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GENERAL NEWS

(1) POINTERS ON GREENHOUSE GAS

New Zealand Herald

August 20, 2002

Internet:

<http://www.nzherald.co.nz/business/businessstorydisplay.cfm?storyID=2350257&thesection=business&thesubsection=general&thesecondsubsection=&thetickercode=>

The New Zealand Business Council for Sustainable Development has launched a guide for businesses on why and how to measure their emissions of greenhouse gases. Measuring emissions is the essential first step towards managing them, says council chairman Stephen Tindall. One reason to do that is to identify opportunities to save money, for example through energy efficiency. The Warehouse is saving about \$3 million a year, Tindall says. Another motive is regulatory risk. Although a carbon tax is still five years off and will initially be set at a low rate, it represents a new cost to be managed. Heavy emitters whose competitiveness would be at risk if they were subject to a one-size-fits-all tax will be able to negotiate greenhouse agreements with the Government, but that presupposes credible greenhouse gas inventories and monitoring arrangements. On the opportunity side, some firms may be able to sell into the still embryonic international market in "carbon" (tradeable rights to emit greenhouse gases). Waste Management has already dipped its toe in those waters. Again that would presuppose internationally recognised greenhouse accounting at the firm level.

Early adoption may yield opportunities to develop and refine intellectual property. Landcare Research has developed software intended to enable companies with a Kyoto liability to gain credits from the regeneration or re-establishment of native bush. Finally, there may be intangible benefits from being seen as good corporate citizens. The how-to part of the guide is based on the greenhouse gas protocol devised by the World Business Council for Sustainable Development, which has been "road tested" by six of the New Zealand council's members: BP, Hubbard Foods, Meridian Energy, Milburn Cement, Urgent Couriers and Landcare Research.

Some elements have to be adjusted for New Zealand conditions. Greenhouse emissions associated with electricity use, for example, have to reflect the fact that around two-thirds of power generated is from hydro rather than gas or coal-fired power stations. The guide emphasises the need to be clear about why a firm is quantifying and reporting greenhouse emissions. Speaking at the release of the guide yesterday, Climate Change Minister Pete Hodgson said the Government had intended to ratify the Kyoto Protocol before next

week's world summit on sustainable development in Johannesburg but the early election had delayed that. So far 79 countries have ratified the protocol, including the 15 members of the European Union, Japan, Norway, Iceland and several Eastern European countries. For Kyoto to come into force, countries responsible for 55 per cent of developed country emissions in 1990 have to ratify. The tally so far is 36 per cent, which will shortly rise to 39 per cent, Hodgson said, with the Polish Parliament having recently approved ratification. Russia, with 17 per cent of 1990 emissions, must ratify for the treaty to come into force, as the United States (36 per cent) has said it will not. Hodgson said Russia was expected to ratify this year or early next year.

(2) SUMMIT TO CHURN OUT 'TONS OF CARBON MONOXIDE'

Independent Online

The Star

August 19, 2002

Internet: http://www.itechnology.co.za/index.php?click_id=13&art_id=qw1029755162105B263&set_id=1

The Johannesburg Climate Legacy on Monday urged governments to sign up to a programme neutralising greenhouse gas emissions created by the World Summit for Sustainable Development. Spokesperson Saliem Fakir said in a statement about 290 000 tons of carbon monoxide emissions would be created by delegates attending and travelling to and from the summit. "Emissions of greenhouse gases are widely acknowledged to cause global warming and climate change." The Johannesburg Climate Legacy aims at raising \$5-million (R50-million) by September in order to offset the effects of the gas emissions at the summit. "Money raised will be used to fund up to 15 long-term emission-reducing projects at schools, hospitals and in rural communities such as electricity generation from methane and energy conservation projects." The funds would mainly be raised by the selling of Climate Legacy Certificates, ranging from \$10 to \$100 000, to delegates and governments attending the summit. – Sapa.

(3) BETTER RICE, LESS GLOBAL WARMING

BBC

August 19, 2002

Internet: <http://news.bbc.co.uk/1/hi/sci/tech/2203578.stm>

Rice plants which produce higher yields make less of the potent greenhouse gas methane, researchers have discovered. Plants which use the carbon they absorb from the atmosphere efficiently put less carbon into the soil, where it can be converted into methane. Methane is the second most important greenhouse gas, responsible for about 20% of global warming. The scientists say their findings could lead to new ways of growing rice which will curb global warming as well as producing higher yields.

Plant pollution

Paddy fields full of rice are among the world's biggest producers of methane, contributing around 10% of global emissions. Methane, a compound of carbon and hydrogen, is produced by bacteria in the soil. Some of the carbon enters the soil from the roots of the rice plants, which in turn take it from the atmosphere through photosynthesis. Now scientists from Wageningen University in the Netherlands, the Fraunhofer Institute in Germany and the International Rice Research Institute in the Philippines have discovered that plants which channel carbon into making flowers and grain put less of it into the soil. In experiments inside greenhouses, they found that the crucial factor is the number of spikelets which a plant makes. A spikelet is a structure which holds a number of flowers and, later, grain. Writing in the journal *The Proceedings of the National Academy of Sciences*, they say their discovery "provides opportunities to mitigate methane emissions by optimising rice productivity".

Cleaning the fields

Rice is the staple crop of around half of the world's population. Yields vary widely, with some fields producing around eight tonnes per hectare, others only three.

But even as researchers are developing new strains which produce more grain, global warming is threatening to bring yields down, as plants produce fewer spikelets in higher temperatures. In a

commentary in the same journal, Dr Ronald Sass from Rice University in Houston and Dr Ralph Cicerone from the University of California at Irvine describe the research as "timely and a call to action". Understanding the links between temperature, spikelet formation and methane production could, they write, help researchers to develop new strains which can channel more atmospheric carbon into the rice itself, and less into methane production in the soil. However Dr Robin Matthews of Cranfield University in the UK cautioned that it may be difficult to extrapolate these greenhouse experiments to the real world. "It's a complex situation, and there may be other factors which come into play when you grow rice in open fields," he said.

(4) NORTH AMERICAN 'LEADERS' TAKE BACK SEAT ON GLOBAL CONCERNS

IPS

August 19, 2002

Internet: <http://athena.tbwt.com/content/article.asp?articleid=1404>

MONTREAL - The world's most powerful nation and one of its most respected moral guides continue to snub an international treaty that has become a symbolic yardstick for sustainable development. U.S. President-elect George W. Bush quickly repudiated the Kyoto Protocol to combat global warming in 2001 saying it was bad for business. And after signing the agreement in 1997, long-serving Canadian Prime Minister Jean Chretien is now holding the international community to ransom for a better deal, saying his businesses will face unfair competition south of the border. The positions taken by the huge North American neighbours reflect the findings of a report released this week by the United Nations Environmental Programme (UNEP). While the United States and Canada moved towards sustainable development at home after the 1992 Rio Earth Summit, their actions continue to have a huge impact on the world at large.

"The news is pretty bad," says Jacob Scherr, director of the international programme of the Natural Resources Defence Council in Washington. Immediately following the Rio Summit there was a flurry of activity in the United States, he says, including the creation of the President's Council on Sustainable Development. But today, "the phrase doesn't have a lot of currency here. Most people probably don't know what it means", says Scherr. "What has been very sad is the failure of national governments to make significant steps" to implement the Rio agenda, he adds. Industrial pollution and the over-consumption of resources are growing obstacles to sustainable development in the United States, according to Scherr. Consumers in the United States and Canada use nine times more gasoline than other people in the world do, revealed the UNEP study. With only five percent of the world's population, the countries generate more than 25 percent of global emissions of carbon dioxide, one of the greenhouse gases responsible for the global warming that Kyoto was designed to fix. U.S. emissions of all greenhouse gases will increase 43 percent by 2020, says a study by the U.S. Environmental Protection Agency, released earlier this year. Bush has shrugged off that report.

A Canadian activist says her country has utterly failed to implement sustainable development. Elizabeth May's Sierra Club of Canada has issued a Rio Report Card of Canadian governments since 1993. It reveals no star pupils. "Certainly if there's been any progress at all in the last 10 years it has happened at the level of municipalities," May says. "We have municipalities in Canada that now have bylaws against the use of pesticides for cosmetic purposes and a number have moved aggressively to remove greenhouse gases." "These steps are welcome because they provide demonstrations that it's possible, but overall, we're in very desperate straits." One bright spot, she says surprisingly, is that Chretien remains committed to Kyoto, although it is unlikely that he will announce Canada's ratification at the World Summit on Sustainable Development (WSSD) in Johannesburg, which begins Aug 26.

The UNEP study also found that soil degradation and loss of wetlands remain major problems in North America, although Canada and the United States have removed much of the toxic waste from the Great Lakes and set aside more than 10 percent of their lands as protected areas. Despite the litany of depressing statistics, Scherr believes that many individuals and corporations in the United States have embraced sustainable development. "At the national level it didn't have the kind of impact that people hoped," he says, "but Agenda 21 (the global plan of action arising out of Rio) in some ways really took hold at the community level". That explains, for example, why water quality in urban areas has improved, Scherr says.

