Kyoto because of the impact it would have on a burgeoning oil and gas industry. Illarionov said Kyoto is obviously favored by countries that are more dependent on nuclear energy and aimed against the use of hydrocarbons, suggesting Greenpeace and the ecological movement should understand that they are "actually fighting for a nuclear future." Illarionov said the European Union, which has the most to gain economically from Kyoto, is putting pressure on Russia to ratify.

SPLIT OCCURRING IN EUROPE

But a split is occurring in Europe, with Loyola de Palacio, the European Commission vice president in charge of energy and transport, calling for a rethink on implementing the protocol. In an interview with the Financial Times Feb. 25, she insisted Europe should stick to the Kyoto target, while debating whether there are better ways to achieve the objective. De Palacio noted that Russia is unlikely to ratify, meaning the agreement would be voided. That prediction poses a challenge to European Union legislation seeking to lower greenhouse gas emissions through an emissions trading system based on national reduction targets.

Commission President Romano Prodi responded by insisting the commission "strongly rejects all calls to change its position concerning the ratification ... and its full implementation" in Europe. Canada's Environment Minister David Anderson, an unflinching proponent of Kyoto, said Feb. 27 that based on his discussions with the Russian government he still expects Russia to ratify, adding the Russians "play the game of good cop, bad cop."

4) SAUDI ARABIA SAYS RUSSIA WILL NOT RATIFY KYOTO PROTOCOL

New Zealand Herald

March 5, 2004

Internet: <http://www.nzherald.co.nz/latestnewsstory.cfm?storyID=3553046&thesection=business&thesubsection=latest>

RIYADH - Saudi Arabia's senior delegate on climate change talks says the European Union should accept that Russia will not ratify the Kyoto Protocol and the 15-nation bloc would hurt itself trying to meet its targets. "We see very little chance, if any, that Russia will come on board," Mohammed Sorour al-Sabban told Reuters. "They have decided already even though they have not announced it clearly." Saudi Arabia, the world's biggest oil exporter, opposes efforts to curb petroleum consumption, saying oil products are unfairly singled out in the name of environmental protection. "We think that the EU will eventually accept the fact that they cannot do it alone, and even if they pretend to do that in order to continue pressuring Russia to ratify the protocol, they cannot continue for ever," Sabban said.

European Union environment ministers this week resisted a call to put off implementing Kyoto until Russia -- whose backing is key to bringing the protocol into force after Washington withdrew in 2000 -- gave its ratification. Under the Kyoto Protocol the EU has pledged to cut greenhouse gas emissions from burning fossil fuels such as oil and gas by eight per cent of 1990 levels by 2008-2012. Sabban said figures already showed the European Union may miss its target and that any additional measures to meet it would lead to higher energy costs which would hit EU competitiveness compared to the United States and Japan. "They will also result in the migration of many energy-intensive industries outside Europe," said Sabban, who is also a senior adviser to Saudi Oil Minister Ali al-Naimi.

Italy was the only EU state to voice objections this week to momentum on implementing Kyoto, but Energy Commissioner Loyola de Palacio has said the bloc should rethink its strategy if Russia does not back it and several major industrial companies have voiced concerns over the scheme.

Sabban said coal production was still heavily subsidised in Europe and that nuclear energy was now being heavily promoted -- despite the potential hazards -- simply because it did not involve carbon dioxide emission. He said doubts remained over the causes of climate change. The world should abandon strict targets and timetables and aim instead for a voluntary approach that could benefit trade, economy and environment alike. Scientists were discussing possible "carbon dioxide sequestration" in dry gas fields, or under oceans, he added. "It is realistic, There is much research being done on this to make it more economically viable."

5) EU FIRM ON CLIMATE CHANGE, TO PUSH RUSSIA ON KYOTO

Planet Ark

March 4, 2004

Internet: <http://www.planetark.com/dailynewsstory.cfm/newsid/24126/story.htm>

BRUSSELS - EU environment ministers have resisted a call by Italy to review a planned emissions trading scheme and will push Russia to ratify the Kyoto Protocol to bring it into force, diplomats and officials said this week. "I repeat our commitment to fighting climate change. We have

unanimous commitment to the Kyoto process. There has been no proposal for an alternative if Russia doesn't ratify," European Environment Commissioner Margot Wallstrom said. "We believe in the Kyoto Protocol, we should continue to fight for early implementation and ratification," she told a news conference after a meeting of EU environment ministers.

Diplomats said the only EU state that had voiced objections to the bloc's momentum on implementing Kyoto was Italy, which insisted on Russian ratification of the pact before the EU presses ahead with its strategy to cut greenhouse gas emissions.

Russia holds the key to Kyoto and needs to ratify the pact to bring it into force after the United States withdrew in 2000. In recent months Moscow has backed away from promises to ratify it. "The only delegation not able to agree...was Italy.

They feel very strongly about it, asking why they should make efforts when others aren't ready to do the same," one said. Under the Kyoto Protocol, the EU has promised to cut greenhouse gas emissions from burning fossil fuels such as oil and gas, by eight percent of 1990 levels by between 2008-2012.

DIFFICULT, CONTROVERSIAL

The Commission, architect of the laws which stand behind EU climate change pledges, has had to deny a split in its ranks after Energy Commissioner Loyola de Palacio said the EU should rethink its strategy if Russia does not back it. "We should continue to show leadership on this issue...which is on top of the environment agenda. It will continue to be difficult and controversial," Wallstrom said.

The Protocol seeks to curb emissions of gases like carbon dioxide from fossil fuels burnt in factories and cars that are blamed for blanketing the planet and driving up temperatures, raising sea levels and causing natural disasters. As the lynchpin of its Kyoto efforts, the EU has launched an ambitious emissions trading scheme where many plants in the power, oil refining, smelting, steel and other sectors will need special permits to emit carbon dioxide (CO₂) from 2005. Several major industrial companies have voiced their concerns over the scheme, saying EU plans to cut emissions after 2012 might be premature if Kyoto does not come into force.

German power firm RWE (RWE.G.DE: Quote, Profile, Research) said the scheme could not go ahead with just a few states and should be postponed if needed. RWE board member Gert Maichel said only a few EU states were going to be ready for emissions trading.

"The Commission should make up its mind. Either have all member states in January 2005 or postpone the whole system for another year," he told the Energy Choices for Europe conference. Companies that exceed their carbon dioxide caps may buy emissions permits - the right to pollute - from firms that end up within their targets.

The permits can be traded, creating a secondary market and a financial incentive to reduce pollution. Britain is leading the way in preparing for the start of the emission trading scheme, being the first to publish a national allocation plan for industrial emissions of CO₂. All plans are due to be published by the end of March, approved by July and allocated by October, with trading to begin three months later for an initial two-year period.

6) COMMISSIONERS CLASH OVER DEADLINE FOR MOSCOW

EU Observer

March 3, 2004

Internet: <http://www.euobserver.com/index.phtml?sid=9&aid=14655>

Loyola de Palacio - denies being opposed to the Kyoto Protocol.

The EU Energy Commissioner Loyola de Palacio and the Environment Commissioner Margot Wallström are at odds again. This time they have clashed over how best to get Russia to ratify the Kyoto Protocol - the international climate change treaty. "We should give the Russians a final deadline for deciding", said the Spanish Commissioner, who is in charge of transport and energy policies, in a letter to the Financial Times. "There should never be deadlines set for signing of international conventions. Countries must be offered the time necessary to ponder. They might have different difficulties and more time could be needed for some countries", said Mrs Wallström in response, according to the Swedish daily Dagens Nyheter.

ENVIRONMENT COUNCIL

When EU environment ministers meet today, (2 March) in Brussels, one of the points on their agenda will be the Kyoto Protocol. Under the Kyoto Protocol, the EU has agreed to reduce its emissions of greenhouse gases by 8% - compared to 1990 levels - by 2008-2012. In order to reduce emissions as cost effectively and cheaply as possible, the Commission proposed a Directive on trade in emission allowances within the EU.

PALACIO NOT OPPOSED TO PROTOCOL

Ms de Palacio denies being opposed to the Kyoto Protocol, but she admits to having deep concerns about the Russian intentions to ratify it, following tough declarations by various high representatives from Russia. "I consider European industry cannot commit itself to a plan in which it will be the only industrialised part of the world to add a burden to its industry and discover by 2008 that Russia might finally not ratify", Ms Palacio wrote. 120 countries have so far ratified the Kyoto Protocol according to the latest updated UN register. However a number of important countries have not yet ratified, among these the US, Australia, Israel and Russia. A signature by Russia would mean that the Kyoto Protocol would reach the threshold of countries representing 55% of emissions for it to go into effect.

7) DAVID SUZUKI SLAMS AUSTRALIA OVER ATTITUDE TO GLOBAL WARMING

AFP

March 3, 2004

Internet: <http://www.terradaily.com/2004/040303044328.ybt3mad3.html>

World renowned ecologist David Suzuki lashed out here Wednesday at Australia's failure to reduce global warming, or to ratify the Kyoto Protocol on greenhouse gas. The Canadian environmentalist, who is here for the launch of Toyota's 2004 environment and community report at the car manufacturer's new "green" corporate headquarters, said Australia is especially vulnerable to global warming and should do more to counter it.

"Here you have a country (where) your federal government is saying 'we in Australia, we can't do anything about global warming... we can't do anything'," he said. "Australia is especially vulnerable. Your whole country is bordered by the ocean, sea levels are rising, half your country is desert, that desertification is going to continue.

"You've got all this sunshine coming down and look, anywhere you look, where is there a solar panel anywhere?" And your government has the nerve to say we can't do anything about Kyoto." The Kyoto Protocol requires industrialised signatory countries to cut emissions of greenhouse gases, the carbon-based pollution which results from burning fossil fuels and is blamed for driving global warming.

Suzuki defended his association with Toyota, which produces an energy efficient petrol/electric hybrid car called the Prius. He cited a need to praise the private sector in order to encourage it to do more to protect the environment. "I made the decision a number of years ago that if you don't at least acknowledge that (the private sector has) done something right and give them credit for it, then why the hell should they ever listen to an environmentalist?"

8) EC'S PRODI REJECTS CALL TO DROP KYOTO PROTOCOL

China View

February 27, 2004

Internet: http://news.xinhuanet.com/english/2004-02/27/content_1334096.htm

BRUSSELS, Feb. 26 (Xinhuanet) -- European Commission (EC) President Romano Prodi Thursday called on members of the European Union (EU) to fulfill their commitments to the Kyoto Protocol ratified in 2002. The remarks came in response to a call by Loyola de Palacio, EU commissioner for transport and energy, who earlier told the British newspaper the Financial Times that plans to implement cuts in greenhouse gas emissions pose a severe threat to European industry.

"The Protocol represents a significant first step towards realizing the goal of stabilizing atmospheric levels of greenhouse gases at safe levels," Prodi said. "We cannot and we will not back down in the fight against human-induced climate change," he stressed.

The Kyoto Protocol, which places constraints on industry's output of greenhouse gas emissions, was ratified by the EU and its member governments on May 31, 2002. The EU has already committed itself to cutting emissions by eight percent on 1990 levels by 2012.

Each member of the EU has accepted a target for limiting its emissions in an internal "burden-sharing" agreement. But the protocol has also invited criticism from conservative leaders and pro-business groups within the EU.

See Also:

The Commission Rejects Calls To Drop The Kyoto Protocol, EC, February 26, 2004,
Internet: http://europa.eu.int/rapid/start/cgi/guestfr.ksh?p_action.gettxt=gt&doc=IP/04/269%7C0%7CRAPID&lg=EN&display=

9) RUSSIA CAN'T RATIFY KYOTO, OFFICIAL SAYS

Globe and Mail

February 26, 2004

Internet: <http://www.globeandmail.com/servlet/ArticleNews/TPStory/LAC/20040226/RKYOTO26/TPBusiness/International>

CALGARY -- Russia would not be able to ratify the Kyoto Protocol based on the information it has in hand, one of the country's top economic advisers said yesterday. "So far, the evidence looks not in favour of the Kyoto Protocol," Andrei Illarionov said yesterday in Calgary after meeting with members of the Vancouver-based think tank the Fraser Institute. Mr. Illarionov sparked international controversy in December when he said that the accord "of course" could not be ratified in its current form. He did not go that far yesterday, although he did say that the greenhouse-gas pact is "incompatible" with President Vladimir Putin's goal of doubling gross domestic product in the next decade. He said Russia is not yet ready to announce its stance on ratification, a decision that will determine whether the environmental accord comes into force. But the thrust of Mr. Illarionov's presentation, as well as his comments to reporters, left little doubt that he does not view the restrictions of the Kyoto Protocol on emissions of greenhouse gases as achievable. "It is an economic gulag," he said. Much criticism levelled against Kyoto in Canada has centred on the notion that billions of dollars will be handed over to countries such as Russia to purchase their unused emissions credits in order to meet the goals laid out under the pact.

10) U.S. WILL REJOIN KYOTO TALKS, ANDERSON PREDICTS

CTV

February 24, 2004

Internet:

http://www.ctv.ca/servlet/ArticleNews/story/CTVNews/1077587105362_53/?hub=SciTech

OTTAWA — Environment Minister David Anderson predicts the United States will rejoin the international effort to curb greenhouse emissions because of a growing realization that its own national security is at stake. Anderson said he does not expect Washington to rejoin the Kyoto treaty but to launch a vigorous parallel effort to cut emissions on its own terms, using access to its market to ensure compliance by trading partners. Speaking at the University of Ottawa on Monday, Anderson cited a Pentagon study, leaked to a British newspaper this week, as evidence of changing attitudes in Washington.

The Pentagon study says the scenario of catastrophic climate change is "plausible and would change U.S. national security in ways that should be considered immediately." U.S. President George W. Bush pulled Washington out of the Kyoto climate treaty about three years ago, citing scientific uncertainty and the need to protect American jobs. Since then the evidence of climate change has grown stronger, and much of the research has come from the U.S. scientific establishment, Anderson said. "What I strongly suspect is that we will get a change in American policy soon regardless of who becomes president or who remains president." "I suspect it is going to be very difficult for the American administration to continue with its position given the increasing evidence of this being a major, major global problem."

The Pentagon study, obtained by The Observer, predicts abrupt climate change could bring global anarchy as countries develop nuclear capability to defend food, water and energy supplies.

It says climate change "should be elevated beyond a scientific debate to a U.S. national security concern." Anderson said Alberta's resistance to the Kyoto protocol is also fading. "The rumblings have changed substantially in the past year." He said the Alberta government was forced to drop its talk of penalizing companies that co-operated with the federal Kyoto compliance plan after a backlash from industry. Industry leaders understand it doesn't make sense for each jurisdiction to develop its own plan to deal with a global problem like climate change, he said.

He recalled that a year ago Alberta "was set to sue the federal government in the highest court in the land" over Ottawa's ratification of the Kyoto treaty, but the case never materialized. Kyoto is no longer being routinely compared to the National Energy Program of the early 1980s, which angered the West, he added. "I'm still a whipping boy in Alberta -- fair enough, they have to have somebody to whip. But the substance of the debate is not there and the reason is straightforward -- Albertans generally speaking support climate-change measures." He said awareness of climate change is higher in Alberta than in any other province. The spectacular snowstorm that hit Halifax last week is one more reminder of the havoc that extreme weather can bring, he said. No single extreme weather event can be blamed on climate change, but an increasing frequency of such events is consistent with predictions of climate scientists.

11) MINISTER PEKKARINEN IS NOT TAKING FINLAND OUT OF KYOTO AGREEMENT

Helsingin Sanomat

February 18, 2004

Internet: <http://www.helsinki-hs.net/news.asp?id=20040218IE3>

Finland's Minister of Trade and Industry Mauri Pekkarinen (Centre) has disputed claims that he has suggested Finland should withdraw from the Kyoto Protocol on climate change. According to some comments in the media, Pekkarinen is said to have brought the subject up during a visit to the Olkiluoto nuclear plant on Monday, where he took part in the ceremonies surrounding the start of blasting work on Finland's fifth nuclear reactor. Pekkarinen roundly denied that he had said anything of the sort, commenting that his only message had been that emission rights trading was to start and that Finland is preparing itself for this.

Nevertheless, Pekkarinen does support the idea that if the treaty is not ratified in its present form in the near future, Finland should become more active within the European Union to seek a renegotiation of the accord and the more equitable distribution of discharge levels. "The entire world should be on board, and not merely the countries that generate 15% of the emissions. But even this is a matter of negotiations, and not of wriggling out", stressed Pekkarinen. Thus far the United States, China, and India have declared they will not sign up to the agreement.

There has been concern among Finnish industry representatives recently that the implementation of the reduction in emissions required by Kyoto will noticeably increase energy prices. Pekkarinen himself has earlier commented that in his view Finland may have taken on an overly ambitious commitment to reduce emissions when these matters were decided within the EU in 1997. The then Minister for the Environment Satu Hassi (Greens) expressed the view on Tuesday that the Ministry of Trade and Industry has failed in its work on reducing emissions, and she demanded that henceforth the responsibility for this be moved to the Environment Ministry.