That community commitment will become apparent at the WSSD, he predicts. "When people go to Johannesburg they're going to see that there is (still) a global movement", which is different than the traditional geo-political model controlled by national leaders; "sort of an Internet world" is how Scherr describes it. At least 100 presidents, prime ministers and monarchs are scheduled to attend the meeting, he adds. "People will look for vision and guidance from those leaders, but there will be 40,000 other people there."

(5) GERMANS WANT TO PRESSURE US OVER POLLUTION

The Star

August 18 2002

Internet:

http://www.itechnology.co.za/index.php?click_id=3&art_id=ct20020818205240686B265619&set_id=1

Berlin - A German government minister has called on the international community to put pressure on the United States at this month's World Summit in Johannesburg to do more to protect the environment. "It must be made clear to the US government that its boycott of the Kyoto protocol is unacceptable," Overseas Development Minister Heidemarie Wieczorek-Zeul said, referring to the international treaty mandating cuts in so-called greenhouse gases. "It is an absurd situation in which the world's worst source of damage to the climate boycotts the international alliance to protect the climate, and shirks its international responsibilities."

The 1997 UN protocol, the first co-ordinated world response to tackling global warming, requires industrialised countries to cut emissions of greenhouse gases to below 1990 levels by 2008-2012. United States dropped out of the agreement last year

The United States dropped out of the agreement last year. Wieczorek-Zeul linked the devastating floods in Asia and Europe last week to global climate changes. She said they should open the eyes of those in the US government who deny a relationship between pollution and natural disasters. "Climate changes are no longer a distant scientific prognosis but are becoming a horrible reality," she said.

According to official Chinese media, floods and mudslides have cost the lives of hundreds of people in the last two weeks, with the death toll expected to rise as torrential rains continue. Central Europe has also faced the worst floods in memory in the past week. Central Europe has also faced the worst floods
The Johannesburg conference, officially known as the World Summit for Sustainable Development, is the follow-up to the first Earth summit in Rio de Janeiro, where, 10 years ago, representatives from 196 countries gathered to produce a model for sustainable development and environmental protection. - Sapa-AFP

(6) EUROPEAN FLOODS SWEEP NORTH AND EAST

The Guardian

August 19, 2002

Internet: <http://www.guardian.co.uk/worldlatest/story/0,1280,-1956440,00.html>

BERLIN (AP) - Flooding spread through eastern Germany on Monday, threatening to add to the misery of tens of thousands forced from their homes as the country faced its biggest relief effort since World War II. In Hungary, the Danube River peaked at a historic high in Budapest without causing major flooding after relief workers spent a frantic night bolstering dikes. The capital's high flood walls, built at the turn of the last century, held off the floodwater in the city center, though one barrier gave way in a northern suburb. Europe is wrestling with the aftermath of violent storms that swept the continent two weeks ago. German authorities reported three more deaths Monday, bringing the Europe-wide toll to at least 109.

Forecasters predicted generally dry weather for Austria and Germany over the next few days, with scattered showers over western Hungary. No abundant rainfall was expected. The floodwater has ebbed in Austria and the Czech Republic and begun to fall in Dresden, the biggest German city hit so far, allowing the start of a massive cleanup and rebuilding operation expected to cost some \$20 billion Europe-wide. Under sunny summer skies Monday, thousands of emergency workers, soldiers and volunteers were working round the clock to pile tons of sandbags onto sodden dikes along Germany's Elbe and Mulde rivers to protect smaller

towns. Sweeping toward the North Sea from the hills on the Czech border after record rainfall, the Elbe forced workers to retreat after bursting its banks in seven places Sunday near Wittenberg, the town where Martin Luther launched the Reformation in 1517. But officials said the old town was not under immediate threat.

Rescuers used boats and ropes to bring several people trapped in their homes to safety and were scouring nearby villages in the darkness to ensure everyone had been evacuated. High water also threatened the city of Dessau, best known for its Bauhaus architecture school. Helicopters dumped sand on the dikes to strengthen them. More than 80,000 people have been evacuated across the region. A government relief agency, the Technical Aid Service, said Monday that sand bags were running short. Denmark shipped 650,000 sandbags to Germany to help, and Italy, France, the Netherlands and other countries have also offered to help, the agency said. In Bitterfeld, workers shored up dikes on the Mulde about a mile from one Europe's largest chemical industry complexes, grouping 350 companies.

Authorities played down concern that the chemical plants could be overwhelmed and release toxins into the water that has covered part of the town since Saturday. In Dresden, where expensively restored monuments such as the Semper Opera and Zwinger Palace museum were partly flooded, officials said some residents may be allowed to return home on Sunday. Further north, the city of Magdeburg began to move people out as the Elbe's crest surged toward the North Sea. The river is expected to threaten there in the next few days. As the Danube River surged to a historic high around Budapest, authorities evacuated about 2,000 people in the area on Sunday. But they said the city would not see the devastation that befell other countries because of 33-foot-high walls running along the river banks throughout much of the city.

The river peaked at a height of 28.3 feet in Budapest early Monday, a touch over the previous record set in 1965, then began falling, said Tibor Dobson, a spokesman for Hungary's national disaster relief office. "Our main concern now is to ensure that waste from the city's sewers does not cause any problems or enter the water supply," Dobson said. Most evacuated towns lie north of Budapest. A few areas in the southern part of the capital also were evacuated - areas where the flood walls don't rise as high as in the city center. The government postponed an annual fireworks ceremony scheduled for Aug. 20, or St. Stephen's Day, which commemorates the king who founded Hungary 1,000 years ago. "It would be unbecoming to celebrate with fireworks in a situation where tens of thousands are working on the dams," Prime Minister Peter Medgyessy said after the meeting.

See Also:

FLOODS IN EUROPE POINT TO GLOBAL WARMING (The Asahi Shimbun, August 18, 2002)
<http://www.asahi.com/english/tenjin/K2002082000329.html>

FLOOD SUMMIT CALLED AS TOLL (The Guardian August 17, 2002)
<http://www.guardian.co.uk/naturaldisasters/story/0,7369,776146,00.html>

GERMANY CALLS FOR EU DISASTER FUND (Agence France-Presse Berlin, August 17, 2002)
http://www.hindustantimes.com/news/181_39306,00050003.htm

FLOODS LEAVE 98 DEAD ACROSS EUROPE (Japan Today, August 15 2002)
<http://www.japantoday.com/e/?content=news&cat=8&id=226541>

FLOODS SPILL INTO GERMAN ELECTION CAMPAIGN (Planet Ark August 15, 2002)
<http://www.planetark.org/dailynewsstory.cfm/newsid/17301/story.htm>

EUROPE'S FLOOD PART OF GLOBAL DELUGE (The Christian Science Monitor August 15, 2002)
<http://www.csmonitor.com/2002/0815/p01s02-woeu.html>

PRAGUE HIT BY WORST FLOODS IN 500 YEARS (Straits Times)
<http://straitstimes.asia1.com.sg/story/0,1870,137580,00.html>

TIDE OF MISERY FLOODS EUROPE (The Guardian August 14, 2002)
<http://www.guardian.co.uk/naturaldisasters/story/0,7369,774266,00.html>

WHAT'S BEHIND THE WEATHER? (BBC August 13, 2002)
<http://news.bbc.co.uk/2/hi/sci/tech/2190585.stm>

TORRID CONDITIONS WORLDWIDE (The Guardian August 12, 2002)
<http://www.guardian.co.uk/globalwarming/story/0,7369,773144,00.html>

MONSOON BRITAIN (The Observer August 11, 2002)
<http://www.observer.co.uk/focus/story/0,6903,772595,00.html>

(7) AUSTRALIA OFFERS CLIMATE AID TO SINKING PACIFIC NATIONS

Reuters

August 17, 2002

Internet:

http://asia.reuters.com/news_article.jhtml;jsessionid=BJ413HMTUCFPYCRBAE0CFEY?type=topnews&StoryID=1341064

SUVA (Reuters) - Australia, criticised by some of its slowly sinking Pacific neighbours for its role as Asia's biggest emitter of greenhouse gases, said on Saturday it would fund a project to help the region better predict weather changes. Australian Prime Minister John Howard said the three-year, A\$2.2 million (US\$1.2 million) project would help to upgrade existing meteorological services in Pacific countries.

"Better meteorological services will enable Pacific countries to deal more effectively with extreme weather events such as El Nino and droughts and to anticipate the impact of climate change, climate variability, cyclones and storm surges," Howard said in a statement issued at the annual Pacific Islands Forum. The leaders of six small, low-lying Pacific island states expressed profound disappointment on Thursday over the U.S. decision not to sign the 1997 Kyoto Treaty which sets targets for greenhouse gas emissions, blamed for global warming, which melts polar ice caps and so raises sea levels.

Small Pacific states have urged Australia over the past three days to change its mind on Kyoto and do more to cut emissions. The leaders of the Cook Islands, Kiribati, Nauru, Niue, the Marshall Islands and Tuvalu stopped short of including Australia in their statement. Australia is also the Pacific's most visible aid donor and will distribute US\$279 million in assistance in 2002/03. The 16-nation Pacific forum, which comprises 14 island states and Australia and New Zealand, wraps up later on Saturday with an official communique expected to include a statement on the region's grave concerns over climate change.