PROJECTS, POLICIES AND MEASURES

12) EU STUDY: AIR TRAVEL CHANGES CLIMATE

Washington Times

March 12, 2004

Internet: <http://washingtontimes.com/upi-breaking/20040312-021815-2504r.htm>

BERLIN, March 12 (UPI) -- An unreleased European Commission study indicates air travel may play a larger role in climate change than previously thought, environmental groups say. A coalition of German environmental groups released data from the study Friday that indicates air travel is the source of 9 percent of total global warming, the German online newspaper Netzeitung reports.

That percentage is higher than earlier estimates, although air traffic was always known to contribute to global warming. The new study takes into account not only greenhouse gas emissions, but also contrails and the artificial clouds they form. Those clouds also contribute to global warming, according to the study. "Flashy advertisements for discount flights suggest that everyone can jet around the world no problem," Monika Lege said, speaking in Berlin on behalf of the environmental groups touting the study. "The environmental damages are hidden."

The environmental groups said warning should be printed on airplane tickets explaining the environmental damage flying inflicts.

13) BHC FUNDS ENERGY TRAINING PROGRAMME

Accra Mail

March 12, 2004

Internet: <http://www.accra-mail.com/story.asp?id=9409>

A two-week energy training programme for decision makers and senior executives in the energy sector to identify, evaluate and successfully implement energy efficiency opportunities in their enterprises has opened in Accra. The training workshop which runs from 2-18 March is being organised by the Energy Foundation in collaboration with the Future Energy Solutions of the UK under the auspices of the British High Commission and the Ministry of Energy.

The training programme is a comprehensive effort that covers Energy Management in Buildings and Industry, Renewable Energy and Business Case for Energy Projects and will focus on assisting Ghanaian decision makers to establish sustainable energy markets in Ghana and elsewhere in Africa.

It therefore aims in the short term at improving skills amongst decision makers in government, public organisations, financing organisations, private sector etc and will enable them to more effectively develop and participate in sustainable energy markets in Ghana.

It is hoped that this will lead to effective energy markets that will result in a reduction in greenhouse gas emissions and the sustainable use of energy resources. In his keynote address at the opening of the training workshop, Dr Rod Pullen, British Commissioner said, "The challenge of climate change is one that faces the whole world. Consequently, the UK government is working with many government, including a close active involvement with the Ghanaian government, to accelerate the development and deployment of renewable energy and energy efficient system."

14) CANADA SAYS IT MAY EMULATE CALIFORNIA ON AUTO EMISSIONS

New York Times

March 12, 2004

Internet: <http://www.nytimes.com/2004/03/12/business/worldbusiness/12canada.html?ex=1079758800&en=724dedce3b065fce&ei=5062&partner=GOOGLE>

The environment minister of Canada said yesterday that his country would emulate California's new law aimed at curbing automotive global warming emissions if carmakers did not agree to make significant reductions. "Unless we get a voluntary agreement, our intention is to make use of the California model," David Anderson, Canada's environmental minister, said in an interview shortly before a speech about global warming at the University of Toronto.

The notion of Canada following in California's footsteps will not appeal to automakers, who have said they will sue to keep the state's global warming law from taking effect. But Mr. Anderson said the Canadian government had not yet given up on reaching a voluntary agreement. Canada has been negotiating with automakers and representatives of other industries since December 2002, when it signed on to the Kyoto Protocol, a global accord on limiting emissions of gases linked to climate change that has been rejected by the Bush administration and Russia.

As part of the Canadian government's effort to meet the Kyoto targets, it has asked automakers to improve the fuel efficiency of Canadian vehicles by 25 percent by 2010. Mr. Anderson said that so far, the industry had balked at such a notion.

"They say it's impractical," he said. "They say it's out of sync with the United States so it would affect the common market with the U.S. and Canada, so that's why it would be important for us to find state partners." Mark Nantais of the Canadian Vehicle Manufacturers Association, a lobbying group, said his group was talking with the government.

"We're basically discussing the progress we've made to date and the progress we will be making with the introduction of new technologies."

He said he had not seen Mr. Anderson's speech, which was made late yesterday afternoon.

The auto industry voluntarily follows United States fuel economy regulations in Canada as well. But Mr. Anderson, a member of the ruling Liberal Party, said in the interview that he had been frustrated that the growth of sport utility vehicles had stalled fuel efficiency gains in both countries.

"Our difficulty now is that the U.S. federal government is not seeing eye to eye with us on the importance of reductions from the automobile sector," he said. He added that Canada's government could carry out a law passed by Parliament in 1982 that would give the country its own fuel economy standards.

Or Canada might look to pattern regulations after California, the one state allowed to write its own air quality standards because of its history of smog. Other states can choose California's rules instead of the federal government's, and many in the Northeast have done so. "We can together create a critical mass in the integrated North American market," Mr. Anderson said in his speech, according to a transcript. "This is particularly crucial for climate-friendly vehicles."

15) NEW RESEARCH HIGHLIGHTS OPPORTUNITY FOR INCREASED CO2 EMISSIONS SAVINGS

Cordis

March 11, 2004

Internet: http://dbs.cordis.lu/cgi-bin/srchidadb?CALLER=NHP_EN_NEWS&ACTION=D&SESSION=&RCN=EN_RCN_ID:21722

On 10 March, a Decision of the European Parliament and Council came into force, making all targets and requirements under the 1997 Kyoto protocol legally binding in all EU Member States. Under the terms of the international agreement, the EU has pledged to reduce its greenhouse gas emissions by eight per cent below 1990 levels within the first 'commitment period' covering 2008 to 2012. The most common greenhouse gas released as a result of human activities and contributing to global warming is carbon dioxide (CO₂).

European Commissioner for the Environment, Margot Wallström, welcomed the Decision, saying: 'Now we have adopted all the necessary EU legislation to carry out our commitments under the Kyoto protocol. As a strong bloc of soon-to-be 25 countries, the European Union has a special responsibility to show global leadership and pave the way for other countries to follow suit.' On 4 March, however, new data published by ECOFYS, one of Europe's leading research institutes on energy efficiency, pointed to measures that could significantly improve the impact of EU legislation designed to reduce CO₂ emissions.

The European Directive on the energy performances of buildings (EPB) came into force in December 2002, and targets improvements in insulation, heating and cooling systems and energy generation systems as a means of reducing greenhouse gas emissions. Energy use in buildings and the building sector accounts for over 40 per cent of Europe's CO₂ emissions, more than all forms of transport combined. Under the current scope of the EPB Directive, all new buildings must meet strict requirements on energy efficiency, as well as existing buildings larger than 1,000 square meters that undergo significant renovation. According to the ECOFYS report, in its current form the Directive 'will have a significant impact on the CO₂ emissions of the European building stock.'

Indeed, ECOFYS estimates that by 2010, CO₂ emissions from buildings within the current 15 Member States will have been reduced by 34 megatonnes (Mt) per annum thanks to EPB. However, the report argues that if the scope of the Directive was extended to cover all renovated buildings, including single dwellings, CO₂ emissions could be reduced by more than twice this amount in the same time span. This is due to the fact that the main source of CO₂ emissions from buildings is the residential sector, contributing 77 per cent of the total. Within this sector, single family homes, which are rarely as large as 1,000 square metres, are responsible for 60 per cent of emissions.

Therefore, ECOFYS concludes that as 'there is likely to be considerable pressure on the EU building sector to contribute to the EU climate targets beyond what will be achieved by means of the current EPB Directive [...], legislators on the EU and national level are [...] advised to take accelerated actions to tap the very significant emission reduction potentials available in the EU building stock,' notably, by including all renovated buildings in the EPB Directive. The ECOFYS report was produced on behalf of EURIMA, the European Insulation Manufacturers Association and EuroACE, the European Alliance of Companies for Energy Efficiency in Buildings.

For further information, please consult the following web address:

<http://www.ecofys.com/com.htm>

16) CITIES, TRIBES TEAM UP FOR RENEWABLE ENERGY

SolarAcces.com

March 11, 2004

Internet; <http://www.solaraccess.com/news/story?storyid=6282>

Organizations representing 150 American cities interested in climate protection and Indian tribes interested in developing renewable energy projects announced a campaign for national security through energy independence. This July, participating cities and tribes will deliver their declaration of energy independence to the White House door, as part of a broader effort to promote tapping one of the world's richest clean energy resources - the wind blowing through Indian reservations in the Great Plains to supply clean energy to U.S. cities to reduce green house gas emissions.

The Energy Independence Day Campaign seeks to hasten the day when America is energy secure and independent with the production of clean, emission-free renewable energy. This joint campaign promotes tribally-owned clean energy projects to help meet the emission reduction goals of U.S. cities, according to Susan Ode, Outreach Director for ICLEI - Local Governments for Sustainability, which leads the U.S. Cities for Climate Protection -CCP program.

"Our goal is to reduce greenhouse gas emissions from the burning of fossil fuels and other human activities through local actions designed to address global warming and improve the quality of life in our communities," Ode said. Over 150 U.S. cities have pledged to voluntarily reduce their carbon emissions through conservation, energy efficiency and the use of renewable energy.

"American Indians recognize the value of renewable energy in addressing climate change and in building sustainable homeland economies," said Patrick Spears, president of the Intertribal Council On Utility Policy. "This campaign will bring rural tribes and local urban governments together for renewable generation and carbon emissions reductions."

Intertribal COUP is composed of federally recognized Indian tribes in the Dakotas and Nebraska, with affiliated tribes throughout the West. The organization promotes renewable energy policies based on tribal self-determination and ecological sustainability. COUP, working with Honor the Earth, is leading a collaborative intertribal effort for some 3,000 MW of tribally-owned windpower to be built on two-dozen Indian reservations across the Great Plains by 2010, according to Bob Gough, COUP secretary. "Bringing tribes from all across the country with tremendous renewable resources together with cities seeking to reduce the burning of fossil based fuels has created a natural alliance for true homeland energy security," Gough said.

The Energy Independence Day Campaign is open to any tribe, city or local government willing to commit to producing or promoting the purchase of utility scale renewable energy. Local governments and tribes can participate in the campaign through endorsement of the Declaration of Energy Independence, along with educational and promotional outreach, conservation and energy efficiency, or renewable energy purchases. Interested city and tribal representatives are scheduled to convene during the Denver March Pow-Wow on March 19th for a press conference and to officially endorse the Declaration of Energy Independence, which will be circulated among local governments throughout the country and be delivered to the White House on the 4th of July.

17) RAINFORESTS ABSORBING LESS CARBON DIOXIDE: STUDY

ABC News Online

March 11, 2004

Internet: <http://www.abc.net.au/news/newsitems/s1063540.htm>

Scientists from Brazil and the United States say they have found worrying new evidence that tropical rainforests are becoming less able to absorb the carbon dioxide emissions blamed for global warming. The scientists' report is based on a 20-year environmental study in the Amazon Basin. Observations over the last two decades have revealed that trees in the Amazon have been growing faster and dying faster. The process has particularly benefited the bigger, quicker-growing species at the expense of the smaller ones living below the forest canopy. Plant growth requires carbon dioxide and the researchers speculate that the Amazon trees are getting an extra boost from the rising levels of the gas caused by vehicle exhausts, factory emissions and other industrial processes. Rainforests are thought to limit the greenhouse effect by storing carbon and so reducing the amount of carbon dioxide in the atmosphere. But fast-growing trees are less dense than slow growing ones and they therefore hold less carbon overall.

18) POWER GIANTS AGREE TO REPORT CLIMATE EMISSIONS TO SHAREHOLDERS

GreenBiz.com

March 10, 2004

Internet: http://www.enn.com/news/2004-03-10/s_13807.asp

NEW YORK, New York — In response to shareholder proposals for greater transparency on how companies are planning for potential constraints on carbon dioxide and other emissions, electric power giants American Electric Power and Cinergy have agreed to report publicly about on how they are responding to growing pressure to reduce greenhouse gas and other emissions. The company reports will assess the impacts of and potential responses to a number of policy scenarios, including various proposals in Congress and existing state legislation to limit carbon dioxide and other emissions. Both companies agreed to the shareholders' request that a committee of independent directors oversee the report. As a result, shareholders will withdraw resolutions facing the two companies.

The resolutions focus on the potential risks to shareholders posed by the company's CO₂ emissions, the primary greenhouse gas linked to global warming. The resolutions' proponents believe that the public reports to shareholders, which were agreed to by AEP and Cinergy following discussions with the investors, will raise the benchmark for disclosure of and action on climate change risks. They heralded the decisions as precedent-setting. "These landmark agreements are an important milestone for shareholders, one that we hope will be emulated by corporate leaders across this industry, and across many industries," said Denise Nappier, treasurer of Connecticut. "The consequences for companies that do not act responsibly and take steps to assess and mitigate risks posed by climate change can be just as devastating to shareholders as the corporate scandals of the past few years. We look forward to reports that will provide shareholders with essential information we need to make informed investment decisions."

Bill Somplatsky-Jarman, associate for Mission Responsibility Through Investment, Presbyterian Church, said, "Shareholders have been raising this issue since the early 1990s, so it's significant

that we're working together to cooperate on an action plan. Cinergy made a forward-looking announcement last year with their pledge to reduce emissions; we're hoping that this report will also be a leading example of risk assessment and disclosure that can be taken up by other companies." The resolutions were filed at American Electric Power by Connecticut Retirement Plans and Trust Funds and cofiled by Christian Brothers Investment Services, Trillium Asset Management, Board of Pensions of the Evangelical Lutheran Church in America, The Pension Boards — United Church of Christ, and the United Church Foundation and at Cinergy Corp. by the Presbyterian Church (USA).

Similar resolutions have been filed at additional electric utilities and other companies by shareholders associated with the Interfaith Center on Corporate Responsibility (ICCR), a coalition of 275 religious institutional investors, and CERES, a coalition of investors and environmental groups. Both companies expressed their willingness to work collaboratively with the shareholders on addressing the emissions issue. American Electric Power agreed to print the resolution in its proxy, with a statement describing the company's decision to "accept and comply" with the resolution. The proxy statement will also outline the parameters of the company's report. Cinergy will describe the collaborative effort on the report in the letter to shareholders in its 2003 annual report.

Dale Heydlauff, senior vice president of Governmental and Environmental Affairs, AEP, said, "We reviewed their proposal and concluded that their request for an emissions assessment and report was reasonable. We view it as consistent with the hard work we are doing to make environmental improvements while keeping our power plants competitive." Meanwhile, at Cinergy, Jim Rogers, CEO, said, "Cinergy has undertaken several initiatives to establish its leadership in social and environmental policy. We are partnering with Environmental Defense on our greenhouse gas emissions reduction pledge and we are delighted to join with the Mission Responsibility Through Investment to produce another effective collaborative process on these crucial public policy matters."

The agreements come on the heels of increasing pressure on the electric power industry to address the issue of coming carbon constraints. Similar resolutions last year garnered the support of Institutional Shareholder Services, a group that advises institutional investors on proxy voting, resulting in record high votes — an average 23 percent vote in favor — with 27 percent of shareholders voting for such disclosure at American Electric Power. Although last year's resolution was successfully challenged at the SEC, Cinergy announced in September 2002 that it would reduce its greenhouse gas emissions 5 percent below 2000 levels by 2010 and freeze them through 2012.

19) GREENHOUSE GAS DEAL CONSIDERED BY STATES

The Age

March 7, 2004

Internet: <http://www.theage.com.au/articles/2004/03/06/1078464695035.html>

Victoria and NSW are considering a Kyoto-style trading scheme for greenhouse gas emissions. Officials from the states met a month ago to discuss a deal as a way to reduce carbon dioxide emissions, after an approach by NSW Premier Bob Carr. Mr Carr wants to set up a national greenhouse emissions trading scheme as an alternative to the one set out in the Kyoto Protocol on climate change, which the Federal Government has refused to ratify. "We need some form of

scheme to drive emissions abatement," James Golden, a policy analyst with the Victorian Department of Sustainability and Environment, said. "We have commenced discussions with NSW on the potential for a bilateral emissions abatement scheme and at this stage everything is on the table."

Under the Kyoto Protocol countries get carbon credits if they invest in carbon sinks - for example, forests that absorb carbon dioxide and thus offset greenhouse gas emissions. Countries with credits can sell them to countries that have failed to reduce emissions. State and industry representatives also met the Climate Group, a new international body set up to break the climate change deadlock by bringing more groups into global negotiations. The group's chief executive officer, Steve Howard, said the response he had received in Australia had been exceptional "We are looking at some really exciting things to move the debate forward," he said.

While the Federal Government has refused to sign the Kyoto agreement, which sets out binding emissions targets and a carbon trading scheme, Dr Howard said the states could sign their own agreement, which would, in effect, bypass the Federal Government. "Within the European agreement, due to start on January 1 next year, there is a linking directive which allows for the 28 countries in the scheme to link to other schemes which are state or city based - it is a very flexible mechanism," he said. "It is based on a . . . scheme where there are set limits or caps on emissions and if a company goes under its cap, you can trade the surplus." A spokeswoman for federal Industry and Resources Minister Ian McFarlane said the Federal Government could not see "any advantage" to a state-based scheme. "Queensland and WA don't support carbon trading and it has to be one in, all in," she said.

But, she said, there was nothing illegal about the option and it was a matter for the states. Dr Howard is not worried about the section of industry driving the Federal Government's anti-Kyoto policy. "We are a coalition of the willing. We are after the silent majority of industry interested in the cash incentives. BP invested \$20 million globally aiming for a 10 per cent emission reduction in 10 years, met the goal within three years and saved \$650 million."

20) TOKYO GOVT MAY MEASURE FIRMS' CO2 LEVELS

Yomiuri Shimbun

March 6, 2004

Internet: <http://www.yomiuri.co.jp/newse/20040306wo33.htm>

The Tokyo metropolitan government is considering introducing a new measure against global warming--rating large business facilities in Tokyo according to their voluntary efforts to reduce carbon dioxide. The metropolitan government intends to introduce the system in April 2005. Tokyo's CO2 emissions in 2001 amounted to 60.6 million tons, or about 5 percent of the country's total CO2 emissions. The amount increased by 5.1 percent compared with that of 1990 mainly due to the increase in the number of users at home with personal computers. Under the 1997 Kyoto Protocol, Japan is required to cut greenhouse gas emissions by 6 percent below the 1990 level by 2012. With this goal in mind, the metropolitan government incorporated into its basic environmental plan drafted in January 2002 the same 6 percent goal of greenhouse gas reduction in Tokyo by 2010.

To achieve the goal, Tokyo Gov. Shintaro Ishihara proposed in November 2002 a policy that would require large business facilities in Tokyo to reduce CO2 emissions. The Tokyo government's

advisory council on the environment also has been discussing such a system. But council members from the industrial sector opposed the requirement because, they said, the new system is aimed solely at large business facilities. "The reduction of CO2 emissions will cost us a lot of money because we have to invest in plants and equipment to meet the goal," one member said. "If the metropolitan government only introduces this system, the competitiveness of Tokyo's large business facilities would suffer," another member said. In response to such concerns, the metropolitan government has offered know-how to help offset the amount of investment needed for plants and equipment. But it could not present any concrete details for the program, mainly due to lack of preparedness.

One member in the council said if the metropolitan government abandons the 6 percent goal on these companies, Tokyo's environmental measures would regress. But in the end, the metropolitan government gave up on trying to impose the requirement. It is difficult to attain 6 percent reduction of greenhouse gas only with the current efforts being made by industry. When the metropolitan government urged about 800 large business facilities in Tokyo to submit their voluntary reduction plans for greenhouse gases, their average reduction rate from fiscal 2002 to fiscal 2004 was only 2 percent.

As a result, the metropolitan government incorporated the council's draft proposals announced in late February in a system to rate efforts by large business facilities in Tokyo to reduce CO2 discharged from these facilities with the aim of encouraging voluntary reductions.

According to the proposals, the metropolitan government will carry out ratings three times--when it sets its goals, two or three years later and five years after the goals are set, making public the results on its Web site.

A senior official of the metropolitan government's environmental bureau said: "The larger the size of a company, the more sensitive it is to its reputation for its environmental conservation efforts. A company doesn't want to be labeled as reluctant to take such measures. I think the rating system would bring about the same effects as would result if the metropolitan government had imposed the goal on them." The outline set by the central government to promote measures against global warming incorporated measures by various fields including industry, the transportation sector and the general public. But in reality, the rise in greenhouse gases cannot be stopped at present.

The initiative taken by the government of Tokyo, where industries are concentrated and about 10 percent of the nation's population lives, deserves praise. The metropolitan government wants to start the system in April 2005. But as it took too much time for the council to discuss the costs and benefits of imposition of the goal, the metropolitan government has yet to decide what standards should be set for the ratings. In addition, the metropolitan government has not created a favorable tax environment to encourage businesses to reduce greenhouse gases. It is necessary for the metropolitan government to present a clear vision to address these problems. Efforts are needed to promote the new system with society at large as well as industry.

21) STATE TO SAVE RS 22 CRORE BY SUPPORTING CDM

Business Standard

March 6, 2004

Internet: <http://www.business-standard.com/today/story.asp?Menu=23&story=35842>

The state government may consider providing special incentives to develop power generation and distribution units based on cleaner fuels or renewable energy technologies. Such units, serving the

60 geographic SSI clusters in the state, and rural electrification managed by community based organisations can help the state more than Rs 22 crore, says a PricewaterhouseCoopers study.

The study on clean development mechanisms (CDM) was sponsored by the Gujarat Electricity Board (GEB). According to the study, the CDM ranking in power generation puts Gujarat Energy Development Authority's (GEDA) wind and gassifier projects as the most attractive CDM projects, followed by Biogas and Solar PV.

GEDA has been allotted four projects on top priority basis, which have to be aggregated and followed through with the CDM project cycle. The project includes 16 biomass gassifier projects and 6 mw gassifier projects, which will result in emission reduction and additional income of Rs 5.17 crore over 10 years. The proposed 20,000 units to be used in rural electrification is expected to result in income of Rs 73.2 lakh over 10 years.

The Surat Municipal Corporation's solid waste bio-methanation and Anil Starch's bio-methanation plants are expected to generate emission reduction and trading income of Rs 1.45 crore and Rs 3.6 crore, respectively, while the several wind projects in the pipeline are expected to result in emission reduction and potential revenues of Rs 11.32 crore, says the study.

The CDM was created as a successor to the joint implementation to boost collaborative projects to reduce emissions or sequester carbon in the developing countries. It is one of the several flexibility mechanisms authorised in the Kyoto Protocol to the 1992 UN Framework on Climate Change, signed at Rio de Janeiro Earth Summit for developing countries to evolve measures that achieve the goals set at Rio and Kyoto. CDM makes available funds for developing countries for technology change.

22) MEASURES URGED TO EASE CLIMATE CHANGE

China Daily

March 5, 2004

Internet: http://english.peopledaily.com.cn/200403/05/eng20040305_136650.shtml

Chinese meteorologists have urged authorities to "get ready soon for the worst possible catastrophes" from abrupt climate changes that could cost the nation millions of lives, economic sustainability and its security.

"To secure China's voice in world environmental diplomacy regarding adverse climate changes, China must be well prepared with related strategies, programmes and projects if a climate war is to occur as some foreign experts have predicted," the meteorologists concluded Thursday. The Beijing seminar centred on strategic countermeasures against climate changes.

Over the past century, climate change, including widespread flooding, persistent droughts and rises in sea levels, have been caused by global warming resulting from greenhouse gases. The situation has had far-reaching impacts on many countries, including China.

"In the future, such impacts will become an increasing threat to China's sustainable development of its economy with many adverse influences that might worsen its society," Qin Dahe, a scientist and top official for China Meteorological Administration, warned. To meet an emergency situation caused by catastrophic climate changes, China should intensify its research and work out an overall

strategy to mitigate their adverse impacts, Qin told the seminar. Qin made it clear that how to fight climate change and make it an impetus to China's sustainability and national security has become a urgent issue facing the country today." One of the most important countermeasures for this purpose, said Qin, who also works for a State office studying strategic developments to cope with climate changes, is to work out united policies and tactics for diplomatic, economic, energy and military actions against possible havoc triggered by climate war.

To raise China's ability for climate prediction, scientists said, the country should accelerate development of a supercomputer-based forecasting model as a way to foresee adverse impacts on the economy and society that might be brought by ecosystem changes.

"Only by building a capability against climate changes can China know how deal with the worst threat of catastrophic climate change like global warming that may occur in the next 20 to 30 years and become a menace to food, water, energy and environmental security," said Ye Duzheng, a senior academician of Chinese Academy of Sciences (CAS).

Echoing Ye's idea, Sun Honglie, and Sun Shu, also academicians at CAS, said they hope authorities can increase funds earmarked for research and technological development in the field of climate change as soon as possible.

They and other experts attended the seminar to urge the government to launch China's Climate Observation System to obtain first-hand data for climate change research. They also said it is imperative to observe and monitor black carbon aerosols, a greenhouse gas caused by fossil fuels and blamed for increasing greenhouse effect.

23) GROUP CALLS FOR US RENEWABLES DRIVE

Green Consumer Guide
March 5, 2004

Internet: <http://www.greenconsumerguide.com/index.php?news=1760>

An association of US business, environmental and energy interest groups is calling on the government to increase funding towards renewable power in 2005. The Sustainable Energy Coalition, in a letter to the US Senate's Budget Committee, is requesting enough backing in the fiscal year 2005 budget to allow the renewables industry to develop beyond its existing levels, and double in size over the next five years.

The Committee is expected to come up with allocations and priorities that will influence the scale of the 2005 budget later this week. The proposals outlined in the letter focus on the potential economic and social benefits of a larger US renewables industry, the key factors behind the Bush Administrations refusal to ratify the Kyoto Protocol on Climate Change.

The letter states that "support for federal sustainable energy programs represents a sound investment that could, over time, actually contribute to the nation's economic recovery by creating new domestic businesses and jobs, reducing energy imports and prices, enhancing national, energy, and homeland security, improving the reliability of the nation's electric transmission grid, and curbing the costs of energy-related environmental impacts."

24) EU READY TO GO IT ALONE

EU Politix

March 4, 2004

Internet: <http://www.eupolitix.com/EN/News/200403/35bb88b6-7a45-4fd9-8348-19d369538a30.htm>

The EU has defended its determination to go ahead with plans for trading carbon dioxide allowances, despite a lack of commitment to climate change from the USA and Russia. A representative of the European Commission's environment department said on Thursday the commission believed it was right to stand by the 'emissions trading scheme', with or without international ratification of the Kyoto protocol. Director of the commission's climate change unit Jos Delbeke said that even without ratification "Climate change remains a problem – the earlier we start the cheaper emissions trading will be".

He added that "The earlier we start the sooner we will develop technology that the whole world is going to need." Under the emissions trading scheme countries can buy and sell CO2 quotas from each other – thereby ensuring that 'greener' countries benefit financially from selling their excess quotas and the overall level of emissions does not go up. This scheme is already in place in America for sulphur dioxide – a fact the commission believes could encourage the USA to reconsider its attitude to climate change. "The fact that we are using the favourite instrument of the USA should be an important element in our future debate." "If we exert our leadership, for our own good reasons, it could be a good card to convince the US to come on board."

EU nations have until the 31st of March to present the commission with their emission allocation plans for the trading scheme. Delbeke said "Countries will try to get as many allowances as possible for free now because they know that after March 31st they won't be able to." He added that the commission had "some concerns" about the plans it had seen so far but refused to specify which countries he was referring to. And he concluded that there would be no hesitation over taking legal action – in the form of infringement letters – to those member states who did get their allocation plans in on time. The ten new member states have until May 1 this year to present their allocation plans. Emissions trading will become law in 2005.

25) CLIMATE CHANGE COULD RELEASE OLD CARBON LOCKED IN ARCTIC SOILS, RESEARCHERS SAY

American Geophysical Union

March 2, 2004

Internet: http://www.eurekalert.org/pub_releases/2004-03/agu-ccc022704.php

WASHINGTON - The Arctic Ocean receives about ten percent of Earth's river water and with it some 25 teragrams [28 million tons] per year of dissolved organic carbon that had been held in far northern bogs and other soils. Scientists had not known the age of the carbon that reaches the ocean: was it recently derived from contemporary plant material, or had it been locked in soils for hundreds or thousands of years and therefore not part of Earth's recent carbon cycle?

Now, using carbon-14 data, scientists from the United States and Germany have been able to determine the approximate age of dissolved organic carbon in the Arctic for the first time. They report, in an article to be published this month in Geophysical Research Letters, that most of the

carbon that reaches the ocean is relatively young at present, but that this could change. Warming of the Arctic, which has been documented in recent years, could affect northern peats, collectively one of the largest reservoirs of organic carbon on Earth. As the carbon-rich soils warm, the carbon is more susceptible to being transported to the ocean by rivers small and large, they say.

The researchers, headed by Ronald Benner of the University of South Carolina, studied four rivers in northern Russia and in Alaska, along with the Arctic Ocean itself. The carbon-14 dating method is not precise, because, for example, old and new dissolved organic carbon is typically mixed in a given sample, resulting in an average reading, and content of rivers varies by season as well. The scientists concentrated their study in periods of peak river discharge. "Our results are not applicable to the sedimentary fraction of river discharge," Benner notes. "However, most of the organic carbon exported from land to the ocean is in dissolved form, and it is the dissolved components that track river water in the ocean."

River water tends to remain near the surface of the Arctic Ocean for five to 15 years, and the land-derived dissolved organic carbon from all sources and years is therefore mixed. Various samples gave radiocarbon average ages varying from 680 to 3,770 years, including both carbon from land-derived and marine sources. The researchers analyzed dissolved lignin phenols to determine the portion of a particular sample that had originated on land, as the compound is related only to terrestrial plant material.

The East Greenland Current is the major source of both Arctic Ocean water and its dissolved organic carbon component reaching the North Atlantic Ocean. The study concludes that the land-derived dissolved organic carbon reaching the Atlantic via this current is much younger than the marine component. In fact, up to half of it reaches the Atlantic, some three to 12 teragrams [three million to 13 million tons]. The fate of the young land-derived dissolved organic carbon in the Atlantic Ocean is uncertain, but there is no evidence of this material at lower latitudes in the Atlantic, the researchers say.

"This suggests most of the land-derived organic carbon ends up being oxidized to carbon dioxide and thus eventually cycles back into the atmosphere," says Benner. "If current warming trends in the Arctic continue, we can expect to see more of the old carbon now sequestered in northern soils enter the carbon cycle as carbon dioxide. This will act as a positive feedback, tending to enhance the greenhouse effect and accelerate global warming."

26) UK CARBON DIOXIDE LEVELS RISE

Green Consumer Guide

March 1, 2004

Internet: <http://www.greenconsumerguide.com/index.php?news=1748>

Emissions of carbon dioxide, one of the most destructive greenhouse gases, increased in the UK during 2003 according to an assessment of newly released government statistics. Using figures that show a significant increase in coal and fossil fuels due to a rise in energy demand, NGO Friends of the Earth calculate that carbon dioxide rose by 3% over 2002 levels. The growth in carbon dioxide threatens the government's strict, self-imposed target of a 20% reduction by 2010 (on 1990 levels), and the lesser goals of the Kyoto Protocol.

Friends of the Earth's Energy Campaigner, Bryony Worthington, said; "Government policy is obviously not working. UK emissions are rising when they should be going down. The EU emissions trading scheme, which will start in 2005, could make a big impact and help to reverse this worrying trend, but it must be implemented correctly both in the UK and the rest of Europe. Similarly tough measures are also needed to tackle transport and other non-industry emissions. The Government must not wait until its climate review next year. It must put our climate strategy back on track now."

27) MAKING MONEY OFF CARBON DIOXIDE

AFP

March 1, 2004

Internet: <http://cooltech.iafrica.com/features/303058.htm>

Carbon dioxide (CO₂) tops the list of environmental villains published by the world's green movement. The byproduct of burning oil, gas and coal, CO₂ is the main force behind global warming, the potentially catastrophic process of climate change. Tackling CO₂, though, has been a political nightmare. Reducing output, by forcing rich countries most to blame for the problem to trim their CO₂, is making only faltering progress, as the fate of the UN's Kyoto Protocol — still unimplemented more than six years after it was signed — can testify.

One eagerly explored option is carbon sequestration, in which waste CO₂, extracted at source from fossil fuels, is pumped and stored deep below the sea or the ground, hopefully for centuries if not millennia. Environment campaigners are against this idea, mainly because of the risk that if the geological storage tank bursts, the outpouring of CO₂ would instantly damage the world's climate system.

Nonetheless, some small experiments have already been conducted into sequestration and their results have been promising. Now, a major step is about to be taken by the Dutch government, which aims not only to sequester large amounts of CO₂ but also turn it into a money-spinning asset. In a project unveiled in Paris last week by Gaz de France (GDF), the state-owned French company entrusted with the scheme, engineers intend to pump CO₂ into an ageing methane gasfield in the North Sea, about 100 kilometers off the North Sea and 4000 metres underground.

The field, K12-B, has been exploited since 1987 and its gas will soon be exhausted. Once it is empty, a shoreline facility will separate carbon dioxide from the gas extracted from other fields — a relatively simple process — and send the CO₂ down a pipe on the sea floor to K12-B, where it will be pumped deep underground, says GDF sequestration expert Gilbert Meunier.