But Howard has suggested the communique is unlikely to include any strong criticism of Australia, the only country in the region not to sign the Kyoto protocol. "I think the language focuses rather more on the things that we have in common, rather than the things that we don't," Howard told reporters after a leaders' retreat outside the Fijian capital Suva on Friday. Tuvalu Prime Minister Saufatu Sopoanga expressed sadness on Thursday over the U.S. and Australia's stand against Kyoto. Sopoanga's nation is a string of nine coral atolls 26 sq km (10 sq miles) in area and a population of about 11,000. Just five metres (16 feet) above sea level at its highest point, it fears its last palm tree could sink under the Pacific within 50 years.

The United States abandoned the Kyoto protocol in 2001, saying it would hurt its economy, but President George W. Bush has put forward a plan to encourage industries to trim emissions. Howard's conservative government says the absence of the United States and other major industrial nations leaves the Kyoto protocol a flawed document.

(8) BOOST CANADA'S EFFORTS FOR A GREENER EARTH

The Star.com

August 17, 2002

Internet:

http://www.thestar.com/NASApp/cs/ContentServer?pagename=thestar/Layout/Article_Type1&c=Article&cid=1026144325686&call_page=TS_Editorial&call_pageid=968256290204&call_pagepath=News/Editorial&col=968350116795

A decade ago at the Earth Summit in Rio, the world pledged to clean up its environmental act. Today, our blue planet is dirtier than ever, more stressed, less healthy and more bleakly divided into haves and have-nots. Like the Asian Brown Cloud that threatens millions, it's a dismal indictment of the failure of Canada and other affluent countries to cut our consumption of polluting fuels, and to help developing countries adopt clean technologies. As well, Canada bears a share of the blame for tolerating "indiscriminate patterns of development" which threaten to "compromise the long-term security of the Earth and its people," in the words of United Nations undersecretary general Nitin Desai, who has the thankless job of chairing a follow-up summit in Johannesburg this month.

The challenge at Johannesburg will be to draft a fresh global development plan to boost output and combat poverty, while protecting the environment. Few experts are holding out much hope. Still, Prime Minister Jean Chrétien will be there to show some concern for sustainable development, global poverty and the environment - issues that still tug the voters' conscience. So Canadians will look for some sign of the fresh agenda he promises for Parliament's fall session. Under former prime minister Brian Mulroney, Chrétien's free-spending predecessor, Canada was a known activist, championing green causes like the successful campaign to get rid of ozone-eating chlorofluorocarbons (CFCs) and battling the sulphur emissions that cause acid rain. We gave more in foreign aid. And we undertook to protect species at risk, shoring up biodiversity.

Today, sadly, Ottawa has little by way of an overarching strategy. The Chrétien government is wavering on signing the Kyoto Protocol to cut planet-warming greenhouse gases unless we get credit for clean energy exports like natural gas. Yet we're not willing to accept debits for dirtier exports, like oil and coal. Ottawa only recently proposed tax changes to promote investment in renewable energy and conservation. We've only just brought in laws to protect species at risk. And we've slipped from 6th to 22nd place among major aid donors. Like the United States and Australia, we're dragging our feet on green issues.

The good news is that Chrétien has ample scope in Johannesburg to energize his approach, if he chooses to. * Chrétien could defy all expectations and recommit to ratifying the Kyoto Protocol, as 23 industrial countries have, without holding out for concessions that undermine the accord. Absent our support, the protocol may be doomed. As a substantial producer of greenhouse gases (3 per cent of the global total) we should aim especially to cut emissions in the energy-extraction sector, and in transportation. The Americans will no doubt continue to balk. But no cleanup can proceed without us.

* The PM could also commit to accelerating plans to double our \$3 billion in foreign aid by 2009, and to move beyond dedicating just 0.35 per cent of our national output to aid when the long-standing U.N. target is double that.

* He could order the reinstatement of Canada's environmental "report cards" to track our delivery on green commitments. They fell victim to cost-cutting in 1996.

* And he could offer to underwrite proposals he plans to make in Johannesburg, to have countries swap "best ideas" on how to plan sustainable cities at a time of furious urban growth.

That would begin, at least, to correct the drift in recent years, and to provide some of the leadership that Canadians expect and that the world so urgently needs.

(9) AUSTRALIA SAYS ON TRACK TO MEET KYOTO TARGET

Planet Ark

August 16, 2002

Internet: <http://www.planetark.org/dailynewsstory.cfm/newsid/17325/story.htm>

CANBERRA - Australia, the world's largest coal exporter, said yesterday new data showed it was on track to meet its Kyoto Treaty greenhouse gas emissions target, but a leading environmentalist labelled the latest figures a "greenwash". Australia said its greenhouse gas emissions would increase by 11 percent by the end of the decade but it believed it could cut that back to its Kyoto target of an eight percent rise by 2012. "Australia's economy is becoming less greenhouse intensive..." said Environment Minister David Kemp in releasing the new greenhouse data. But Australia reiterated it would not ratify the global climate agreement.

The Australian Greens party rejected the government's statement, saying the data was "rubbery figures" based on land-clearing data, adding emissions could be up 33 percent by 2012. "The fact is that greenhouse gas emissions from burning coal, oil and petrol in Australia have gone through the roof," Greens Senator Bob Brown told reporters. "The government's technical snow cover is to imply land clearing and agricultural practices are sopping up these emissions," he said. Australia's 20 million inhabitants represent only 0.3 percent of the world population, but according to the Australian Bureau of Statistics the vast island continent is the world's second largest per capita producer of carbon dioxide. The United States is the world's largest greenhouse gas emitter.

Australia has sided with the United States and refused to endorse the 1997 Kyoto pact which sets targets for industrialised nations to cut their emissions of heat-trapping gases blamed for rising global temperatures. Fending off international criticism of its rejection of Kyoto, Australia said yesterday its measures to cut greenhouse gas emissions were working and that it was in striking distance of its target of an eight percent rise between 1990 and 2012. "The government's A\$1 billion (\$540 million) investment in greenhouse programmes is having a major impact...saving annually 60 million tonnes of greenhouse gases by the end of the decade," Kemp said.

Kemp, who will lead Australia's delegation to the U.N. earth summit in Johannesburg this month, said without action by the government, Australia's greenhouse emissions would have grown 22 percent by 2010 from 1990 levels, Kyoto's benchmark year. But he repeated the government's opposition to joining the 50 or so countries that have endorsed the Kyoto pact, shrugging off pressure from environmental groups and rival politicians. "It is clear that the Kyoto Protocol does not at the time provide an effective framework," he said.

(10) KEMP CALLS FOR EMISSIONS SUMMIT

The Australian
August 16, 2002

Internet: http://www.news.com.au/common/story_page/0,4057,4909872%255E421,00.html

ENVIRONMENT minister David Kemp will next week join business and environment groups to develop a framework to slash Australia's greenhouse gas emissions. The government initiative follows the release of new figures showing Australia may be exceeding its self-imposed limits for greenhouse emissions under the international Kyoto Protocol. Australia's greenhouse gas inventory shows gas emissions rose 6.3 per cent between 1990 and 2000 to 535 million tonnes. The figures forecast that without further action to curb emissions they will increase by 11 per cent by 2010. Under the Kyoto targets, the Government agreed that emissions can only increase by 8 per cent between 1990 and 2010. Dr Kemp put a positive face on the forecast, saying it was "within striking distance" of targets and "far closer" than many experts had predicted. The Government remains strongly opposed to ratifying the Kyoto Protocol, despite strong pressure from environmental groups and Labor. To commit to the protocol would "send a signal to investors that Australia was prepared to expose itself to binding legal commitments that could in the future impose costs not faced by neighbouring regional economies", Dr Kemp said yesterday.

But the figures prompted environmental lobbyists to question why the Government would not sign the protocol. "It seems absurd they're claiming to be so close to the Kyoto target but refuse to avail themselves of a three-quarters of a trillion dollar industry in emissions reductions technology," Australian Conservation Foundation spokesman John Connor said. "Either it's dodgy methodology, or ideology is blinkering their approach." The Government claims that without its intervention emissions would have risen by 122 per cent over the period. This year's gas inventory for the first time includes figures on the effect of land clearance on greenhouse emissions.

At next week's summit, Dr Kemp will propose intensifying the Government's existing anti-greenhouse measures to extract the extra 3 per cent cut needed to meet the Kyoto targets. The measures include a mandatory renewable energy target that creates a market for renewable energy, and eco-efficiency agreements with industry. But the focus of the talks will be on longer-term strategies to decouple economic growth from greenhouse gas emissions to achieve a "low-carbon economy". On the agenda will be the creation of a domestic carbon credit market in which firms must buy credits to pollute and can sell them if they pollute less.

See Also:

RIGHT TO POLLUTE ENVIRONMENT (Neftegaz August 16, 2002)

<http://www.neftegaz.ru/english/lenta/show.php?id=26469>

(11) NEW ZEALAND SAYS AUSTRALIA IS OUT OF STEP WITH SOUTH PACIFIC STATES OVER GLOBAL WARMING

August 16, 2002

Internet:

http://story.news.yahoo.com/news?tmpl=story&u=/ap/20020816/ap_wo_en_po/south_pacific_summit_1

SUVA, Fiji - Australia is out of step with the rest of the South Pacific in its refusal to sign the Kyoto Protocol on climate control, New Zealand's prime minister said Friday on the second day of a regional summit. "Pacific states do feel strongly about this," said New Zealand Prime Minister Helen Clark. "We have 16 member nations (of the Pacific Islands Forum) and 15 hold the view that countries should ratify and one doesn't."