That way, the CO₂ is buried, rather than released when the methane in the gas is burned by users. In the pilot phase of the project due to start in April, 10 000 tonnes of CO₂ will be stored over the first six months. If that goes well, storage will be scaled up in 2005, and could ultimately reach 480 000 tonnes of CO₂ a year. So far, so good — but where K12-B could really score is in an unprecedented plan to tap that stockpile of CO₂ and use it in oil exploitation: "a double first", in the words of International Energy Agency (IEA) expert Jacek Podkanski. "When CO₂ is injected in a well, its effect is to make crude more fluid and boosts pressure in field, thus making it easier to extract the oil," GDF engineer Gilbert Meunier said. That could be a boon for many of the North Sea oilfields, some of which have been in production for two decades or more. As the oil runs out, the pressure in the field drops, making it more difficult and thus costlier to extract the remainder.

One goal is to build a 100-kilometre pipeline to British oilfields farther south that, by conventional technology, will no longer be viable by the end of the decade. Pumping in CO₂ could keep them going.

Wilhelm van Groothest of the Dutch environment agency Novem is cautious. "There are currently discussions on improving oil recovering using stored CO₂, but there is no valid project yet. Pipelines are very expensive, and we might have to wait another five years before a decision is made." Scientists have been testing sequestration theories in the North Sea because the size of its fields is well known as is the soundness of the geological structure. An experiment in Norway's offshore field, Sleipner, has been storing a million tonnes of waste CO₂ per year since 1996, pumping it 1000 metres below a cap of shale and mudstone. In North America, CO₂ is being extracted from a coalgas plant in Wyoming and pumped 300 kms to Weyburn, in Canada's Saskatchewan province, where it is stored in an empty underground chamber in a working oilfield.

28) AIR CONDITIONERS BLOW KYOTO TARGET OUT THE WINDOW

Sydney Morning Herald

February 28, 2004

Internet: <http://www.smh.com.au/articles/2004/02/27/1077676970871.html>

A power-hungry society in love with appliances such as air-conditioners is dwarfing attempts by the Federal Government to reduce Australia's high level of greenhouse gas emissions. Projections of emissions to 2020 prepared by the Australian Greenhouse Office show greenhouse gases produced by the generation of energy will have shot up by 160 per cent on their 1990 levels. Despite small decreases in emissions levels in recent years, Australia will remain short of its Kyoto protocol target by about 13 million tonnes of greenhouse gases a year, or enough carbon dioxide and other gases to fill 13 million family-sized homes.

The paper acknowledges an increasing appetite for power is driving a blow-out in emissions. "A major factor contributing to Australia's emissions is the domination of energy generation by low-cost fossil fuels," it said. Australia was given a generous target under the Kyoto protocol on climate change. Unlike other developed countries, which must decrease their level of emissions on 1990 levels, Australia's emissions would be allowed to increase to 108 per cent of 1990 levels by the first stage of the international agreement in 2008-12. The latest estimate is that levels will reach 110 per cent by that stage.

Although the Federal Government has committed itself to meeting the Kyoto target, it has repeatedly said it will not ratify the international agreement because it is not in Australia's economic interest to do so. It has committed almost \$1 billion in funding to programs aimed at reducing greenhouse gas emissions, the highest per capita in the world, but much of that money will not be spent until after 2008. The paper shows the main program administered by the agency - the \$400 million Greenhouse Gas Abatement Program - will deliver 5.9 million tonnes of abatement by 2008-12, after starting in 2000. Without any government programs, emissions levels would have blown out to 123 per cent of their 1990 levels. But the small decreases reported in recent years are largely due to changing land use which has seen a drop in the rates of land clearing compensating for the increases recorded by the energy and transport sectors.

The Environment Minister, David Kemp, has repeatedly said Australia was "on track" to meeting its Kyoto target but that further work is necessary. Dr Kemp has argued against ratifying Kyoto

because it will only deliver global reductions in emissions of 1 per cent, when many scientists say reductions in the order of 60 per cent are needed if global warming is to be addressed. But emissions would explode if the world made no attempt to reduce emissions, the United Nations Framework Convention on Climate Change warns. The Opposition environment spokesman, Kelvin Thomson, said: "Unless we get serious about tackling climate change - and serious means Kyoto, emissions trading and increasing renewable energy - then the Mickey Mouse measures won't cut it." The executive director of the Australian Conservation Foundation, Don Henry, said the recent heatwave should be making people expect more action on global warming. "Every time we have a drought or a hailstorm or a heatwave people should ask why we aren't doing something," he said.

29) AVIATION SHOULD BE INCLUDED IN EMISSIONS TRADING

Eddie weekly summaries

February 27, 2004

Internet:

http://www.edie.net/gf.cfm?L=left_frame.html&R=http://www.edie.net/news/Archive/8105.cfm

Aviation is increasingly responsible for the greenhouse effect and should be included in the emissions trading scheme, according to a report by the German Environment Ministry. At present, the industry is exempt from fuel taxes and other emissions reduction measures in the EU, because of the international nature of the market. However, the report claims that, if aviation was included in the Kyoto Protocol, it would generate cheaper carbon credits than the current expected price for reduction credits from Clean Development Mechanism (CDM) projects. It concludes that emissions trading in aviation is an option for meeting Article 2.2 of the Kyoto Protocol on cutting emissions from the industry.

The report states: "The IPPC estimates that international aviation contributes about 3.5% to global warming. If the growth in aviation continues to grow at 4% a year, as in the 1990s, the share of international aviation in the greenhouse effect will be higher in 2010 than Germany's."

Various options are discussed within the report to alleviate this, but a cap and trade scheme for aviation is recommended. It says that this should take into account the fact that aircraft produce a multitude of gases making it highly important that "trade offs take place between individual greenhouse impacting substances", and that, "an emissions trading system based solely on CO2 must be accompanied by other measures".

The report claims that the CO2 reduction costs from this would be between US\$0.20 and US\$3.0 per tonne CO2e and are therefore below the price that is currently expected for reduction credits from CDM projects. It also points out that CO2 emitted at altitude has a far greater impact than that emitted at sea level, so any trading scheme would need a conversion measure to be included. Emissions trading for aviation has been discussed widely in recent years.

Last year, the UK Government published a consultation document Aviation and the environment: using economic instruments, and is thought it will raise the issue during its presidency of the EU in the second half of 2005. The British Airports Authority (BAA) told edie last year that it would support an emissions trading scheme for aviation provided it was on a global scale.

30) AUDITORS RISK REPUTATION OVER CLIMATE CHANGE

Accountancyage.com

February 26, 2004

Internet: <http://www.accountancyage.com/News/1136350>

Auditors of US-listed companies have been warned they risk massive damage to their reputations if they fail to disclose risks posed to companies by climate change. Organisers of a summit held today in Washington DC on the failure of many companies to report environmental risks said US financial watchdog the Securities and Exchange Commission could prosecute companies and even their auditors for failure to make disclosures. David Hayes, a leading US business lawyer at Latham & Watkins, said: 'Accountants approve company reports and if this issue blows up, it will be on them as well as top management.'

The backdrop to the concerns is growing shareholder unrest over the issue. Last year, a UN-hosted summit of investors representing over \$1 trillion (£536bn) in assets called for greater disclosure of the risks climate change posed to companies' profits. Hayes said: 'The message to the accounting community is that when doing annual reviews they must complete the required disclosures. Accountants should be asking tougher questions about climate change.'

31) GERMAN INDUSTRY AND GREENS AT LOGGERHEADS OVER EMISSIONS PLAN

DW-World

February 25, 2004

Internet: http://www.dw-world.de/english/0,3367,1432_A_1123308_1_A,00.html

German industry and unions are up in arms over an emissions trading system to cut pollution, even as the clock ticks on a March deadline for Berlin to submit a list of companies and their carbon credits to the EU. The tug of war over Germany's controversial plans for an emissions allocation system, unveiled last month, showed no signs of easing this week even after a high-profile meeting between Environment Minister Jürgen Trittin and Economics Minister Wolfgang Clement.

The emissions trading plan is a result of an EU bill passed last year, which makes it mandatory for EU member states to issue "carbon credits," initially cost-free, to companies in the oil refining, energy, smelting, steel, cement, ceramics, glass and paper sectors. The system is a crucial part of the EU's commitment under the Kyoto Protocol to reduce emissions by 8 percent between 2008 and 2012, compared to 1990 levels. The emissions trading plan will effectively create a Europe-wide market in greenhouse emissions allowances. The allotments include a system of tradable emissions permits that allow companies that voluntarily reduce emissions to sell the difference to others as unused "rights" to pollute. Offenders will also be able to buy extra credits to emit carbon from another company -- the price will be determined by the emissions trading market. The system is scheduled to take effect in 2005.

INDUSTRY SKEPTICAL OF EMISSIONS TRADING PLAN

Though the emissions trading plan sounds simple on paper, in practice it is complicated by the various lobby groups vying to influence the system to suit their interests. Trittin's national allocation plan, which foresees issuing carbon credits to around 2,600 companies and is expected to

lead to a 7.5 percent reduction in carbon emissions by 2007, has been criticized by the German Economics Ministry. Spearheaded by Clement, the ministry says it could put Germany at a serious competitive disadvantage compared to other industrial nations. The companies themselves complain that the plan forces them to eliminate an additional 7.5 percent in emissions on top of climate protection measures they have already volunteered to implement. Many, who have already prematurely slashed their emissions, also accuse Trittin of giving them too little carbon credits.

UNIONS FEAR JOB LOSSES

Martin Wansleben, head of the Association of German Chambers of Industry and Commerce said it was wrong to base the emissions trading plan on the industry's voluntary offer from two years ago. "What the environment minister is doing, is a trick. He's twisting words and saying if you have already promised that then I can count on the fact that it will work," Wansleben told Deutsche Welle. "It's like he's saying 'We will become more Catholic than the Pope, we'll become better than the others -- even if it costs jobs and the economy!'" Trade unions are also warning of disadvantages for their sectors and a loss of jobs if Trittin's plan goes ahead in its present form. Erhard Ott, chairman of the services union Verdi, said the regulation would make coal-fired plants unprofitable and threaten thousands of jobs. On the other hand, electric utilities that burn natural gas will be the most likely winners.

CARBON CREDITS WILL AMOUNT TO NAUGHT: GREENS

Environmental organizations have a radically different take on the issue. "The industry just doesn't get enough. It's absolutely shameless, what they're demanding," said climate expert Regine Günther of the World Wide Fund organization. "They (the industry) want to raise their emissions. That means: each one will get as much as he needs. If that happens, the price of the carbon credits will be zero," she added. Trittin, a member of the Green party insists that the emissions trading plan will help the industry meet their self-imposed goals of cutting pollutants. "With the emissions trading system we want to help the industry to meet their promises of saving 45 million tons of carbon dioxide by 2012 and help them to actually implement it," the minister said. Meanwhile time is running out for Germany to submit its list of 2,600 companies and its break-down of carbon credits among them to Brussels by the end of March. Trittin has announced that Germany will stick to the deadline, ensuring further negotiations between the industry leaders and the greens to find a compromise.

32) OIL INDUSTRY CAN DEVELOP CREATIVE SOLUTIONS TO ADDRESS CLIMATE CHANGE

AME Info

February 25, 2004

Internet: <http://www.ameinfo.com/news/Detailed/35341.html>

Making a keynote address at the 'Environment Progress in the Petroleum Industry' conference being held in Bahrain, Sir Charles Nicholson, BP's Group Advisor on the Environment, said that the world cannot ignore the impact of climate change and that action should be taken now to address the issue. He said that this message has already gained resonance in the Middle East and that people and companies in the region and around the world are responding to the challenge, developing new technologies and ways of producing and using energy.

One of the most vivid examples of this is the increasing shift to using cleaner fuels such as natural gas, which in power generation produces 24 per cent less carbon than oil and 41 per cent less than coal. Sir Charles, who is also a member of the World Business Council on Sustainable Development, said that by setting themselves challenging environmental targets, oil companies can actually save money. Citing an example from BP, he said that in 1998 the company set itself the target of reducing its own greenhouse gas emissions to 10 per cent below 1990 levels by the year 2010. In the event, BP met the target by the end of 2001, nine years ahead of plan, and produced remarkable savings. 'The further we proceeded, the more we saw that it made good business sense. Within the three years we added \$650 million of value for an investment of around \$20 million,' said Sir Charles.

BP now plans to hold its greenhouse gas emissions at this level, despite continuing growth in the company. An important part of BP's initiative was the introduction of an internal emissions trading system, whereby each of the company's 120 business units was given a greenhouse gas emissions allowance. If it exceeded this limit the unit had to either buy additional allowance from another unit or seek lower cost ways of staying within target. The system encouraged participants to find innovative low cost ways to reduce emissions while still growing their business.

The United Kingdom introduced a national emissions trading system in 2002 and a similar system will be introduced throughout the European Union by 2005. BP is taking part in both these schemes. BP is also exploring possibilities for capturing and storing carbon dioxide (CO₂), one of the main greenhouse gases. For example, in Algeria, with Sonatrach the company is developing one of the world's largest CO₂ storage projects to store the CO₂ that will be separated from large quantities of natural gas produced by the companies for the European market. 'Huge amounts of time, money and effort are going into researching the issues. I think we should be optimistic, but we should not underestimate the scale of the challenge. It is the responsibility of us all, and partnership will be the key in this,' Sir Charles concluded.

33) ADDRESSING CLIMATE CHANGE

Kuensel Online

February 24, 2004

Internet: <http://www.kuenselonline.com/article.php?sid=3773>

Global climate change is a concern just as the rising emission of greenhouse gas. How will one respond?

Attempting to address that issue in Bhutan would be the outcome of two project documents signed between the national environment commission (NEC) and the UNDP with the global environment facility (GEF), yesterday, on February 20. The projects are funded by UNDP/GEF at US\$ 200,000 each. The project, national capacity self-assessment for global environment management, will identify needs and priorities for "capacity building", support at the individual and institutional level keeping in mind the three Rio Conventions- biodiversity, climate change and land degradation- to which Bhutan is an active party. The second project, national adaptation programme of action, will, in consultation with various stakeholders, develop a "prioritised" programme of action to address the impact of global climate change in Bhutan. Climate change, according to NEC, would bear very serious economic, social and ecological ramifications to a country, and being prepared was vital.

34) PENTAGON DOWNPLAYS REPORT ON CLIMATE CHANGE THAT IT COMMISSIONED

AFP

February 24, 2004

Internet: <http://www.terradaily.com/2004/040224205552.9h8gyjrq.html>

The US Defense Department downplayed a report on climate change that it had commissioned, saying it was speculative and shrugging off its call to make the issue a top political priority. "The Schwartz and Randall study reflects the limits of scientific models and information when it comes to predicting the effects of abrupt global warming," said Andrew Marshall, an influential Pentagon adviser who ordered the study carried out. "Although there is significant scientific evidence on this issue, much of what this study predicts is still speculation," he argued.

According to Britain's The Observer, US military officials censored an alarming report because the issue of global warming could wind up thrust into the US presidential campaign ahead of the November vote. Environmental activists charge Bush with downplaying the importance of global warming noting his opposition to the Kyoto Protocol aimed at reducing emissions of greenhouse gases. The Pentagon report predicts that "abrupt climate change could bring the planet to the edge of anarchy as countries develop a nuclear threat to defend and secure dwindling food, water and energy supplies," The Observer reported. The report, quoted in the paper, concluded: "Disruption and conflict will be endemic features of life.... Once again, warfare would define human life."

Its authors -- Peter Schwartz, a CIA consultant and former head of planning at Royal Dutch/Shell Group, and Doug Randall of Global Business Network based in California -- said climate change should be considered "immediately" as a top political and military issue. It "should be elevated beyond a scientific debate to a US national security concern", they were quoted as saying.

35) GREENHOUSE GAS INVENTORY EXPERTS MEETING IN WGTN

New Zealand Ministry for the Environment

February 23, 2004

Internet: <http://www.scoop.co.nz/mason/stories/SC0402/S00085.htm>

Wellington is hosting a meeting of lead international reviewers for the greenhouse gas inventory review process under the Framework Convention on Climate Change. Organised by the United Nations Framework Convention on Climate Change secretariat in Bonn and the Ministry for the Environment's Climate Change Office, the meeting is being held in Wellington from 23 to 25 February 2004. The meeting is co-funded by the United Nations Framework Convention on Climate Change secretariat and the governments of Australia, Canada, and New Zealand. It will be attended by about 30 lead reviewers from a wide range of countries. Officials from New Zealand and Australia involved in greenhouse gas inventory preparation (and who are not lead reviewers) have been invited to attend the meeting as observers.

Ministry for the Environment's Sustainable Industry and Climate Change Group General Manager, Bill Bayfield, says that hosting the meeting in New Zealand provides a valuable learning opportunity for officials involved in New Zealand's greenhouse gas inventory preparation by attending the lead reviewers' meeting as observers. "This meeting is integral to the success of the inventory review process under the United Nations Framework Convention on Climate Change and

inventories are the prime means by which success against targets will be measured under the Kyoto Protocol. Good inventories also support New Zealand's climate change policies which are based on robust emission estimate and land use change information." All countries that have signed the United Nations Framework Convention on Climate Change will take measures to address climate change including greenhouse gas inventories, national or regional programmes and preparation for adaptation to the impacts of climate change. The United Nations Framework Convention on Climate Change took effect on 21 March 1994 and has been signed and ratified by over 189 nations, including New Zealand.