Many of the low-lying Pacific Island nations fear they will be swamped by rising sea levels blamed on global warming. They criticized the United States and Australia on Thursday for not signing the Kyoto deal, which aims at cutting production of greenhouse gases blamed for warming the atmosphere. The 16 leaders went into a behind-closed-doors huddle at an exclusive beachside resort outside the Fijian capital Suva and Australian Prime Minister John Howard was expected to be challenged over Kyoto. The leaders return to Suva on Saturday for the summit's final day.

Howard, meanwhile, is seeking assurances from the mostly cash-strapped Pacific nations that they will bolster democracy and make their governments more publicly accountable. Howard's message to leaders at the 33rd Pacific Islands Forum is that Australian development aid will likely be tied in the future to good governance - increasing transparency and tackling widespread corruption. Pacific nations like Papua New Guinea and the Solomon Islands are both rich in minerals but are teetering on the edge of bankruptcy due to economic mismanagement and corruption in their governments, which in turn has caused political and social unrest.

Speaking before the leaders' retreat, Clark also called on the Commonwealth, an organization of Britain and its former colonies, to take stronger action against Zimbabwe over President Robert Mugabe's campaign to push white farmers off their land. "Clearly there needs to be a new round of diplomacy to get a stronger stance by the Commonwealth," she said. Commonwealth Secretary-General Don McKinnon also is attending the Fiji summit. The Pacific Island Forum is made up of Australia, New Zealand, Fiji, the Cook Islands, the Federated States of Micronesia, Kiribati, Nauru, Niue, Palau, Papua New Guinea, the Marshall Islands, Samoa, the Solomon Islands, Tonga, Tuvalu and Vanuatu.

See Also:

PM FACES RISING TIDE OF ANGER ON GASES (The Courier Mail August 16, 2002)

http://www.thecouriermail.news.com.au/common/story_page/0,5936,4908584%255E953,00.html

SIGNING KYOTO PROTOCOL WOULD HURT INVESTMENT, SAYS AUSTRALIA MINISTER

(Agence France-Presse August 19, 2002) <http://www.etaiwanews.com/Asia/2002/08/19/1029743564.htm>

(12) PARTIES RESPOND TO CHANGING CLIMATE

Frankfurter Allgemeine Zeitung

August 16, 2002

Internet: <http://www.faz.com/IN/INtemplates/eFAZ/docmain.asp?rub={B1311FCC-FBFB-11D2-B228-00105A9CAF88}&doc={27F079C7-629A-4498-976A-39D3C5A1B2C6}>

Renewed fears that man is responsible for the flooding in Europe leads to a rethink of environmental policy. Disastrous flooding in central Europe this week has led to renewed warnings from some scientists, who believe that rapid climate change is occurring because of the warming of the earth's atmosphere through man-made causes. Joining them was German President Johannes Rau, who, surveying the devastation, said "greater efforts" were needed to protect the climate. A good time, then, to look at the platforms for climate protection - in other words, pollution reduction - put forward by the main political parties ahead of the Sept. 22 federal election.

Social Democratic Party: The governing SPD calls for more use of cogeneration, whereby energy that would otherwise be lost during industrial processes is diverted through special technology into the production of electricity or heating systems. The party backs more energy efficiency generally and a doubling of renewable energy sources in electricity generation by 2010. Over the mid term, energy and raw

material use for the production of goods and services should be reduced by three-quarters in Germany, while carbon dioxide emissions should be 25 percent lower than 1990 levels by 2005. Coal, "if used in a way that is sensible for the environment, remains a major component of a modern energy supply," the SPD platform says.

Greens: The party that got its start in the environmental movement and is the SPD's junior partner in the national coalition government wants carbon dioxide emissions to be 40 percent lower than 1990 levels by 2020. "Only with a policy that systematically makes us independent of coal and oil, and ends our use of nuclear energy, will we reach this climate protection goal," the party says. The Greens back the implementation of EU emission reduction goals and more development of renewable energy, as well as more efficient energy use through cogeneration. "We will reduce environmentally damaging subsidies like the tax exemption on aviation fuel or subsidies to the coal industry." They promise; they laud the energy tax, originally a Green project, as critical to climate protection.

Christian Democratic Union/ Christian Social Union: The sister parties want more renewable energy and an overall reduction in demand, goals that they say can be achieved through market incentives for the most efficient forms of energy use. More funds should be made available for energy research. German-produced coal should continue to be used, but more cleanly, and the government's decision to phase out nuclear energy should be reversed if the country is serious about reducing carbon dioxide emissions, they say. They want the energy tax abolished over the mid term, and replaced with Europe-wide emission limits that are both revenue-neutral and avoid creating competitive distortions.

Free Democratic Party: The pro-market party wants an end to coal production subsidies after 2005, and argues that nuclear power should continue to be used in Germany. The FDP also favors the trading of emission rights, as well as measures to reduce energy consumption and encourage renewable energy. **Party of Democratic Socialism:** Like the Greens, the PDS wants Germany to stop using nuclear power and to dramatically increase the use of energy from renewable sources. The share of electricity and heating from cogeneration should be increased sharply, the PDS says.

(13) MELTING ALASKA GLACIERS WATER A DEBATE OVER GLOBAL WARMING

Cox News Service

August 16, 2002

Internet: <http://www.nrdc.org/news/newsDetails.asp?nID=733>

SEWARD, Alaska _ Bear Glacier, which dominates one side of frigid Resurrection Bay here in southern Alaska, lives up to its name. Centuries old, its intimidating blue ice spreads out flat and cold, three miles wide and 13 miles deep, held back only by breathtakingly beautiful mountains. When its jagged edges shift and slide into the sea, the roar can be like a grizzly's. But Bear Glacier is shrinking. So are most of the glaciers in the Kenai Fjords National Park here. And so are most of the ancient glaciers around the world, in fact, in an early and measurable indicator that the Earth's temperature is on the rise. "Every summer, it seems like we see more and more rocks around the edges," park ranger C.J. Rae says of a neighboring glacier. Exactly why the Earth's ice is melting and what it means depends on whom you talk to. Environmentalists say melting glaciers are telltale signs of human-induced global warming. They blame rising sea and air temperatures and a thinning ozone layer on an increasing number of cars and factories and other emitters of "greenhouse gases" that trap the sun's heat.

Others say melting glaciers are simply by-products of a natural cycle in the Earth's evolution, not worth worrying about and not anything that can be solved. "Something is happening here, that's all we really know," said Peter Armato, who as director of the Ocean Alaska Science and Learning Center at Kenai Fjords National Park has studied southern Alaska's glaciers and the wildlife around them for the past seven years. "I'd like to say there's a cut-and-dried answer, but I don't know it," he said. "I think there's probably a natural component and there's probably a component that's human-induced." Surrounded by snow-capped mountains, with the 50-degree wind stinging your cheeks even in the middle of July, it's hard to believe global warming has had any effect here.

But studies of the Earth's ice are crystal clear in their findings.

- * In the past decade, 67 Alaska glaciers studied by the University of Alaska at Fairbanks shrank at an average rate of 6 feet per year, about twice the annual rate of the previous 40 years.
- * In Montana, the number of glaciers in Glacier National Park has decreased from more than 150 to fewer than 40 in the past century.
- * At the top of the world, in Greenland, glaciers are melting at a rate of 11 miles a year, much faster than scientists thought just a few years ago.
- * And at the opposite end of the globe, a giant ice shelf the size of Rhode Island that dated back to the last Ice Age collapsed this year after one of Antarctica's warmest months on record.

Glaciers are important to scientists because they're good indicators of what's going on with the world's long-term weather patterns. "Glacial changes are intimately linked to climate changes," said Anthony Arendt, a researcher at the University of Alaska at Fairbanks who helped complete the recent glacier study. "They seem to respond fairly quickly to what's happening with the world's climate." True, glaciers grow and shrink all the time, Arendt said. Elsewhere in Alaska, an expanding glacier recently threatened to block seals, porpoises, fish and other sea life from getting to the open ocean. But the latest findings, he and others say, show that the vast majority of glaciers are shrinking significantly faster than they have ever since people started tracking their sizes decades ago.

Besides signaling a rise in temperature, the melting glaciers also contribute to rising sea levels, which could cause flooding, saltwater intrusion into cropland and drinking supplies, and a number of other problems. Already, strange environmental changes have come hand in hand with warming temperatures and shrinking glaciers here in southern Alaska. The local population of Steller sea lions is inexplicably dwindling. A few years ago, there was a big, unusual die-off of birds. An explosion of plankton growth has set off a number of changes in the food chain. "I hear people all the time who say they don't see the sorts of animals they used to see here," Armato said. Maybe so, say others, but melting ice and evolving food chains don't necessarily make a crisis. "I think there's a general consensus that we're in a period of warming," said Becky Norton Dunlop, vice president and spokeswoman for the Heritage Foundation, a Washington public policy group. "But many of the same scientists who are engaging in the fear-mongering that we have a crisis on our hands were the same scientists that 25 or 30 years ago said we were entering into a new ice age. "We may be in a period of warming, but the trends are measured in too short of a time span to say this is conclusive," she said. "We certainly don't see anything that says we're in a crisis, and there's definitely plenty of debate over whether the warming we're experiencing is a consequence of man's actions."

Plenty of scientists, in fact, disagree that man and his greenhouse gases are behind global warming. Beginning several years ago, about 17,000 scientists started signing an ongoing petition that claims the environmental effects of the gases are vastly exaggerated. The petition asks the U.S. government not to move forward with agreements that would ration energy and fossil fuels, in part because they would have far-reaching economic effects around the world. President Bush and his advisers have said they agree that global warming is in large part due to human activity. But Bush doesn't support international agreements setting limits on greenhouse gases, and has proposed relaxing limits on factories, car makers and other sources in order to reduce the burden on the nation's economy. Far from Washington, on the quiet waters of Alaska, Armato hesitates to join in the national debate over what the country should do about global warming and the glaciers melting around him. "I know we have to do more research to find ways to figure out what nature is doing," Armato said. "But we also need to realize that whenever we do something to the environment, there's going to be a reaction."

(14) U.S. DISAPPOINTS SINKING PACIFIC

CNN

August 15, 2002

Internet: <http://www.cnn.com/2002/WORLD/asiapcf/auspac/08/15/pacific.forum/index.html>

SUVA, Fiji (CNN) -- Low-lying Pacific nations have chided the United States for not signing the Kyoto Protocol and have urged Australia to do more to cut greenhouse gas emissions. The leaders of Tuvalu, the Cook Islands, Kiribati, Nauru, Niue, and the Marshall Islands released a joint statement in Suva Friday, expressing profound disappointment in the United States' rejection of the Kyoto Protocol. The statement did not specifically criticize Australia, which also refuses to sign the accord, but is a large aid donor to the

region. The annual meeting of 16 Pacific nations, which began in the Fijian capital Suva on Thursday, is one of the few international forums for the small, scattered island nations to air their grievances. Tuvalu leaders say the reality of rising sea-levels through global warming is already apparent in their nation with many formerly dry areas now submerged.

A former leader of the nation predicted the Pacific could submerge Tuvalu within the next 50 years. Tuvalu says Australia should be championing the cause of the Pacific nations instead of siding with the United States over global warming. But Australian Prime Minister John Howard denies there are serious tensions between Australia and its Pacific neighbors, despite the difference of opinion on climate change. Speaking from Suva Thursday, Howard said he was unconcerned. "There will be some areas where we differ, but overall the relations are good and there's a lot of work to be done," he said.

See Also:

SINKING PACIFIC STATES SLAM U.S. OVER SEA LEVELS (Reuters August 15, 2002)

http://reuters.com/news_article.jhtml;jsessionid=05U3MUF4GOZ3QCRBAELCFFA?type=sciencenews&StoryID=1332010

SOUTH PACIFIC LEADERS CONDEMN US OVER KYOTO PACT AS SUMMIT BEGINS IN FIJI (Associated Press August 15, 2002)

http://story.news.yahoo.com/news?tmpl=story&u=/ap/20020815/ap_wo_en_po/south_pacific_summit_1

(15) PACIFIC ISLAND SUMMIT TO FOCUS ON CLIMATE, ECONOMY

Reuters

August 15, 2002

Internet: <http://www.miami.com/mld/miami/news/world/3866726.htm>

SYDNEY - Pacific island nations gather for an annual summit on Thursday to discuss the global economy and rising sea levels with growing resentment against Australia perhaps their only unifying theme. The 16-nation Pacific Islands Forum is meeting in Fiji and members ranging from regional powerhouse Australia to the specks of Tuvalu and Niue, population 1,748. Tuvalu, at risk of sinking beneath Pacific waves, said in March it was considering David and Goliath legal battles against the United States and Australia for refusing to ratify the 1997 Kyoto protocol on cutting greenhouse gas emissions. Analysts fear that the small size, poverty and instability of some forum members have made it hard for them to find one voice to address important issues like climate change and economic opportunities. "I think what's been lacking has been any firm political leadership for the last five or six years and I think that's to do with everyone being so busy at home with local conflicts," said Greg Fry, professor of South Pacific and Australian relations at the Australian National University (ANU). Of the 16 forum members, the Cook Islands, Fiji, Niue, Papua New Guinea, the Solomon Islands and Tuvalu have all undergone leadership changes since the last meeting.

UNITY IN DISSENT

But members seem united in their growing anger against what they see is an arrogant and bullying Australia. Canberra angered many in the region last year with its "Pacific solution" of closing its doors to unwanted illegal immigrants. Instead, it paid Pacific neighbors to accept and process their asylum claims. The policy proved popular at home and helped conservative Prime Minister John Howard win re-election but Vanuatu leader Edward Natapei labeled it a bullying "Big Brother" tactic. Australia annoyed its neighbors again by deciding to nominate one of its top diplomats as a candidate to replace Papua New Guinea's Noel Levi as secretary general of the forum, a job that has traditionally been held by Pacific islanders. Canberra, a major aid donor, wields considerable influence in the region. Total Australian aid for the Pacific region will total A\$516.4 million (US\$278.9 million) in the 2002/03 financial year, with Papua New Guinea alone receiving A\$351.4 million. Canberra also pays a third of the Pacific forum secretariat's budget. "There are a number of things now where there is a big divide between Australia and the Pacific islands," Fry said on Monday.

EUROPEAN TRADE CRUCIAL

Apart from climate change, Pacific states must also think about their economic futures. Under moves to tear down barriers to world trade, they are set to lose privileged trade status granted by such economic

giants as the European Union. Instead, they will negotiate with the EU next month over so-called "Economic Partnership Agreements," a new form of EU trade accord individually tailored to regional needs. They combine trade with measures to promote development and extend duty free access, rather than rely on duties and quotas which still exist for commodities like sugar, Fiji's main crop. Forum Secretary General Levi said member countries must forge a unified front to take advantage of the new EU accords. "For too many of our island countries, economic development in recent decades had depended on special circumstances which may well prove non-sustainable," Levi said. "Modern economic growth and the relief of poverty in the Pacific require...a different kind of journey," he told a pre-forum meeting in the Vanuatu capital Port Vila last week

(16) NEW EYES ON THE SKY

Christian Science Monitor

Thursday, August 15, 2002

Internet: <http://library.northernlight.com/FE2002081573000049.html?cb=0&dx=1006&sc=0#doc>

Aug 16, 2002 (The Christian Science Monitor via COMTEX) -- Wait long enough and the weather changes. And sometimes the instruments scientists use to predict it do, too. Beyond your local TV weatherman's Super Duper Digital Doppler XT Radar (and your finger in the wind) loom the first images from the Atmospheric Infrared Sounder (AIRS) and its companion microwave and humidity-measuring units, beamed down from NASA's Aqua spacecraft. If the names alone aren't enough to spark your interest on a sultry summer day, consider the scientific community's excitement. With its ability to create simultaneous images at different wavelengths, the AIRS system can provide a global, 3-D weather map, allowing meteorologists to "see" through clouds. Already, scientists predict much-improved short-term weather forecasts (from the current three to five days, to seven to 10), and better tracking of severe storms.

They also note big benefits for the environment. Currently, some 4,000 weather balloons launched daily around the world help tell us what's happening. AIRS can send back the equivalent of the data from 400,000 balloons, providing much more precise climate modeling. This should lead to a better understanding of global warming, for instance, or of the way fresh water is transported around the earth in clouds. Current weather models haven't been sophisticated enough to track that water, an increasingly vital commodity. Aqua's six-year mission stands to further scientific thought, and help individuals plan for sunny days.

(17) ECONOMISTS SPLIT OVER KYOTO

The Australian

August 15, 2002

Internet: http://www.news.com.au/common/story_page/0,4057,4902828%255E421,00.html

A PETITION of 254 academic economists and the federal Opposition yesterday called on Australia to urgently sign the Kyoto protocol. The petition has sparked a bitter row among economists about the expertise of those signing the document on the eve of the release today of official figures detailing Australia's greenhouse emissions. The Australia Institute yesterday released an eight-point statement declaring humans had contributed to global warming and that the Kyoto Protocol's plan for caps on emissions and trading of carbon was the only alternative strategy available. Signatories include the former Liberal leader John Hewson. Institute director Clive Hamilton said a similar petition circulated in 1997 raised 131 signatures. "Policy options are available that would slow climate change without harming employment or living standards in Australia, and these may improve productivity," the petition says. But one prominent environmental economist, ANU professor and Reserve Bank board member Warwick McKibbin said the UN's much quoted Intergovernmental Panel on Climate Change which has warned about the effects of human activity also had warned the costs of dealing with the problem through Kyoto were significant. "People like to think the cost of 1 or 2 per cent of gross domestic product is nothing," he said. Professor McKibbin said he had not been approached about the petition. "It is a pretty sad indictment of the profession when people sign these things en masse without expertise in what they are signing," he said. Dr Hamilton said he had deliberately left out Professor McKibbin. "I didn't send it to him, why would we ... why waste the stamp. He is way out on a limb."