On an annual basis, developed countries greenhouse gas inventories undergo a process of in-depth technical review. These reviews are coordinated by the United Nations Framework Convention on Climate Change secretariat, and involve teams of technical experts who conduct the reviews. Consistency is partly achieved through having an annual meeting of lead reviewers where interpretation of guidelines can be discussed, together with any problems that have arisen through the previous year's review process. "The New Zealand delegation will be lead by Helen Plume, New Zealand Climate Change Office's Science and Inventory Team Manager. Ms Plume was recently elected to the Bureau of the United Nations Framework Convention on Climate Change Conference of the Parties for one year. The Bureau serves as the guardian of the United Nations Framework Convention on Climate Change process," Mr Bayfield said. Each annual review process involves a total of about 12 review teams with two lead reviewers per team. The first annual lead reviewer's meeting was held in Bonn in June 2003. The meeting in Wellington is the second annual meeting.

For more information:

See www.climatechange.govt.nz and the United Nations Framework Convention on Climate Change website www.unfccc.int

36) CANADA PLACES CARBON DIOXIDE UNDERGROUND TO CLEAN AIR

The Seattle Times

February 20, 2004

Internet: http://seattletimes.nwsourc.com/html/nationworld/2001861641_carbon19.html

REGINA, Saskatchewan — The Saskatchewan prairie is so featureless and flat that people here say you can watch your dog run away for three days. Fields of canola and wheat fill the vastness before falling off the horizon in a landscape punctuated by oil pump jacks bobbing lazily. But deep underground, an ambitious experiment is under way to determine whether carbon dioxide can be safely buried. If so, carbon sequestration, as the process is called, could prove to be an effective way to reduce one of the biggest contributors to global warming.

Carbon-dioxide emissions from power plants, auto tailpipes, factories and other sources are contributing significantly to global warming, scientists have found. Without sizable reductions in this and other so-called greenhouse gases, the trend is expected to continue, bringing with it tumultuous weather patterns, melting glaciers and rising sea levels. The Weyburn oil field, 70 miles south of Regina and 50 miles north of the U.S. border, can hold an estimated 21 million tons of carbon dioxide over the project's 25-year life span. Saskatchewan's oil fields have enough capacity to store all the province's carbon-dioxide emissions for more than three decades, according to the Petroleum Technology Research Center, which manages the project.

KYOTO PROTOCOL

The Canadian government believes that carbon-gas storage will go a long way toward helping the country meet its emissions reduction targets under the 1997 Kyoto Protocol, of which it is a signatory. The pact requires industrialized nations to cut emissions of greenhouse gases by an average of 5 percent between 2008 and 2012. A similar American effort is in the planning stages in Wyoming's 10,000-acre Teapot Dome oil field, where the U.S. Energy Department wants to store CO₂ from a natural-gas processing plant more than 300 miles away. The Weyburn project began four years ago and has the backing of international energy companies and the United States, European Union and Canada, which have contributed \$21 million. "When I first heard about this, my reaction was, 'Wow, this is really nuts.' But the more I looked at it, I began to start believing that, on a small scale, this is something that is achievable," said Sally Benson, deputy director at Lawrence Berkeley National Laboratory in Northern California.

An essential ingredient of the atmosphere, carbon dioxide keeps the Earth warm enough to sustain life. It is only during the last century that scientists have begun to fear that the industrial world is creating too much of it and started to look for ways to lower CO₂ production or dispose of the excess. But it is a tricky molecule to get rid of. It doesn't always stay buried. In 1986, 1,700 people in the West African nation of Cameroon suffocated when a giant bubble of naturally occurring carbon dioxide suddenly erupted from Lake Nyos and displaced all of the available oxygen in the immediate area.

Deep-well injection of the gas can force briny water to the surface, potentially polluting streams and aquifers. Earthquakes have been reported in places where deep-well injection has occurred. And carbon dioxide can convert to an acid in groundwater. "With geological sequestration, we need to know that the carbon we put in the ground isn't going to come back up," said Klaus Lackner, a scientist with the Earth and Environmental Engineering Department at Columbia University. Burying the gas is one of several remedies for global warming that include energy conservation, emissions reductions and greater reliance on alternative energy. But carbon storage offers a unique incentive. Buried in an oil field, the gas boosts oil production by forcing residual deposits to the surface. At Weyburn, oil production is up 50 percent since carbon-dioxide injection began four years ago.

The Weyburn site was selected because, during 44 years of oil exploration, Saskatchewan required oil companies to keep copious geological records. Core samples from 1,200 bore holes provide a comprehensive look at subsurface conditions and a way to track movement of oil and gases. Carbon dioxide is injected nearly a mile underground beneath a thick rock layer. Researchers keep track of buried carbon dioxide by checking vapors in wells, sampling groundwater and conducting seismic tests that depict subsurface conditions. So far, no leaks have been detected and none of the gas has escaped to the surface, said Mike Monea, who manages the Weyburn project for the Petroleum Technology Research Center.

'CONDUITS' MONITORED

The Weyburn site is pocked with hundreds of oil wells over a 70-square-mile area. Each well shaft can act as a conduit to channel carbon dioxide to the surface. Some wells are being closed off, and others are being watched for traces of carbon dioxide. Scientists are trying to forecast how the site will hold up over several millennia. One computer model showed that carbon dioxide could migrate upward about 150 feet in 5,000 years — though it would still be far below the surface. A

final report is due in June.

Each day, about 5,000 tons of liquefied carbon dioxide arrives from a plant near Beulah, N.D., operated by the Dakota Gasification Co., which converts coal to natural gas. The liquid CO₂ crosses the prairie in a 220-mile-long pipeline before it is pumped underground in Canada.

Separating carbon dioxide from other exhaust exiting a smokestack is expensive. The process can use up to one-third of the energy produced by the power plant. Scrubbers must be installed, pipelines must be built, carbon dioxide must be carefully watched underground. It costs about \$30 a ton to separate carbon dioxide from industrial exhaust, though technology exists to cut that expense nearly in half, said Curt White, carbon-sequestration science leader for the U.S. National Energy Technology Laboratory. He said the Energy Department's goal is to get the cost down to \$8 a ton, a price at which the emissions could be captured and stored in the United States without increasing the cost to produce electricity by more than 10 percent.

"It's always going to be cheaper to put carbon dioxide into the air than somewhere else," said Howard Herzog, principal research engineer at the Massachusetts Institute of Technology. "It costs a lot more than anybody seems willing to pay now, but if we decide we really want to solve the climate problem, then it's going to be a cost-effective option." President Bush has endorsed carbon capture and burial as a way to reduce greenhouse gas emissions while promoting energy development. The Energy Department has a goal for power plants to capture 90 percent of their carbon emissions by 2012.

Experts caution that sequestration, alone, is only part of the solution. The United States — which has not signed the Kyoto Protocol — is the world's leading emitter of carbon dioxide, with 1.6 billion tons of emissions annually, about one-quarter of the worldwide total. About 80 percent of the U.S. emissions come from fossil-fuel combustion, according to the Environmental Protection Agency. Worldwide CO₂ emissions could triple over the next 100 years, reaching 20 billion tons annually, according the Intergovernmental Panel on Climate Change, the U.N. body that brings together scientists to study global warming. "We need increased reliance on energy efficiency and increased reliance on renewable energy," said David Hawkins, director of the climate center for the Natural Resources Defense Council, a leading U.S. environmental group. "Carbon storage could provide a third side of the triangle that would allow us to get deep reductions in global warming pollution, but you can't rely on it as the silver bullet."

"We've got to find a way to get industry to get their emissions into the ground instead of into the atmosphere," said Monea, the Weyburn project manager. "One of the most destructive greenhouse gases is carbon dioxide, and mitigation of that greenhouse gas is happening here. We are dealing with this problem, right here, by burying it underground. What's happening here is huge." A consortium of eight partners, including Canada, the United States, the European Union and BP — formerly British Petroleum — have launched a \$25 million project to explore new technologies to capture and store carbon gas. The effort so far has found techniques that reduce costs for geological carbon storage by up to 60 percent, although more savings are needed before the economics favor doing so on a large scale, said Gardiner Hill, manager of BP's environmental technology group. "Geological storage is one option that could play a material part in helping us remove emissions and helping the world move forward to a stable amount of carbon dioxide in the atmosphere," Hill said. "The carbon originated from under the ground. We're putting it back."

Copyright © 2004

37) ARGENTINA ASSESSES VULNERABILITY TO CLIMATE CHANGE

IPS

February 18, 2004

Internet: <http://www.ipsnews.net/interna.asp?idnews=22468>

BUENOS AIRES, Feb 18 (Tierramérica) - One hundred Argentine scientists and technicians will work on a project over the next two years to measure the country's greenhouse gas emissions and to determine where its vulnerabilities lie with respect to the impacts of climate change. The project is to be financed by the Global Environment Facility (GEF), which will grant the government 1.14 million dollars for the effort, but the coordination and administration of the programme is in the hands of the non-governmental Fundación Bariloche. "The project will allow us to determine how vulnerable the country is to changes in climate," economist Daniel Bouille, president of the foundation, told Tierramérica. He said the focus areas "are priorities determined by their relevance from the economic and social perspectives."

The project has four objectives. The first is to take an inventory of emissions of gases that contribute to global warming, particularly carbon dioxide and methane. The results will be presented in a report to the Conference of Parties to the United Nations Framework Convention on Climate Change. The first report was made in 1990, and its data were updated in 1999. The study will now take figures from 2000 to conduct a new measurement, in the hands of 10 experts from the Fundación Bariloche who took part in the first inventory.

Greenhouse gas emissions from the combustion of fossil fuels in Argentina represent 0.5 percent of the global total. The country ratified the Kyoto Protocol on curbing greenhouse gas emissions in 2001. The second objective of the project is to determine Argentina's vulnerability to climate variations and the increase in average temperatures in the long term. There will be 90 scientists and technicians from institutions from throughout the country working on that effort, and it is where most of the funds are going, according to Bouille. There are many problems found in crucial economic and social areas, and that is where the experts will focus their work, says Raúl Estrada Oyuela, director of environmental affairs for the Argentine foreign ministry.

Estrada told Tierramérica that they will analyse, for example, the impacts of climate change on agriculture in Argentina's central humid Pampas. In this vast fertile region, which provides most of the country's farm exports, heavy rains have caused flooding in recent times. Just over a year ago, nearly 20 percent of the cultivated area in this flat region was under water. Under normal conditions, the water filters into the subterranean layers or evaporates, but after a period of heavy precipitation, the ground's absorption capacity was exhausted. The problem is aggravated if the type of crop does not contribute to evaporation, as occurred with soybeans, Argentina's leading export, which covers half of the country's cultivated area.

There are regions in the northeast where prolonged drought is hurting the operations of hydroelectric dams. In others, intense rains cause devastating floods, as occurred in 2003 in the western province of Santa Fe, with the Salado River. The inundation occurred in just a few hours, affecting half of the provincial capital and killing 23 people. Thousands of families were left homeless as entire neighbourhoods along the river disappeared under water. Another area of study is the effect of rising temperatures on sea levels in Buenos Aires province, where windstorms from the south cause the Río de la Plata estuary to rise, triggering damage along the shores.

Also to be assessed is soil deterioration in the Patagonia region, in southern Argentina. The area has been affected by desertification, but could be hit by increasingly torrential rains as a result of climate change, aggravating the soil erosion problem. Formulating a National Mitigation Programme is the third objective, and entails reducing emissions of greenhouse gases, which retain heat in the Earth's atmosphere. Experts are to propose policies and actions to neutralise the harm produced by carbon dioxide and methane gases. By way of example, Estrada pointed to a study being conducted by Argentine scientists to reduce methane emissions from livestock by changing the diet of cattle, which, he said, has the added benefit of improved beef and milk.

Finally, the project calls for training in climate change issues, and raising public awareness about the relationship between emissions, temperature increases and the impacts of climate change on the population.

CLIMATE IMPACTS

38) GLOBAL WARMING WORSENING: WRI

The Hindu

March 12, 2004

Internet: <http://www.hinduonnet.com/thehindu/holnus/003200403121190.htm>

Washington, March 12. (PTI): Concerned over the "worsening" global warming, despite a decade since the ratification of the UN Framework Convention on Climate Change (UNFCCC), the World Resources Institute (WRI), a major think tank, has said that a concerted effort by international communities could only address the problem. "We have not made significant progress in curbing global warming in the last decade. In fact, the latest scientific reports indicate that global warming is worsening," said Dr. Jonathan Pershing, director of WRI's Climate, Energy and Pollution Programme.

"We are quickly moving to the point where the damage will be irreversible. Unless we act now, the world will be locked in to temperatures that would cause irreparable harm. To stabilize the atmospheric concentrations of the greenhouse gases that lead to global warming, we must ultimately bring net emissions of these gases to near zero," he said. Leaders from 154 countries signed the UNFCCC with much fanfare during the 1992 Earth Summit in Brazil. It was ratified in March, 1994 and today, 188 countries are signatories. An implementing treaty, the Kyoto Protocol, is in limbo as Russia remains undecided whether it will ratify it or not. The Bush Administration has refused to sign it. David Jhirad, WRI's vice president for research and an international energy expert, said unprecedented technology innovation, policy leadership and private capital investment will be needed to solve the problem.

39) CHILLING GLOBAL FORECAST

Sydney Morning Herald

March 11, 2004

Internet: <http://www.smh.com.au/articles/2004/03/10/1078594434768.html>

Global warming could disrupt the world's sea currents, sending Europe into a chill within 100 years and devastating tropical ocean life, a CSIRO scientist says. Richard Matear, a Hobart-based marine

researcher, said the oxygen content of deep ocean water between Australia and Antarctica had fallen 3 per cent since 1968. If new research confirmed the decline was happening throughout the world's southern oceans, it would be a strong sign global warming was interfering with sea currents. According to NASA "the thawing of sea ice covering the Arctic could disturb or even halt large currents in the Atlantic Ocean. "Without the vast heat these currents deliver - comparable to the power generation of a million nuclear power plants - Europe's average temperature would likely drop 5 to 10 degrees."

While North America would not be as severely hit, the space agency said "such a dip in temperature would be similar to global average temperatures toward the end of the last ice age roughly 20,000 years ago". While NASA said many scientists were sceptical, it quoted Dr Robert Gagosian, director of the private Woods Hole Oceanographic Institution, Massachusetts, as saying such a change in ocean currents could happen within 20 years. Yesterday Dr Matear explained that if global warming continued melting Arctic ice and increasing evaporation, boosting rainfall in the North Atlantic, "the North Atlantic could be flooded with fresh water. The flood of fresh water reduces the density of the surface and prevents the water from sinking deep into ocean," he said, adding that the vertical sinking of sea water helped drive ocean circulation.

Officially called the thermo-haline circulation, the pattern is sometimes dubbed the Great Conveyor Belt. Dr Matear said the decline in oxygen levels in deep water of the Southern Ocean was exactly what computer modelling suggested would be seen if global warming slowed this circulation, reducing the cold water flowing south of Australia. "Cold water is high in oxygen," he said. Dr Matear said although it was too early to say what impact a shutdown of ocean currents would have on Australian temperatures, he agreed Europe could be sent into a severe chill. "A decline of five degrees by end of this century . . . that wouldn't be unrealistic." Dr Matear said a decline in oxygen levels would be particularly serious for sea life in the tropics, where the warmer water is already oxygen-poor.

40) ENVIRONMENT HIGH ON GLOBAL AGENDA

World Bank

March 10, 2004

Internet: <http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,,contentMDK:20175220~menuPK:34457~pagePK:64003015~piPK:64003012~theSitePK:4607,00.html>

Leading environmentalists say the environment is still at the top of the global agenda, but people now view what was once a single issue as a series of specific topics such as: climate-change, deforestation, carbon emissions, and wildlife conservation. That was the conclusion of a recent roundtable debate hosted by the Environment Department of the World Bank. That conclusion is backed up by recent polls showing that "the environment" has dropped off as a hot topic. Experts say it is because people don't categorize or perceive critical environmental issues under the "fuzzy" generic umbrella of environment, but more as specialized sub-topics.

The environment debate was chaired by Claude Martin, Director General of the World Wide Fund for Nature (WWF International) and prominent NGO leaders: Steve Sanderson, President and CEO of the Wildlife Conservation Society; Christiana Figueres, Founder and former Executive Director of the Center for Sustainable Development in the Americas; Steve McCormick, President of The Nature Conservancy (TNC); Tim Wirth, President of the United Nations Foundation; Jonathan

Lash, President of World Resources Institute (WRI); and Kathryn Fuller, President of World Wildlife Fund US (WWF).

According to Tim Wirth, UN Foundation, "environmental issues are going to be one of the four top priorities of the electoral debate leading the US election in November 2004 because the swing-voters in the decisive 15 states of the nation care deeply about these issues." Wirth added that both President George W. Bush and the democratic prospective candidate Senator John Kerry "are pushing the importance of environmental issues in their campaigns to reach this critical group of voters." "As humans," said Christiana Figures, Center for Sustainable Development in the Americas, "we have the capacity to plan for the future, we do it when buying insurance or retirement funds. We must build on this human capacity of planning for the future to become carbon smart people, through a massive education campaign to increase the environmental awareness of ordinary citizens, especially on climate change."

For Steve Sanderson, WCS, the issue of state responsibility is critical as in many parts of the world public and state failures have caused a shift to local communities and privatization. He says, "there has been a shifting of public oversight of the environmental agenda onto the private sector and NGOs." Sanderson now sees too much emphasis on non-publics, and is concerned about the division of responsibility between public and private initiatives. He underscored that "what we need but are lacking is visionary global leadership, this is cause for concern. It is a serious risk that the environment is being privatized, though it is a very public issue."

But for Kathryn Fuller, WWF, the involvement of communities has brought a new sense of ownership. "We see through different examples around the world that success is possible, for instance in the fishing villages of East Africa, where as a result of the establishment of protected areas, the quality of life of the local community has improved tremendously."

For his part, Claude Martin of WWF International reminded the audience that to achieve the 2015 target of halving the number of people without access to water and sanitation, in real terms means that each day an additional 250 thousand people would need to get access to water and 300 hundred thousand to sanitation services.

Jonathan Lash, WRI, crystallized the issue, "can climate change be the ultimate weapon of mass destruction, 15,000 people died in Europe last year as a result of it." Lash questioned the efficacy of the international community in implementing common targets such as the Millennium Development Goals (MDGs). "Across the board, task forces show that the level of effort of government commitment gets a rating of 3 out of 10 on issues like drinking water, sanitation, poverty, and rural development. Is it too difficult? We are only now learning what to do to address these issues. In a direct reference to an audience of several hundred staff from the World Bank, Lash said "you are the ones that have a key role in integrating different sectors such as health, environment, education, so that results on the ground can be more effective."

The panelists agreed that more cross-sectoral approaches are needed both in governments in the developing world and in donor agencies in order to effectively tackle the challenges of achieving the targets or reducing poverty and achieving environmental sustainability. The roundtable was introduced by Kristalina Georgieva, the outgoing Director of the Environment Department of the World Bank. Georgieva, a Bulgarian national has been appointed as the Bank's new Country Director for Russia.

41) SCIENTIST URGES US CLIMATE HELP

BBC

March 10, 2004

Internet: <http://news.bbc.co.uk/1/hi/sci/tech/3498830.stm>

The US will have to help combat climate change if extreme weather events are to be avoided, the government's chief scientist has warned. Sir David King told a Lords select committee inquiry into climate change of concerns about possible environment changes if global temperatures rise.

Last summer's European heat wave and flooding two years earlier could occur more frequently over time, he said. Action to "reduce the risks" needed to be taken by nations, including the US.

Possible changes could include ocean currents, monsoons and melting polar ice caps if global temperatures are allowed to rise unchecked through carbon fuel burning. "These severe events will occur more frequently, and the understanding of what is driving this will become more apparent," Sir David said.

"I think nations around the world will understand that in order to reduce the risks action will have to be taken." "And amongst those nations has to be the United States, which is currently responsible for emitting about a quarter of the world's carbon dioxide." The US has been criticised worldwide since President Bush pledged not to support the Kyoto Protocol, which sets legally binding global warming reductions.

Sir David's appearance at the select committee came a day after he denied reports that he was being "muzzled" by Downing Street. No 10 had sent a memo to him after he said climate change was a bigger problem than the threat of terrorism. However, Sir David has continued to conduct media interviews. In January, Sir David wrote an article for the American journal Science criticising the US Government for failing to take global warming more seriously. "In my view, climate change is the most severe problem we are facing today, more serious even than the threat of terrorism," he wrote.

PREDICTIONS COMING TRUE

He told the Lords committee that the scientific community had reached a consensus that global warming was man made and "is essentially fossil fuel burning". Sir David also called on petrol companies BP, Amoco and Shell to put money into a new UK energy research centre. He said this would have a key role in predicting climate change and temperature rise. A key energy research laboratory, part of the old Central Electricity Generating Board, was shut down when the electricity industry was privatised in the 1980s. Details about the new research unit will be unveiled shortly, he said.

42) SCIENTISTS SAY CORALS ENDANGERED

News-press.com

March 8, 2004

Internet: http://www.news-press.com/news/local_state/040309reefs.html

As any well-traveled scuba diver will attest, coral reefs throughout the Keys and the Caribbean have been crashing for years. In an attempt to limit coral destruction, the Center for Biological

Diversity has petitioned the federal government to put three of the hardest-hit coral species — elkhorn, staghorn and fused-staghorn — on the Endangered Species List.

National Oceanic and Atmospheric Administration-Fisheries received the petition Friday. Although corals are subject to many threats, including boat anchors, disease, bleaching and algal blooms, the petition's focus is to force the Bush administration to deal with global warming, said Brent Plater, staff attorney for the center. "The petition documents all the other threats," Plater said. "We have a fair amount of knowledge how to address most threats. "The bigger problem, where the government has its head stuck in the sand, is with global warming. Other threats can be abated, but if we don't get our heads out of the sand with global warming, all other efforts will be for naught."

Although debate still exists on the subject, many scientists think that global warming is raising water temperatures and that warmer water increases coral bleaching and makes corals more susceptible to disease. By not implementing the Kyoto Protocol, which is intended to limit greenhouse gas emissions and, thus, slow global warming, the Bush administration increased the chances of coral destruction, Plater said. "Global warming is looming," Plater said. "It's not the immediate cause of death. It's the linchpin of extinction." From 1977 to 1981, elkhorn and staghorn corals became the first species to show rapid die-offs in the Keys. An extremely cold winter in 1977-78 wiped out large areas of the cold-sensitive corals. By 1981, diseases had killed most of the remaining elkhorn and staghorn colonies.

Since the 1970s, elkhorn and staghorn corals have suffered from 85 percent to 98 percent declines in the Keys and Caribbean. "There are not many left," said Walt Jaap, a coral expert at the Florida Marine Research Institute in St. Petersburg. "There are a few spots that are doing moderately OK, like off Cuba. But the rest of the Caribbean, it's not so good. "For an animal to be listed, it needs to be endangered throughout its distribution. These species are distributed throughout the Caribbean, so they're reasonable candidates. It'll be interesting to see the response to the petition." Elkhorn and staghorn corals are not the only species in trouble.

Between 1996 and 1999 in the Keys, coral cover — the percent of a reef that has coral growing on it — dropped from 10.3 percent to 6.4 percent. A healthy reef has 30 percent to 40 percent coral cover. NOAA-Fisheries scientists are just now getting a look at the Center for Biological Diversity petition, spokesman Chris Smith said. "Our staff is working very hard," Smith said. "A designation requires a biological opinion, an assessment of the health of the organism, how far it's been depleted from its range, what are the causes of its demise. "Our response to the petition is in the formative stage, and we have every intention of doing a very thorough assessment and response."

Once NOAA-Fisheries officials respond to the petition, the Secretary of Commerce would decide whether to put the three coral species on the Endangered Species List. "They're going to have to list these species as endangered," Plater said. "NOAA-Fisheries already knows they're going extinct; they just haven't taken action on that knowledge. "They can no longer sit on their haunches. They need to recognize these corals are endangered." If the coral species are listed, scientists from government agencies and various organizations would create a management plan to protect remaining staghorn and elkhorn corals and expand their distribution.

Whether protection for the species is too late remains to be seen. "Look what we've been able to do with other animals," Jaap said. "The whooping crane is doing pretty well. The California condor is coming along. Manatee populations are as great as they've ever been. "There are rays of hope for these corals, but it's going to take a fair amount of talent and will to do it."

43) EUROPE'S SUMMER OF 2003 WAS HOTTEST IN 500 YEARS, STUDY SHOWS

Bloomberg

March 5, 2004

Internet: <http://quote.bloomberg.com/apps/news?pid=10000102&sid=ayajcPMaPYf4&refer=uk>

The summer of 2003, when more than 20,000 people in Europe were killed by extreme heat, was the continent's warmest for five centuries, according to a study published today in the journal *Science*. The study's lead scientist, climatologist Juerg Luterbacher, said Europeans must prepare for worse to come, as their summers gradually resemble those of countries closer to the equator. "The long-term trend is clear," Luterbacher, of Switzerland's University of Bern, said in a telephone interview. "It's going to get warmer." Resulting droughts and fires will hurt farming and tourism and heat will claim more lives, he said, echoing the concerns of reinsurers such as Swiss Re, which this week put the cost of heat-related uninsured crop failures in Europe at \$12.3 billion in 2003.

The climate study, which took more than two years, was the first to focus on Europe, Luterbacher, 35, said. Europeans' earliest personal accounts of the weather were combined with data collected in later years to create a picture of conditions across the continent. Previous studies have looked at the entire Northern Hemisphere or the world, he said.

HISTORIANS

The scientists turned to historians to find what Europeans had written in their diaries about their weather and its impact on trade, crops and animals. Weather data records began in 1659, when the first thermometers and barometers were put into use, in England, followed by widespread use of instruments throughout central Europe by 1750, Luterbacher said. The researchers filled gaps in the information by sampling ice from Greenland and tree rings for evidence of changes in climate. Data was gathered as far east as Russia and as far south as Turkey. The results describe the period from 1500 to 1658 season by season. After 1659, the researchers have detailed Europe's weather month by month.

Last year's soaring temperatures in Europe hit France the hardest, with the heat blamed for about 15,000 deaths during the first half of August, when the temperature reached 40 degrees Celsius (104 Fahrenheit). The thermometer hit a record 38.1 degrees Celsius in the U.K., buckling rails along the country's train lines. The drought-hit Danube river receded to a 100-year low, revealing armored vehicles abandoned during World War II. The heat wave began to envelope the continent just as Luterbacher and his team were preparing to announce that their work had determined the hottest European summer of the past 500 years was that of 1757. As temperatures rose, they decided to wait and extend their research into 2003. "It turned out the summer of 2003 was really the hottest," he said.

YEAR-ROUND PROBLEM

Europe is getting warmer during the other seasons, too, the study shows. The nine warmest overall years in Europe have occurred since 1989, the researchers found. Milder winters threaten European ski resorts that lie at lower altitudes, the United Nations said in a report in December on the possible impact of global warming. More than half of Switzerland's ski resorts in lower-lying areas may lose business in coming decades because of lack of snow. Scotland's Glenshee and Glencoe ski centers are for sale after the owner said mild winters were making them unprofitable. The upward

trend in temperatures began more than 100 years ago and has accelerated over the past five decades, Luterbacher said. The study found the increases go beyond those that occur naturally as a result of the Sun or volcanoes and point to human activity, consistent with the rise in "greenhouse gases" over the same period, he said. "The last part of the 20th century and the start of the 21st century were warmer than any time in the last 500 years," he said. Similar patterns have been found by researchers studying world climate or the Northern Hemisphere, he said.

POLLUTION

The study doesn't draw any conclusions about what's causing rising temperatures or how to reverse the trend. Luterbacher blames industrial and vehicle pollution and dismisses critics who say there isn't yet enough evidence to make the connection. "We have to reduce greenhouse gases," he said. "We have to do something now. We can't wait to have all the proof that humans are responsible."

Damage caused by natural disasters increased 9 percent in 2003 to \$60 billion and may rise more in coming years as global warming prompts more weather-related catastrophes, reinsurer Munich Re said in December.

The Kyoto Protocol to limit global warming aims to reduce greenhouse gases, especially the carbon dioxide produced by industry and vehicles, to 95 percent of 1990 levels by 2012. The U.S., the biggest producer of greenhouse gases, hasn't ratified the treaty. "The U.S. government is quite critical about the debate on human influence" on climate, Luterbacher said. "We see signals it's warming. It's warming in all seasons." Some scientists reject the greenhouse-gases theory, saying global warming is a naturally occurring change in the Earth's climate. The study by Luterbacher and his colleague was financed by the Swiss National Science Foundation and the European Union.

44) CLIMATE CHANGE SET TO POKE HOLES IN OZONE

Nature

March 3, 2004

Internet: <http://www.nature.com/nsu/040301/040301-5.html>

The thinning of the ozone layer over the Arctic could be much worse than we thought, because of a side-effect of global warming. If the upper reaches of the Arctic atmosphere get colder - a predicted consequence of climate change - then the rate of ozone depletion could be three times greater than currently forecast, according to Markus Rex of the Alfred Wegener Institute for Polar and Marine Research in Potsdam, Germany, and his co-workers. "I was surprised to see these results," says Drew Shindell, an atmospheric scientist at NASA's Goddard Institute for Space Studies, New York. "We never suspected the models were this far out of whack," he says.

Rex and his colleagues studied climate conditions in the Arctic over the past ten winters to calculate how ozone destruction depends on the weather. They found a surprisingly strong relationship between ozone loss and the amount of polar stratospheric clouds, they report in *Geophysical Research Letters*1.

These clouds form 20 kilometres above the ground in winter-time, and are sometimes called 'mother-of-pearl clouds' because of their shimmering appearance. But they are not harmless things of beauty: the clouds provide reaction surfaces for chemicals eating away the Earth's protective ozone. Chemical reactions in the clouds convert chlorine from

industrially produced compounds, such as the chlorofluorocarbons (CFCs) found in old refrigerators, into a reactive form that breaks apart ozone molecules.

The destruction of ozone allows more ultraviolet rays from the sun through to the surface of the planet, harming humans and the ecosystem close to the poles. Colder air in the stratosphere is thought to promote the formation of these clouds and the destruction of ozone. But it has proven difficult to appreciate the scale of the problem.

On average the Arctic stratosphere has cooled barely perceptibly over the past few years, but Rex and colleagues say the winter-time conditions are getting more conducive to ozone destruction. The amount of stratospheric cloud has been climbing steadily since at least the late 1960s, they say. If Rex's findings and models prove correct, then all our predictions about future ozone depletion are under-estimates, says Shindell.

It is not all bad news: Rex points out that even if polar stratospheric clouds continue to increase in size and number, the amount of CFCs should decline as the chemicals have largely been phased out. However, they do hang about in the atmosphere for a long time, so they will continue to cause ozone depletion for several decades yet.

References: 1. Rex, M. et al. Geophys. Res. Lett., 31, L04116, (2004).

45) NATURAL DISASTER DEATHS RISE SEVENFOLD

Reuters

February 25, 2004

Internet: <http://www.reuters.co.uk/newsPackageArticle.jhtml?type=worldNews&storyID=464218§ion=news>

FRANKFURT (Reuters) - Natural disasters caused by extreme weather claimed seven times as many victims in 2003 as in the previous year and the trend is set to continue, says the world's biggest reinsurance company. Munich Re said in its annual review of natural catastrophes that earthquakes, heat waves and tornadoes had killed 75,000 people during the year, including 40,000 who died in December's severe earthquake in Iran.

The figure was higher than the 50,000 estimate the company gave in a preliminary report in December, largely because the full effects of the Iranian earthquake were not yet known then, a Munich Re spokesman said. "After three years of relative calm, no fewer than five great natural catastrophes occurred in 2003," the report said, saying the five events alone had accounted for about a third of all economic and insured losses. Apart from the Iranian earthquake, a heat wave that hit central and southern Europe in the summer claimed 20,000 lives, and an earthquake measuring 6.8 on the Richter scale killed 2,200 in Algeria in May, the report said.

The most expensive disasters for insurers, however, were in the United States, where tornadoes battered the Midwest in May and a heat wave caused drought and forest fires in California in October and November, destroying thousands of homes. The Californian fires cost the insurance industry some \$2 billion (1.06 billion pounds), Munich Re said, while a massive hailstorm in Texas during the tornadoes "will go down in U.S. insurance history" after generating insured losses of more than \$1 billion. In total, insured losses were 40 percent higher than in 2002 at \$16 billion, said Munich Re, which insures insurance companies for the risks from their policies. Total economic losses rose 18 percent to \$65 billion.

DRAMATIC CHANGES

Munich Re said global warming would cause increasing economic damage in the future. In central Europe alone, an expected two-degree Celsius increase in temperatures by the middle of the century would cause more heat waves and floods. "It is to be feared that extreme events which can be traced to climate change will have increasingly grave consequences in the future," the report said, adding that insurance premiums would rise and that clear-cut indemnity limits would be needed. "Neither human beings, buildings and infrastructure nor the agricultural and livestock sectors are prepared for such extremes," it said. "We would be well advised to prepare ourselves for dramatic changes."

However, Munich Re said it believed climate protection was about to enter "a new dimension" and welcomed the impending start of emissions trading in the European Union in 2005, which will offer a financial incentive to reduce pollution. The system will allow companies that exceed their emission limits for carbon dioxide (CO₂), blamed by many scientists for global warming, to buy and trade emissions permits. But the EU may review its strategy of backing the Kyoto Protocol, which is designed to limit CO₂ emissions, as Russian hesitations over the accord threaten to stop it coming into force. The United States, the world's top polluter, has already refused to back Kyoto, saying it is a regulatory straitjacket that will harm industry and economic growth.