See Also:

AUSTRALIA SIGNING KYOTO EMISSIONS PACT IN ITS ECONOMIC INTERESTS -
ECONOMISTS (AFX News – Asia August 14, 2002)

<http://library.northernlight.com/MA20020814920000064.html?cb=0&dx=1006&sc=0#doc>

AUSTRALIA CONDEMNED FOR REFUSING KYOTO PROTOCOL (Xinhua News Agency August 15,
2002)

<http://library.northernlight.com/FC20020815400000063.html?cb=0&dx=1006&sc=0#doc>

(18) SUPPORT KYOTO, FARMERS TOLD

The Western Producer

August 15, 2002

Internet: <http://www.producer.com/articles/20020815/news/20020815news16.html>

WINDSOR, Ont. - Canada's farmers should be more vocal in demanding that the federal government sign the Kyoto treaty on climate change, an environmental activist told a meeting of farm leaders Aug. 2. Peter Tabuns of Toronto, representing Greenpeace Canada, told the summer meeting of Canadian Federation of Agriculture directors that parts of Canadian agriculture will suffer if average temperatures continue to rise. In addition to less stable weather, he said studies suggest prairie droughts will be 13 times more likely and crop production in the region could fall by as much as 30 percent if average temperatures rise 2.5 degrees or more. "Your organization should demand that the government ratify Kyoto," Tabuns said. "It has its weaknesses but it is far more effective than anything else on the table."

He said farmers should be lobbying for federal financial support to fund investments in flood control, irrigation systems and other projects aimed at reducing the effects of global warming. They should also be warning governments that future weather patterns will put pressure on programs such as crop insurance and disaster relief. Producers must press governments for a promise that farmers will be compensated for the negative effects of future climate change, he added. "If farmers are driven off the farm as a result of drought, they should be compensated." Tabuns said the effects of climate change will be the most harmful on the Prairies. Consequences will be less severe in Central and Eastern Canada.

Ironically, agricultural production would increase in the initial stages of a global warming trend, he said. A one-degree increase in average temperatures would extend the growing season and increase agricultural productivity in temperate zones. However, by the time the warming trend escalates to 2.5 degrees "you start to see the loss of the benefits you have gained from the early stages." Tabuns joined World Wildlife Fund Canada consultant Rod MacRae on an environmental panel during the CFA meeting. Both argued that farmers and environmentalists have much in common and are increasingly working together on issues such as environmental stewardship, tillage practices and reduced pesticide use. When asked whether genetic modification could be used to offset the effects of climate change, Tabuns downplayed the advantages of genetic engineering. Genetic modification could be used to develop plant varieties more resistant to heat and drought but there are other ways to create varieties with such characteristics, he argued.

(19) ODD CHINA WEATHER HITS EXTREMES

Associated Press

August 15, 2002

Internet: <http://www.miami.com/mld/miami/news/world/3867528.htm>

BEIJING - The rains came to China this year as they do almost every summer, starting their destruction in the south and spreading northward as the season heated up. Lakes swelled. Deadly torrents were unleashed. Hundreds died. But something different was happening: The places being flooded were part of China's arid belt - regions unaccustomed to dealing with so much water at once. Residents, many of them deeply poor, were blindsided "Physically, the people were not prepared - and definitely, psychologically, they were unprepared," said Richard Grove-Hills, head of the Beijing office of the International Federation of Red Cross and Red Crescent Societies.

From a balmy winter - the second warmest in 50 years - to particularly severe and frequent spring dust storms to copious downpours in normally arid provinces, China has been battered by unusual weather in the past six months. Summer monsoons dumped immense amounts of rain on provinces whose soil was unaccustomed to a deluge of moisture, unleashing deadly floods in areas far from the banks of the mighty Yangtze River, the usual site of overflow and destruction. Government experts say the events are an unusually strong manifestation of a long-term problem - global warming.

"Global climate change ... has caused these extreme events," said Ding Yuhui, special adviser on climate change for the China Meteorological Administration. "It has caused a lot of extreme conditions and amplified the anomalies. "This year, nearly 900 people have died in nontraditional flood areas like the northwestern province of Shaanxi, the western desert regions of Gansu province and the tropical Guangxi region of the far south. The storms have battered agriculture, transportation, power grids and other infrastructure, causing about \$3.6 billion in damage, according to state media.

The flooding occurred in two periods. In April and May, the first rains hit Wuhan and Nanjing in the southeast, causing lakes along the Yangtze to rise to warning levels. Then in June, warm and moist air from India merged with cold air from Siberia to create a summer monsoon, which started its destructive path in the south and spread northward, bringing major prolonged rainfall, Ding said. The unusual amounts of rain since May in nontraditional areas caused flash floods that have taken a tremendous toll, Grove-Hills said. Landslides triggered by water in areas where soil can't absorb moisture have also killed scores.

In some villages, Grove-Hills said, a lone building is left standing. Debris clogs roads. People suddenly have nothing. "It's more like being in an earthquake zone than being in a flood zone," Grove-Hills said. "You go to bed one night, the next morning everything is gone." Grove-Hills spearheaded relief efforts in the southern provinces of Jiangxi and Hunan in June, when flooding killed 471 people and caused \$2.16 billion in economic losses, according to figures by the Civil Affairs Ministry published in state media. Some 54 million people were affected and 6.42 million acres were damaged, the figures said. In Shaanxi's Foping county, 151 people died in four days in June, officials said. On June 8 alone, the county recorded more than 19 inches of rainfall.

The National Office of Flood Relief and Drought Control and the Civil Affairs Ministry refused repeated requests for interviews. Disaster officials say they have spent \$12 billion on reinforcing dikes and other anti-flood preparations since 1998, when heavy rains along the Yangtze and in the northeast caused the worst floods in decades, killing 4,150 people. They have also stockpiled emergency supplies and set up round-the-clock communications networks. This summer, China has allocated more than \$2.4 million in cash and relief materials to flood-stricken areas across the country, the official Xinhua News Agency said.

See Also:

EXTREME WEATHER HITS CHINA (Associated Press, August 16, 2002)

http://www.boston.com/dailyglobe2/228/nation/Extreme_weather_hits_China+.shtml

MILD WINTERS, DUST, AND FLOODS IN NEW PLACES: CHINA GETS A YEAR OF EXTREME WEATHER (ENN August 16, 2002)

http://www.enn.com/news/wire-stories/2002/08/08152002/ap_48174.asp

(20) INVOLVE MPS IN DECISION, ACTIVISTS URGE

Bangkok Post

August 14, 2002

Internet:

http://scoop.bangkokpost.co.th/bkkpost/2002/aug2002/bp20020814/news/14aug2002_news11.html

Parliament should have a say in the decision to ratify Kyoto Protocol, an international pact on reduction of greenhouse gas emissions, not just cabinet alone, environmental activists urged. "Though the protocol doesn't alter national border, it poses vast impact on variety of issues," said Srisuwan Kuankachon, director of the Project for Ecological Recovery. Many laws and regulations would be altered to put the agreement in place, but policy makers did not seem to pay a lot of attention on the issue, Mr Srisuwan said. He urged cabinet to delay the ratification to inform and seek consultation from parliament.

The National Environment Board had agreed early this month to allow the ratification of Kyoto Protocol, which Thailand adopted in 1997. The Office of Environmental Planning and Policy (OEPP), which is the coordinator and has been studying the legal and economic aspects of the pact, has scheduled to bring the issue before the cabinet meeting next week. If cabinet approved the ratification, Thailand's emissions, though very small, would be accounted in the 55% of the world's total emissions in 1990 to put the pact into effect. Twenty-two developed countries, whose sum of carbon dioxide emissions stand at 36.1% of the global emissions in 1990, have already ratified.

Once the pact is in effect, it obligates the industrialised signatories to reduce greenhouse gas emissions by 5.2% of the 1990 level between 2008 to 2012. United States, the world's largest emitter, withdrew from the agreement last year. Sitanon Jездapipat, of Chulalongkorn University's Ecological Economics, said whether or not the ratification took place soon, the most urgent task before the government was to inform the public about the protocol and how it would affect them.

The reduction of greenhouse gases would affect many sectors in the society from industries to agriculture, "or simply everyone's way of life," he said, "But the country's fate had been decided by only a small group of bureaucrats." He said OEPP had failed to acknowledge the public on the matter. "The protocol had been around for years, but the public has had trouble even to understand the meaning of the words, let alone its consequences or hidden agenda." He urged the government to come up with plans on how to increase public understanding on the issue. The government should outline all the consequences and how the benefit of technology know-how or money from the sales or exchange of greenhouse gases, if any, would be distributed to various sectors.

Surin Wiwatsirin, Division of International Environment chief, said OEPP had explored all aspects of the legal and economic consequences and found that there was nothing Thailand could lose from ratifying the pact. Ratification would ensure Thailand had a say in the international stage and get assistance for research or projects on the greenhouse gas reduction, he said. The committee on the Clean Development Mechanism (CDM) would be set up to oversee the technological transfer in exchange of carbon credits, he said.

(21) EXTREME WEATHER BOOSTS CALLS FOR ACTION ON CLIMATE

ENN

August 14, 2002

Internet: http://www.enn.com/news/wire-stories/2002/08/08142002/reu_48130.asp

BERLIN - The storm clouds massed over Europe that are causing some of the worst floods in decades may have a silver lining for the continent's environmentalists as the battle lines are drawn for the Johannesburg Earth Summit. While floods threatened historic buildings and crops across Europe and hundreds drowned after torrential rain in Nepal, Iran, and the Philippines this week, drought has shriveled harvests in southern Africa, Vietnam, Australia, and the United States.