46) PACIFIC'S LOW-LYING TUVALU BRACED FOR MORE 'KING WAVES'

AFP

February 20, 2004

Internet: http://www.channelnewsasia.com/stories/afp_asiapacific/view/71958/1/html

FUNAFUTI, Tuvalu: The tiny South Pacific nation of Tuvalu was braced for the year's highest tides, a worrying reminder that the low-lying atoll country could one day slip beneath the waves of the rising ocean. The unusually high or "king tides" began Thursday, peaking just before sunset and coming not over the beach as would be expected, but as frightening springs of seawater everywhere on this capital atoll.

The tides flooded homes, offices and even part of the airport. Larger tides are expected on Friday and Saturday. Several hundred metres (yards) into the island, as far as possible as it is to get from the sea, the worst of the flooding occurred Thursday around homes and in ancient compost pits where generations have been growing root crops. "I am very worried about the sea levels," said Losi Tuaga, 18, as she stood outside her home, ankle deep in seawater bubbling out of the soil. Her father, Tuaga Petelu, echoed the fears saying things were changing rapidly. "There is a change in the sea level," he said. "What can we do? We have to wait and see what's happening."

Residents of the atolls are fearful of the rising sea; at island meetings for years they have heard about global warming and the Kyoto Protocol on cutting emissions of gases blamed for driving climate change. In a humble office concerned Prime Minister Saufatu Sopo'aga urged carbon gas-emitting industrial nations to become partners with Tuvalu in ending global warming, which is producing dangerous rises in the ocean levels. "I feel angry, but at the same time I do understand the motives behind the drive of industrial nation activities," he told AFP. "It was not done purposely, there were other motives, and they were looking to bettering the lives of their own countries. "But Tuvaluans have future generations too who want to enjoy the same resource, the same kind of life that Tuvaluans have today."

Tuvalu is a Polynesian nation of around 11,000 people living on just 26 square kilometres (10 square miles) of land spread over nine atolls, none more than five metres (16 feet) above sea level. There has been intensive political and scientific debate over whether the atolls are sinking or not, but on the ground the argument seems academic at best. Seawater bubbles up in the evening as Tuvaluan youth gather on the airport runway -- there are only two flights a week -- to play soccer and volley ball. A frog in the grass near the runway is startled as water seeps up from the ground, welling up to fill a trench and spread further with a terrifying relentlessness. Australian-educated meteorologist Hilia Vavae is known throughout the island as she documents with her small camera the changing nature of each king tide. "Sea temperatures are rising and so is the sea level," she said, standing in a puddle of seawater. "Global warming is playing a part," she said, insisting that Thursday's high tides were not natural. "No, not at all, it was manmade," she said.

47) REEF THREAT WON'T SWAY AUSTRALIA

CNN

February 22, 2004

Internet: <http://edition.cnn.com/2004/WORLD/asiapcf/02/22/australia.reef.ap/>

SYDNEY, Australia (AP) -- Australia will not sign the Kyoto pact on global warming, despite a new report that warns rising ocean temperatures will kill most of the coral on the Great Barrier Reef by 2050, an official said Sunday. In the report, Queensland University's Center for Marine Studies said the Pacific Ocean is getting too warm too fast for the world's largest chain of living coral to survive. The Worldwide Fund for Nature and Queensland state's main tourism body commissioned the report, which was partly funded by the government.

The reef, which stretches almost 2,000 kilometers (1,200 miles) along the Queensland coast in northeastern Australia, is one of the country's biggest tourist attractions. Tourists who visit it each year pump billions of dollars into the state's economy. "Coral cover will decrease to less than 5 percent on most reefs by the middle of the century, under even the most favorable assumptions," said the study, excerpts of which were published in the weekend edition of The Sydney Morning Herald. "There is little to no evidence that corals can adapt fast enough to match even the lower projected temperature rise," it said.

Studies have found that a rise in water temperature of less than one degree Celsius (1.8 degrees Fahrenheit) correlates directly with coral deaths and bleaching -- when coral loses its vibrant colors. Analysts have predicted that water temperature will rise between two and six degrees C (3.6 and 10.8 degrees F) this century. The conservative government of Prime Minister John Howard has made attempts to limit damage to the reef. Last year it increased the size of high-protection zones on the reef from 4.5 percent to 33.3 percent of its total area, or from 16,000 square kilometers to 114,000 square kilometers (6,200 square miles to 44,000 square miles). In these areas, fishing is banned and tourism is the only industry allowed. Authorities say fishing and the runoff of sediments after heavy rains also hurt the reef and make it more susceptible to bleaching.

A spokesman for the Environment Ministry said Sunday that the report was "a good contribution to debate about the reef from a constructive organization." However, speaking on condition of anonymity, he said it did not change the government's view that it should not sign the Kyoto pact because it is not a global treaty. The United States and Russia have not yet ratified the treaty. To come into force, the Kyoto Protocol must be ratified by no fewer than 55 countries, accounting for at least 55 percent of global emissions in 1990. That minimum can now only be reached with

Russia's ratification because the United States and several other nations have rejected the treaty outright. The Queensland University report warned that damage to the reef will cost the economy A\$8 billion (US\$6.3 billion) and more than 12,000 jobs by 2020.

48) SCIENTIST 'GAGGED' BY NO 10 AFTER WARNING OF GLOBAL WARMING THREAT

Independent

March 8, 2004

Internet: <http://news.independent.co.uk/uk/environment/story.jsp?story=499013>

Downing Street tried to muzzle the Government's top scientific adviser after he warned that global warming was a more serious threat than international terrorism. Ivan Rogers, Mr Blair's principal private secretary, told Sir David King, the Prime Minister's chief scientist, to limit his contact with the media after he made outspoken comments about President George Bush's policy on climate change. In January, Sir David wrote a scathing article in the American journal *Science* attacking Washington for failing to take climate change seriously. "In my view, climate change is the most severe problem we are facing today, more serious even than the threat of terrorism," he wrote. Support for Sir David's view came yesterday from Hans Blix, the former United Nations chief weapons inspector, who said the environment was at least as important a threat as global terrorism.

He told BBC1's *Breakfast with Frost*: "I think we still overestimate the danger of terror. There are other things that are of equal, if not greater, magnitude, like the environmental global risks." Since Sir David's article in *Science* was published, No 10 has tried to limit the damage to Anglo-American relations by reining in the Prime Minister's chief scientist. In a leaked memo, Mr Rogers ordered Sir David - a Cambridge University chemist who offers independent advice to ministers - to decline any interview requests from British and American newspapers and BBC Radio 4's *Today*.

"To accept such bids runs the risk of turning the debate into a sterile argument about whether or not climate change is a greater risk," Mr Rogers said in the memo, which was sent to Sir David's office in February. "This sort of discussion does not help us achieve our wider policy aims ahead of our G8 presidency [next year]." The move will be seized on by critics of Mr Blair's stance over the Iraq war as further evidence that he is too subservient to the Bush administration. It will also be seen as an attempt to bolster the Prime Minister's case for pre-emptive strikes to combat the threat of international terrorism, which he outlined in a speech on Friday.

Sir David, who is highly regarded by Mr Blair, has been primed with a list of 136 mock questions that the media could ask if they were able to get access to him, and the suggested answers he should be prepared to give. One question asks: "How do the number of deaths caused by climate change and terrorism compare?" The stated answer that Sir David is expected to give says: "The value of any comparison would be highly questionable - we are talking about threats that are intrinsically different." If Sir David were to find himself pushed to decide whether terrorism or climate change was the greater threat, he was supposed to answer: "Both are serious and immediate problems for the world today." But this was not what Sir David said on the *Today* programme on 9 January when the *Science* article was published.

Asked to explain how he had come to the conclusion that global warming was more serious than terrorism, Sir David replied that his equation was "based on the number of fatalities that have

already occurred" - implying that global warming has already killed more people than terrorism. The leaked memo came to light after a computer disk was discovered by an American freelance journalist, Mike Martin, at the annual meeting of the American Association for the Advancement of Science in Seattle, where Sir David gave a lecture. "The disk was lying on the top of a computer in the press room and I popped it into the machine to see what was on it," said Mr Martin, whose own article is published on the ScienceNow website, an online service operated by Science.

Mr Rogers' memo, written a few days before the Seattle conference, was aimed at limiting his exposure to questions from US and British media. While in Seattle, Sir David sat on a panel of scientists at one carefully stage-managed press conference, but his press office said he was too busy to give interviews afterwards to journalists. Lucy Brunt-Jenner, Sir David's press officer, said she could not comment on internal government documents but said it would be wrong to suggest that Sir David was in any way muzzled. "Sir David had a press conference and he was available to the media at three times," Ms Brunt-Jenner said. But Norman Baker, the Liberal Democrats' environment spokesman, said: "It's a clear attempt by the Prime Minister to keep Sir David quiet. The Government's chief scientist is the nation's chief scientist and I'd expect him to say what he thinks."

See Also:

Scientist denies being 'muzzled', BBC, March 9, 2004, Internet:
http://news.bbc.co.uk/1/hi/uk_politics/3545561.stm

COMMENT & ANALYSIS

49) "TOWARDS A LOW CARBON ECONOMY" by Margot Wallström, European Commissioner responsible for Environment European Business Summit

Brussels, 11 March 2004

Internet: <http://www.europaworld.org/week168/speechwalstrom12304.htm>

Ladies and Gentlemen, I would like to start this speech by quoting one of my favourite writers, Rolf Edberg. In 1966, he wrote: "This is mankind's home", "in the narrow borderland between the deathly heat beneath our feet and the coldness of space above us". He describes the fragility of our existence in poetic terms: "the atmospheric layer is so thin that it cannot be represented on any globe with even the finest brushstroke. At its thickest, it is only a few fractions of a millionth of the Earth's radius. This thin layer is what makes the difference between our planet and the sterile landscape of the moon." After reading that, one does feel the need to take better care of this fragile layer.

It is a pleasure for me to address this conference today. I have four main messages:

- Climate change is happening.
- The Kyoto Protocol is an efficient and ingenious instrument to deal with the challenge of climate change.
- In the fight against climate change, there are significant opportunities for business and we are already seeing the first success stories for European companies.
- There are real solutions to the problem of climate change public authorities and business need to work together in applying these solutions. This would be to the benefit of all.

CLIMATE CHANGE IS HAPPENING

As the quote I just read to you illustrates - climate change is one of the decisive challenges that our generation has to tackle. Our civilisation can be traced back by about 10.000 years exactly those 10.000 years that were characterised by a pretty stable global climate. Now we are endangering this stability, with unpredictable consequences for the lives of our children and our grand-children. Already in 1988, the UN brought all the important scientists of the world together under the umbrella of the IPCC (Intergovernmental Panel on Climate Change). They peer-reviewed all the scientific evidence and have reached consensus on three major reports so far. The writing is on the wall.

We now know that the 20th century was the warmest century in this millennium. Even more, all of us that are here at this conference today have experienced the 10 warmest years on record they have all taken place since 1991. In most parts of Europe, the summer of 2003 was the hottest ever. In France alone 15.000 people died due to heat stress, in combination with increased air pollution by ozone and particulates. Southern Europe was plagued by large-scale forest fires. Agricultural losses across Europe were estimated at over €10 billion. The energy sector, too, proved to be vulnerable. The electricity supply was threatened in many countries of Europe due to a lack of cooling water for fossil fuel and nuclear power plants.

To put it bluntly: How much more science do we need?

Fortunately, people are waking up. A report from the Pentagon warns that the consequences of climate change will reduce the carrying capacity of our earth. As global and local carrying capacities decline new tensions are likely to arise due to the fight for natural resources such as water. According to the Pentagon, this would have implications for the US national security. In a different area, insurance companies keep reminding us of the staggering costs this already involves today. If the current trends of natural disasters continue, total insured economic losses are estimated to be in the range of 30-40 billion US \$ in only 10 years time. This reminds us that climate change is far more than an environmental issue it is a threat to the economy. In considering the costs of slowing down climate change, we should always keep in mind the costs if we do not take action.

KYOTO PROTOCOL: A FIRST BUT VITAL STEP

The Kyoto Protocol is the only credible and comprehensive international framework for addressing climate change. And, all the more better, the Kyoto Protocol is a particularly ingenious tool. It allows for common but differentiated responsibility respecting the specific economic and environmental situation of each country. It provides clear targets towards which we can mobilise our efforts and measure our progress. And it caters for flexible and market-based instruments to reach these targets.

Some are saying the EU is alone in its defence of the Kyoto Protocol. When you read certain reports, you would get the impression that the EU is riding off like some kind of Don Quixote fighting windmills alone. This is wrong! The Kyoto Protocol has been ratified by more than 120 countries representing some three quarters of the world's population, including most of the developed nations. In the United States, 10 North-eastern states are establishing a regional CO2 trading scheme based on an initiative by governor Pataki from the state of New York. True, the EU is a global leader in these efforts, but it is a leadership in active partnership with all countries and other stakeholders that are involved in the fight against climate change. And besides, we would not fight the windmills but rather support them. We need to get our facts right. Unless

we adopt the right policies, emissions are expected to rise to about twice the level of 1990 around 2050. The only way out is the move towards a low carbon world limiting global warming to 2°C. In order to achieve that, world emissions would have to peak around 2015 and then fall substantially. What are 2° C? Not much some of you might think but let's keep in mind that during the Ice Age, the average European temperature was only 5 ° less than it is now. This is how much a few centigrade can mean.

This shows us clearly that whatever happens to the Kyoto Protocol the threat of climate change will not disappear. A recent report by the IEA (International Energy Agency) shows how much we have been doing since the 1970s to reach this path and also ... unfortunately ... how much we are at risk today of nullifying the useful efforts made in the past. The IEA countries have significantly reduced the need for energy to fuel economic growth. Today, it takes one-third less energy to produce a unit of GDP as compared to 1973. Without these savings, energy use today would be 50 % higher than it actually is. However, the growth in the transport sector, in particular passenger cars, means that total oil demand is still the same as it was in 1973. What we have to do is continue to step up our efforts to invest in energy-efficient and low-carbon equipment.

OPPORTUNITIES FOR EUROPEAN BUSINESS

World-wide, mankind is spending €2.7 trillion per year on energy. Of all primary energy, some 80-90% is being lost, for instance in energy conversion and transport processes, inefficient industrial processes, heating and cooling. Limiting this huge amount of waste makes a lot of economic common sense. But it also represents a huge business opportunity and will improve Europe's security of energy supply. Being the first mover can give European business the competitive edge. Environmental technologies can help us raise productivity, increase employment and improve our environment. Across the globe, carbon constraints are becoming clearer this is giving EU companies new market shares thanks to the international framework in which we operate.

Let me give you two examples:

- 40% of energy is consumed in our homes and buildings. Existing low-energy buildings require up to ten times less energy than today's building stock. And this can be done with cost-competitive off-the-shelf technology and expertise.
- Secondly. China is a booming automotive market. In 15 to 20 years' time, China's total vehicle fleet could overtake that of the US. Today, Chinese authorities are seriously considering implementing fuel economy standards for passenger cars. For almost 10 years, the European Union, in cooperation with the car manufactures, have been developing the world's most ambitious strategy in this field. This sustained strategy was successful in Europe and will give us a significant first mover advantage on the fast growing car markets of the future.

And you in business know that developing countries such as China, Brasil or South-Africa no longer go for second best technology, instead they go for the "first best". And right they are!!!! European companies should be ready to seize the new business opportunities of the future. I am heartened to see that many of them are already doing so today.

EMISSIONS TRADING: A COST-EFFICIENT INSTRUMENT TO MEET KYOTO

But, of course, we need to see to it that our measures to fight climate change are truly cost-effective. This is why the Commission invited all stakeholders from industry, NGOs and academia

to contribute to the question: how can we create market-based incentives to reward those technologies that we are going to need much more in the future? One of the strong messages emerging has been clear and simple: by creating a price for carbon and by creating a European market for emission reductions. This indeed leaves ample room for entrepreneurial flexibility to choose the most cost-effective response to emission reductions across Europe.

But a market-based instrument also implies scarcity, so as to create a positive price signal. That is the basic task the Member States are currently undertaking in preparing for the National Allocation Plans under the Emissions Trading Directive. I understand the pressures they are under, as those who will receive allowances for free want to obtain as much as they can. But I trust the common sense of both public and private players to ensure that no more allowances are distributed than the relevant companies need. By over-allocating Member States would deprive themselves of the tools they need to get on "the path to Kyoto" as prescribed by the directive. In this case, the Commission would have to act - and will act if necessary.

Some have stated that price signals, for instance increased electricity prices, are an unintended effect. Some even went so far as to state that this element was overlooked when the Emissions Trading Directive was being developed. I can be formal in my reply: this was not the case! Many reports, including those of the IEA (International Energy Agency), have shown that price signals are the consequence of any climate change policy that calls on the market. We do know however that these price developments are going to be limited, in particular in comparison to the price decreases expected following liberalisation of the electricity market.