Ahead of the summit on the environment and development that starts in Johannesburg, South Africa, in two weeks, Europeans have used the extreme weather as ammunition for criticism of President Bush's rejection of moves to fight global warming. Speaking during a visit to the flooded historic center of the Bavarian university town of Passau, German Interior Minister Otto Schily said weather disasters like floods showed the need for a redoubling of efforts to protect the environment. German Environment Minister Juergen Trittin agreed, saying higher global temperatures in recent decades had led to rising sea levels and increased rainfall and were at least partially to blame for a bout of unpredictable weather seen in recent years. "If we don't want this development to get worse, then we must continue with the consistent reduction of environmentally harmful greenhouse gases," he told NDR radio in an interview. Benedict Southworth from the Greenpeace environmental group in Britain, said temperature records were being broken across Europe, and the frequency of extreme events would increase. "Now we're getting the first sense of urgency of what it will be like when climate change really starts to bite," he said.

RICH WORLD MUST PAY

Gallus Cadonau, the managing director of the Swiss Greina Foundation for the preservation of Alpine rivers and streams, agreed and suggested a punitive tariff on imports from the United States to force cooperation on greenhouse gas emissions. "This definitely has to do with global warming. We must change something now," he said. "Those nations that really are careless with the environment should have to compensate." U.N. Environment Program chief Klaus Toepfer said the latest extreme weather should persuade rich nations of the need to act fast to reduce emissions of carbon dioxide and other gases that are believed to contribute to global warming. "We must massively fight that, and it is above all an obligation of industrialized countries," Toepfer told DeutschlandRadio Berlin in an interview.

Toepfer rejected suggestions that a lack of U.S. interest could render irrelevant the U.N. World Summit on Sustainable Development that runs from Aug. 26 to Sept. 4 in South Africa, although he admitted it might disappoint. "We would like to go much further, but the world cannot be changed just by one conference," he said. While the summit will host some 50,000 participants, including dozens of world leaders, Bush is expected to be vacationing at his Texas ranch. The United States produces one-quarter of the world's carbon dioxide emissions. Bush pulled out of the Kyoto agreement on reducing greenhouse gases last year, saying it would cripple the U.S. economy and give unfair exemptions to developing countries.

NO PROOF OF LINK

Cato Buch of Norwegian environmental group Bellona admitted there was no proof of a direct link between erratic weather and the so-called greenhouse gases produced by burning fossil fuels that are believed to be increasing global temperatures. "We can't say 100 percent that this is linked to climate change caused by people, but scientists agree that such dramatic weather is more likely if the greenhouse effect is taking place," he said. Germany's Trittin also said global warming was by no means the only cause of the recent floods in Europe and said building along river banks and flood plains was also partly to blame. "In many cases, we don't need more dikes, but fewer dikes. Rivers should not be forced to act like canals but given the space to spread onto the plains," he said.

In Romania, where 10 people have died as a result of bad weather in recent weeks, Ion Simion, adviser to the Environment Ministry, said tree felling was also a problem. "Another cause of these floods is the fact that forests have been cut down, not only in Romania but everywhere," he said. Danica Leskova from Slovakia's Hydrometeorological Institute cautioned against jumping to conclusions about a link between floods and global climate change. "Our memory is too short," she said. "Our regular and scientific observations did not begin long enough ago to make such self-assured deductions. There is one nice - or ugly - thing about nature: It is unpredictable."

(22) GLOBAL WARMING THREATENS OCEAN ECOSYSTEMS

ENS

August 14, 2002

Internet: <http://ens-news.com/ens/aug2002/2002-08-14-06.asp>

WASHINGTON, DC, August 14, 2002 (ENS) - Climate change will create increasing challenges to U.S. coastal and marine ecosystems over the next century, warns a new report from the Pew Center on Global Climate Change. Temperature changes, altered patterns of rain and snowfall, and rising sea level are expected to upset the delicate balance of fragile coastal ecosystems. The Earth's climate is expected to change much faster than normal over the coming decades due to the warming influence of human caused increases in greenhouse gas emissions. The world's oceans, which cover almost 70 percent of the planet's surface, are likely to show the effects of climate change in dramatic and devastating ways, the Pew Center warns.

"Such high rates of change will probably result in local if not total extinction of some species, the alteration of species distributions in ways that may lead to major changes in their interactions with other species, and modifications in the flow of energy and cycling of materials within ecosystems," warns the new report, titled "Coastal and Marine Ecosystems and Global Climate Change: Potential Effects on U.S. Resources." "Climate change could likely be the 'sleeper issue' that pushes our already stressed and fragile coastal and marine ecosystems over the edge," said Eileen Claussen, president of the Pew Center on Global Climate Change. "Particularly vulnerable are coastal and shallow water areas already stressed by human activity,

such as estuaries and coral reefs. The situation is analogous to that faced by a human whose immune system is compromised and who may succumb to a disease that would not threaten a healthy person."

The report was prepared for the Pew Center by researchers from three universities, the National Center for Atmospheric Research and the International Pacific Halibut Commission. Based on current projections for climate change in the next century, the report explores the hazards that climate change may pose to marine life. Critical coastal ecosystems such as wetlands, estuaries and coral reefs are particularly vulnerable to climate change, the report concludes. Such ecosystems are among the most biologically productive environments in the world, but their location at the interface between the land and ocean environments exposes them to a wide variety of human and natural stressors.

The added burden of climate change may further degrade these valuable ecosystems, threatening their ecological sustainability and the flow of goods and services they provide to human populations, the report warns. Temperature changes in coastal and marine ecosystems will influence the metabolism of marine species, and alter ecological processes such as productivity and species interactions, the researchers said. Species are adapted to specific ranges of environmental temperature, the report explains. As temperatures change, the geographic ranges of different species may expand or contract, creating new combinations of species that will interact in unpredictable ways. Species that are unable to migrate or compete with other species for resources may face local or global extinction. Changes in precipitation and sea level rise will have far reaching consequences for the water balance of coastal ecosystems, the report notes. Increases in precipitation and runoff will increase the risk of coastal flooding, while decreases in precipitation may trigger droughts. Meanwhile, sea level rise will gradually inundate coastal lands, the study warns. Coastal wetlands may migrate inland with rising sea levels, but only if they are not obstructed by human development.

Climate change is also likely to alter patterns of wind and water circulation in the ocean environment. Such changes may influence the vertical movement of ocean waters, increasing or decreasing the availability of nutrients and oxygen to marine species. Changes in ocean circulation patterns can also cause substantial changes in regional ocean and land temperatures and the geographic distributions of marine species. The Pew Center notes that not all these potential effects can be predicted with confidence. The effects that are most certain have to do with how creatures and ecosystems will react to rising temperatures and sea levels. Predictions about temperature's influence on interactions among species, water circulation patterns, precipitation, wind patterns, and the frequency and intensity of storms, are less certain, the report's authors caution. Still, governments can not afford to wait for more certainty before taking action to reduce greenhouse gas emissions and combat global warming, says the Pew Center's Claussen. "It is increasingly apparent that the United States needs a strategy to address the very real threat of climate change," said Claussen. "The longer we wait, the graver the risks - and the cost of averting them." The current report is the eighth in a series of Pew Center reports examining the potential impacts of climate change on the U.S. environment. Other Pew Center reports have focused on domestic and international policy issues, climate change solutions, and the economics of climate change.

The full report is available at: http://www.pewclimate.org/projects/index_environment.cfm

See Also:

PLUMMETING PLANKTON LINKED TO WARMER OCEANS (CNN August 16, 2002)

<http://europe.cnn.com/2002/TECH/space/08/16/satellite.plankton.glb/index.html>

(23) VINES SPREAD, CHOKER TREES IN DEEPEST AMAZON JUNGLE

Reuters

August 14, 2002

Internet:

http://reuters.com/news_article.jhtml;jsessionid=GXHIOH333ZGDOCRBAELCFFA?type=sciencenews&StoryID=1329650

LONDON (Reuters) - Jungle vines are spreading faster in South America's Amazon rainforest than before, choking trees and potentially slowing the forests' ability to soak up damaging greenhouse gases, scientists say. The spread of woody vines -- like the ones Tarzan swings from in the movies-- is the first change in

plant composition that scientists have recorded in the deepest virgin jungle, and suggests mankind is having more impact on delicate ecosystems than previously shown. A team of researchers from Bolivia, Ecuador, Peru and the United States, led by Oliver Phillips of Leeds University in Britain, counted and measured the vines, called lianas, in the primary rainforests of the Amazon. They found that the "dominance" of lianas over trees had increased by between 1.7 and 4.6 per year over the last two decades of the twentieth century. "It's the first time that a changing composition has been observed in mature forests," Phillips told Reuters in a telephone interview. His team's findings are to be published in the British science journal Nature on Thursday. He said the growth in vines appeared to have been caused by greater concentrations of carbon dioxide, the "greenhouse" gas that most scientists believe is causing global temperatures to rise as a result of human activity.