In less than a year from now, the emissions trading scheme will be up and running. It is attracting a lot of attention from around the world and in particular from industrialised nations such as Canada, New Zealand, Australia and others who have expressed interest in linking up their own future trading schemes with the European one. I am also pleased to see that the debate involves the US. Over there businesses have already set up the Chicago Climate Exchange, a voluntary trading scheme, while climate and trading policies are being developed in several states. Also the discussion in the US Senate on the Mc Cain-Liebermann Act shows a welcome policy development on a nation-wide trading scheme quite similar to the EU experience.

NEW TECHNOLOGIES AND RENEWABLES

I have been underlining the role of technology repeatedly today, and that is also the goal of the new Environmental Technologies Action Plan that the Commission adopted a few weeks ago. I know this issue is raised during your conference and I will therefore not address it in any further detail.

Very shortly and in general terms, ETAP recognises that many environmental technologies have a great potential to boost the competitiveness of companies while decoupling growth from pressure on the environment. ETAP seeks to overcome the barriers that still exist to the use of these technologies through a common European effort with all relevant stakeholders including business.

This is only one of many interesting developments going on at the moment. Some technologies have a spectacular future in front of them. But for several of them the jury is still out and the right incentives should lead to the promising results.

CO2 capture and storage, for example, would allow considerable CO2 savings and would 'buy time' until alternative solutions become available or become less expensive. Hydrogen and fuel cells can deliver important energy efficiency gains with respect to present-day technology, and could give a

significant boost to the use of renewable energy sources in the long term. By far the most promising source of energy are renewable energies as they are clean with low greenhouse gas emissions - or none at all. They are an alternative to importing fossil fuels and so help ensure energy security. Because many of them are decentralised, renewables can also remove the need to expand distribution and transmission systems. Renewables create new jobs and businesses many of them in rural areas. In considering policies related to renewables, all potential benefits need to be taken into account.

The EU is at the forefront in promoting renewables. We have established an ambitious target of increasing the share of renewables in primary energy to 12% by 2010. As regards wind energy, European businesses lead a market now worth €15 billion and growing at 30% per year. This should encourage Europe to strive for world leadership in other areas as well, like photovoltaics for example. To encourage investments in renewables we need a stable long-term perspective and that is why countries around the world should develop targets for 2020. Similarly new public private partnerships are promising, but we should now move away from words to deeds. One way to do so is the Johannesburg Renewable Energy Coalition that the EU launched at the 2002 WSSD. JREC - as we call it - has since grown to include 86 Governments. These members strongly supported by financial and corporate stakeholders, are committed to build a coherent and stable global framework to support renewable energy and set smart targets.

In this context, I very much welcome the initiative taken by Chancellor Schroeder in Johannesburg to host a world conference on renewable energy in Bonn in June 2004. At this Conference, the Commission which is hosting the JREC Secretariat will among others present the results of its "Patient Capital Initiative". Here, the Commission is exploring the feasibility of creating a new global public-private "fund of funds" aimed at risk sharing and risk capital formation. This should provide support to SMES and financial intermediaries that are driving the market today. I expect the business community to take a leading role in this most important event. And that is why I hope to see you there in large numbers, with lots of fresh ideas and practical plans for developing the emerging low carbon economy.

Thank you very much.

50) RUSSIA'S CALL ON GLOBAL WARMING by Jonathan Lash

World Resources Institute

March 10, 2004

Internet:

<http://www.enn.com/direct/display-release.asp?objid=D1D1366D000000FB353D59C50F1CAA7E>

Jonathan Lash, is the president of the World Resources Institute.

Early this year, I moderated a panel on climate change at the World Economic Forum, the global gathering of business and political leaders, pundits, and experts that takes place every year in Davos, Switzerland. The forum's organizers, drawing on an article by a distinguished scientist who joined us, had provocatively titled the panel "Global Climate Change: Mother Nature's Weapon of Mass Destruction?" The discussion was full of surprises.

One of the panelists was Russian President Vladimir Putin's economic advisor, Andrei Illarionov, who had stunned climate negotiators a few weeks earlier by announcing that he expected Russia

would not ratify the Kyoto Protocol. The future of the Kyoto emissions-reduction agreement, negotiated in 1997, has been hanging in the balance ever since it was rejected by U.S. President George W. Bush.

Without U.S. participation, Russia is now the only hope for the future of Kyoto, which is supported by most of the rest of the world. Although the European Union has said that it will implement Kyoto even if it doesn't come into force, without binding agreements Europe will face intense internal pressure not to impose the costs of programs to reduce greenhouse-gas emissions when the rest of the world isn't doing so.

In Davos Dr. Illarionov reiterated his assertion that Russia would reject the Protocol, and gave an explanation that startled business leaders and climate experts alike. There was, he said, no scientific evidence of global warming. Instead, he told the audience, the greater threat was global cooling. Russia would not accept Kyoto obligations, which, he insisted, would limit the growth of the country's economy.

Another panelist, Sir John Houghton, a leading climate scientist, noted that the evidence of human-caused warming is now overwhelming. Not only were 1998, 2002, and 2003 the hottest in the past thousand years, but the evidence of global warming's physical impacts are mounting with the passing of every day, as scientists record new findings on rising sea levels, disruptive ecological shifts, and melting glaciers and ice caps.

But Illarionov seemed as deaf to those arguments as he was to questions about why Russia would worry about Kyoto imposing limits on his country's growth. The protocol's caps are based on 1990 emissions levels, and would allow Russia significant room to grow its emissions since the country's energy use has significantly declined in the past decade. In fact, under Kyoto Russia would reap substantial profits from the sale of surplus emission allowances to other countries.

Since Illarionov made his proclamation, a number of other Russian officials have presented completely different -- and far more encouraging -- public statements. In December, senior trade minister Muhammad Tsikhanov said, "There are no decisions on ratification of the Kyoto Protocol apart from the fact that we are moving toward ratification." What's going on?

One possibility is that Russia is waiting to see whether key ratifying nations -- Germany, France, the United Kingdom, and Japan -- offer additional inducements for Russian ratification. The withdrawal of the United States reduced the prospective demand for, and thus the value of those surplus Russian emission allowances, the so-called "Russian hot air." Russia may be using Kyoto ratification as a bargaining chip in other negotiations with Europe, including WTO admission, energy investments, and debt relief.

In 2004, leaders in Europe and Japan will either find means to persuade Russia to ratify, or Kyoto will fail. If these negotiations fail, the only concrete step nations have agreed upon to protect the climate will evaporate.

Kyoto is not a perfect agreement, but its collapse would be a huge setback for climate negotiations, and undercut those companies that have taken voluntary steps to measure and reduce their emissions. With so much in the balance, this is an opportunity for real political leadership in Russia and Europe. And the outcome will have lasting repercussions for generations to come. (WRI Features)

PRESS RELEASES & ANNOUNCEMENTS

51) SILICON METAL INDUSTRIES SEEKS NEGOTIATED GREENHOUSE AGREEMENT

New Zealand Ministry for the Environment
March 10, 2004

The Government will enter negotiations for a Negotiated Greenhouse Agreement with Silicon Metal Industries (New Zealand) Limited, the Convenor of the Ministerial Group on Climate Change, Pete Hodgson, said today. Silicon Metal Industries (NZ) Ltd intends to convert gravel deposits in Southland into silicon metal, which is used in the manufacture of rubber tyres and high-technology products such as solar panels, silicon chips, liquid crystal displays, silicon plastics, light metal alloys and long-life silicon paints. The company has an exploration permit and an access agreement for gravel deposits at Pebbly Hills, central Southland.

Negotiated Greenhouse Agreements (NGAs) are a key element of New Zealand's climate change policy. An NGA is a binding agreement between a firm and the Government that commits the firm to moving towards world's best practice in managing greenhouse gas emissions. In return, the Government provides a full or partial exemption for the firm from the emissions charge that is to be introduced by 2008. NGAs are limited to firms or industries whose international competitiveness would be at risk from an emissions charge. The Government has signed one NGA, with the New Zealand Refining Company, and is negotiating with ACI Glass Packaging, paper mill operator Norske Skog Tasman, mining companies Newmont Waihi and GRD Macraes, New Zealand Aluminium Smelters Limited and some of Carter Holt Harvey's major New Zealand manufacturing operations. Mr Hodgson said the negotiations were a significant step in the implementation of climate change policy, which is designed to enable New Zealand to meet its obligations under the Kyoto Protocol. "NGAs will constrain greenhouse gas emissions while protecting the international competitiveness of New Zealand businesses. They encourage businesses to pursue the economic and environmental advantages of best practice in emissions management." The New Zealand Climate Change Office at the Ministry for the Environment takes applications from firms seeking NGAs and assesses their eligibility and priority. It has further applications under assessment.

52) NEW BOOK: HIGH TIDE: NEWS FROM A WARMING WORLD by Mark Lynas

Hardback publication
10 March 2004; RRP £16.99; 368pp; 0 00 713939 X

“With High Tide, Mark Lynas has given us a tremendous gift: he has time-travelled into our terrifying collective future, a future that has already arrived in the farthest reaches of the globe. Go with him on this breathtaking, beautifully told journey – to island nations being engulfed by rising tides, to towns swallowed by encroaching desert, to glaciers melting into oceans – and I promise that you will come back changed, determined to alter the course of history.” Naomi Klein, author of No Logo

NEW BOOK REVEALS GROWING CLIMATE DEVASTATION

According to the government's chief scientist David King, it's a worse threat than terrorism. Sir John Houghton, the UK's most eminent climatologist, has called it the real "weapon of mass

destruction". Even the Pentagon is running scared – last week a report surfaced declaring it a threat to national security. And in May, the next Hollywood disaster blockbuster will be catapulting it into the mainstream. The issue is, of course, climate change. Weird weather now buffets the British isles on an almost weekly basis. Snowstorms one week are followed by record high temperatures and floods the next. No longer is climate change a concern for the future. As Mark Lynas makes clear in his enthralling debut book, significant global warming is already happening all over the planet – and millions of people are today suffering the consequences, from China and Peru to Britain and the USA.

Released just as the climate change issue hits the political big-time, *High Tide* is set to be an international publishing sensation. Flamingo has already sold overseas rights to the US, Germany, Italy, Holland, Sweden and elsewhere. Although scientific works on global warming have been published before, this is the first time that a highly-readable and emotive book, set to engage a mainstream audience, has been published on the topic. *High Tide* is set to emulate *No Logo*, also a Flamingo title, as the indispensable book for an explosive issue. No longer is global warming the exclusive domain of ‘worthy but dull’ environmentalists or bearded scientific experts. Instead Lynas opts for the direct approach, setting off on a three-year global odyssey to meet the people and visit the places which are already being devastated by climate change. He splashes through the floodwaters in the drowning Pacific islands of Tuvalu as its population plans their evacuation, and endures terrifying dust-storms with the sheep herders of Inner Mongolia. He stalks polar bears with Alaskan Eskimos, and stares death in the face on a remote Peruvian glacier.

But nor is this a sensationalist polemic. Meticulously researched and fairly presented, every cited fact is scientifically referenced for those wishing to take a closer look at the evidence, and the manuscript was peer-reviewed by leading scientists in the fields of climatology, glaciology and oceanography, including the head of the Intergovernmental Panel on Climate Change, the UN’s authoritative scientific body. A taster for the book appears in the most recent *Granta*, ‘This Overheating World’, and an edited extract of the Alaska chapter was featured in the 14 February *Guardian Weekend* magazine. Mark Lynas is also a regular contributor to the *New Statesman* and has made many appearances in the press and on TV as a commentator on environmental issues. He has no patience with lunatics who pronounce global warming a fantasy, and threw a custard pie at the notorious anti-environment author Bjorn Lomborg.

53) ATKINS SIGNS STRATEGIC MARKETING AGREEMENT WITH SAIC

March 1, 2004

Atkins has signed an agreement with a major U.S. research and engineering company to support private and public sector clients with climate change mitigation strategies. A Strategic Marketing Agreement (SMA) with Science Applications International Corporation (SAIC) will allow both to pursue and service opportunities in the design, implementation and evaluation of climate change mitigation strategies. The agreement allows Atkins and SAIC to draw upon their combined policy expertise and technical capabilities to provide environmental and economic benefits to prospective customers. This new agreement is being launched as the market for climate change mitigation services expands and is poised to address the maturing regulatory environment in the European Union (EU) and Canada.

"Atkins completed an exhaustive search for a company with exceptional qualifications in GHG inventories, registries, and project development," says Steve Messner, principal consultant of

Atkins Environment. "SAIC's track record in these areas is unsurpassed." "Atkins has played an important role in the developing greenhouse gas policy environment in the EU," says Mark Kerrigan, SAIC senior vice president, Energy Solutions. "Atkins' capabilities complement SAIC's science, engineering and forecasting skills."

For more information: www.atkinsglobal.com or www.saic.com.

54) ANNOUNCING WENGEN 2004 INTERNATIONAL AND INTERDISCIPLINARY WORKSHOP: MOUNTAIN GLACIERS AND SOCIETY: PERCEPTION, SCIENCE, IMPACTS AND POLICY

October 6-8, 2004
Wengen, Switzerland

This interdisciplinary workshop focuses on climate and global change as it relates to glacial retreat. This workshop brings together scholars who conduct research in different mountainous regions of the world (the Alps, the Andes, the Himalayas, the Rocky Mountains, New Zealand Alps, etc.) to discuss impacts of glacial retreat on local populations. Themes to be addressed include: climate glacier interactions, impacts of physical changes, human perception of glacial retreat and how it relates to culture and identity, changes in natural hazards, monitoring and modeling, transnational boundary issues. The deadline for submission of abstracts is May 14, 2004.

For further information please visit the conference website:

<http://www.unifr.ch/geoscience/geographie/EVENTS/Wengen/04/Wengen2004.html>

Contacts:

Ellen Wiegandt <wiegandt@hei.unige.ch> or
Benjamin Orlove <bsorlove@ucdavis.edu>.

55) EIGHTH EUROPEAN PH.D WORKSHOP ON INTERNATIONAL CLIMATE POLICY

April 23-24, 2004
London, United Kingdom

The eighth Ph. D. workshop of the European Ph.D. network on International Climate Policy will be held at Imperial College of Science and Medicine and hosted by the Energy Policy and Management Group (EPMG) on April 23-24, 2004 in London, U.K. The workshop is open to Ph.D. students and researchers from all disciplines working on different aspects of International Climate Policy. It offers a forum to present (preliminary) Ph.D. research ideas and results and discuss them with other students and researchers working in the field. The workshop will be held in English. There is no workshop fee. However we may ask you for a financial participation to the drinks and snacks that will be provided during the two days. We cannot offer funding to cover travel costs or accommodation.

Further information on the workshop, as well as on past Ph.D. workshops, is available on the website of the European Ph.D. network on International Climate Policy:

<http://www.sls.wageningen-ur.nl/enr/ICP/>

For registration, please contact Sophie Jablonski <sophie.jablonski@imperial.ac.uk>, including your name, name of institution or university and subject of Ph.D. thesis. Registration closes on March 15, 2004.

56) THE RETSCREEN INTERNATIONAL RENEWABLE ENERGY PROJECT ANALYSIS

The RETScreen International Renewable Energy Project Analysis Software is a unique decision support tool. The software, provided free-of-charge, can be used world-wide to evaluate the energy production, life-cycle costs and greenhouse gas emission reductions for various types of renewable energy technologies (RETs). The software also includes product, cost and weather databases; and a detailed online user manual. Numerous organisations around the globe have expressed an interest in using RETScreen for their renewable energy training and deployment activities. In response to this, the RETScreen Centre is establishing an international network of RETScreen Trainers to deliver adapted versions of the Centre's Renewable Energy Project Analysis Course locally via college and university classes; professional-training seminars and workshops; and via Internet classrooms in distance learning format. For that reason a 2-day course will be organized in which the possibilities of RETSCREEN are explained.

The workshop takes place at the 20th and 21st of April 2004. This workshop is funded by the United Nations Environment Programme (UNEP) and Natural Resources Canada (NRCan), and is being delivered in collaboration with the University of Twente (UT). The course is free but the participants have to take care of travel costs and accommodation. University and college professors, as well as professionals from industry, government and NGOs who have extensive experience in renewable energy training, are invited to attend this free-of-charge workshop. Registration priority will be given to invited professionals from the region (Europe) selected on merit of their interest and experience in promoting the deployment, design and installation of renewable energy systems, on a first-come-first-serve basis. A waiting list will be established for any seats that may become available. The waiting list will also be open to others who do not meet the above criteria.

Registration can be done on the website of retscreen <<http://www.etscreen.net/ang/menu.php>>

Contact Mr. Joop Neinders Course co-ordinator, Technology and Development Group
University of Twente P.O. Box 217 7500 AE Enschede, The Netherlands, tel. +31-(0)53-4893539 fax +31-(0)53-4893087, j.e.neinders@tdg.utwente.nl, <http://www.utwente.nl/tdg>