Plants absorb carbon dioxide in photosynthesis and scientists have predicted that as humans produce more of the gas, forests would grow to soak some of it up, a phenomenon called the "carbon sink," which could help ease global warming. But Phillips said the additional carbon appears to benefit resource-hungry vines more than slower-growing trees, throwing off the balance in jungle forests. "What we think we were finding is the ecosystem responding, not just in growth but in a change in its composition. If you change an environmental driver like carbon dioxide concentration, some plants will do better than others," he said. As the vines weigh down trees and kill them, they can reduce the ability of the forest to soak up more carbon, making the problem of global warming even worse. Other plant and animal species are also likely to have been affected by the increase in vines relative to trees. Different insects may pollinate vines rather than trees, different birds may eat the insects, and so on. "The ecosystem's connected. You change one part and other parts are likely to change too," Phillips said. "It's a kind of example of how we can't predict how the world is going to respond to the changes we're causing."

(24) ENVIRONMENT TAX MAY BE NEEDED

Yomiuri Shimbun

August 14, 2002

Internet: <http://www.yomiuri.co.jp/newse/20020814wo81.htm>

How can we reduce emissions of carbon dioxide--the main cause of global warming--without hampering economic activities? Debate on the introduction of an environment tax, seen as one efficient method of achieving this goal, has intensified. One organization that has begun discussing an environment tax is the Japan Business Federation (Nippon Keidanren), which recently was formed as a merger of the Federation of Economic Organizations (Keidanren) and the Japan Federation of Employers' Associations. Keidanren had been negative about discussing the introduction of such a tax, but Toyota Motor Corp. Chairman Hiroshi Okuda, who assumed the post of Nippon Keidanren chairman, has said an environment tax must be actively discussed as a countermeasure for global warming. Since then, industry has shown signs that it is softening its stance toward an environment tax. Meanwhile, a committee studying a tax to counter global warming within the Central Environment Council has compiled an interim report recommending that an "anti-global warming tax"--a type of environment tax mainly targeting CO₂--be introduced as soon as possible after 2005.

European models worth studying

The government's Council on Economic and Fiscal Policy also has decided to discuss "a taxation system friendly to the global environment" as one element of taxation reforms. It appears that full-fledged discussions on the introduction of an environment tax in Japan finally are getting under way. European countries, including Britain, Germany and Sweden, already have introduced environment taxes. Such taxation systems vary from country to country, but they basically tax fossil fuels, such as gasoline, to curb the consumption of these fuels. The tax revenues are used for anti-global warming measures and to fund the development of environmentally friendly technologies. Noteworthy among these taxes is Britain's Climate Change Levy, which was introduced in April as a tax on overall energy consumption, including natural gas, in addition to the existing tax on gasoline. Under this new taxation system, industries that consume massive amounts of energy, including the cement and steel industries, which have concluded agreements with the British government concerning CO₂ reduction targets, qualify for an 80 percent rebate on the tax. Companies can participate in a new market for emission reductions by trading their CO₂ emissions quotas

with other companies. The new British tax reflects the viewpoint that an environment tax must not hamper competitiveness.

Review Gasoline Tax

When considering the introduction of an environment tax in this country, handling of the Gasoline Tax--one of the taxes whose revenue is specifically designed to be used for road-related projects--is certain to be a focus of discussion. The Gasoline Tax, which currently is applied at twice the basic rate as a temporary measure, generates revenue of about 2.8 trillion yen a year. The temporary imposition of the 200 percent rate is scheduled to expire at the end of March. However, the National Institute for Environmental Studies estimates that if the tax rate is cut to its original level, gasoline consumption will rise steeply, leading to a drastic increase in CO2 emissions. Whether the Gasoline Tax should continue to be applied at the temporary 200 percent rate and whether the revenue it raises should only be used for road development will be topics for discussion in compiling the budget for the next fiscal year. The issue of an environment tax should be introduced as a fresh element in the budget-compilation process, and discussions on it should be promoted.

(25) GREENS URGE WORLD SUMMIT TO ADDRESS CAUSES OF ASIA'S "BROWN CLOUD"

OneWorld South Asia

August 14, 2002

Internet:

http://story.news.yahoo.com/news?tmpl=story&u=/oneworld/20020814/wl_oneworld/1032_1029371432

World leaders are facing calls to take action to reduce a three-kilometer thick haze over South Asia that scientists say may lead to "several hundreds of thousands" of premature deaths in the region over years to come. Greenpeace International is urging government delegates at the forthcoming World Summit on Sustainable Development--scheduled to open in Johannesburg, South Africa, on August 26--to implement global policies that tackle both environmental problems and poverty, following evidence of the spread across the Indian subcontinent of a cloud of toxic particles.

"The haze is just another manifestation of the problem with current lifestyles, whether it be the burning of fossil fuels or poor people's use of inefficient cookers," said Paul Horsman, Greenpeace International's climate change campaigner. Horsman stressed that the evidence presented this week in a report by a group of scientists working for the United Nations Environment Programme (UNEP), "clearly illustrates that climate change and development are completely intertwined." The UNEP report, 'Asian Brown Cloud: Climate and Other Environmental Impacts,' blamed a combination of factors--including forest fires, agricultural waste incineration, fossil fuel emissions from vehicles and heavy industry, as well as the widespread use of cookers burning wood or other biomass, such as cow dung--for the brown cloud which has affected the health and livelihoods of those in some of the most impoverished areas in the region.

In addition to increasing the risk of respiratory problems among thousands of people in the region--which stretches from Afghanistan and Pakistan to Bangladesh, Nepal, and Sri Lanka--the blanket of pollutants could also disrupt weather patterns, leading to reduced rates of rainfall over northwestern parts of Asia and increased rates over the eastern coast of the continent, said the report. The scientists pointed out that there had been two consecutive droughts during 1999-2000 in Pakistan and northwestern parts of India, while Bangladesh, Nepal, and the northeastern states of India suffered severe flooding. In 1998, two thirds of Bangladesh's land area was submerged, ruining 1.6 million hectares of cropland.

According to Greenpeace, the solution lies not only in the implementation of treaties, such as the Kyoto Protocol on reducing emissions of "greenhouse gases," but also in providing cleaner and renewable energy sources for those dependent on organic fuels. "Over 2.5 million people die each year as a result of pollution from indoor cookers," Horsman said Wednesday as the effects of the Asian haze continued to feature prominently in the international media. "Efficient cookers that use sustainably managed biomass, would save lives, and they would also help the environment by polluting less." Greenpeace will present a petition to delegates at high-level discussions during the Johannesburg summit that calls on governments around the world to produce a timetable for action on the introduction of renewable energy. Meanwhile, on Thursday,

a Greenpeace ship will arrive in Bangkok, Thailand, to focus on ways to reduce fossil fuel consumption and to help communities set up local renewable-energy programs.

(26) WANTED: LOADS OF CLEAN ENERGY

DW-World

August 14, 2002

Internet: http://dw-world.de/english/0,3367,1446_A_610017_1_A,00.html

As unprecedented rains lash Germany, the debate on climate change and renewable sources of energy has become increasingly vocal. Here's a look at which regenerative energies play a role in Germany's energy market. While environmentalists and scientists world-wide debate the origins of global warming and its effects on the world's climate, one fact remains undisputed - people all over the globe are consuming more and more energy daily. It's still unclear to what extent rising levels of energy consumption are responsible for climatic change. But the latest weather catastrophes in Europe have triggered a debate in Germany about moving away from fossil fuels and towards the use of alternative sources of energy. In 1999 Germany renounced the use of nuclear power - which accounts for 30 percent of its energy consumption. The governing Social Democratic-Green coalition considers nuclear power and the disposal of radioactive waste too dangerous.

Germany moves towards regenerative energy

The country has made efforts to move away from polluting fossil fuels and embrace alternative energies, in particular solar power. At present, 7 percent of Germany's electricity is generated using alternative energy sources. After the passing of the Renewable Energies Law in April 2000 that sought to encourage a switch to renewable energies, Germany experienced a sort of solar boom. The southwestern city of Freiburg boasts the first hotel in Europe run entirely on alternative energy sources. But despite the solar push, power from the sun today provides a mere 0,0006 percent of Germany's electricity.

Wind and water

Another popular source of alternative energy in Germany is hydroelectric power, which makes up more than half of alternative energy segment in the country. But experts believe that hydroelectric power (photo) is pushing its limits and has already exhausted 80 percent of its potential. It has also become increasingly difficult to find large rivers in which to set up generators without the ecology of the region being adversely affected. Wind energy, once touted as the best form of alternative energy, today produces 3 percent of Germany's electricity. But these huge wind fans throw equally large shadows and can be noisy. Increasing complaints about generators close to homes have led to a sharp drop in wind energy's popularity. In addition, experts think that the best windy places in the country are already taken up and the future of wind energy lies in offshore wind farms. But there, production costs are high.

Opposition could put up barriers

The opposition Union parties who look increasingly set to win the elections in September are reported to have made clear that they will not carry on with the proposed phasing-out of nuclear power set in motion by the current governing coalition.

They are also believed to be mainly interested in promoting biomass energy among the sources of renewable energy known in Germany. The economic spokesperson of the Union parties, Matthias Wissmann, recently said in a statement that renewable energy was just too expensive to seriously consider pursuing. But advocates of alternative energy argue that the slightly higher costs are worth the investment, especially if Germany is to honour its commitment to the Kyoto Protocol and reduce its carbon emissions by 8 percent by 2010. Coal is Germany's only major domestic fuel source and accounts for over 50 percent of electricity generation.

Solar expert Harald Schützeichel said in an interview with Der Tagesspiegel newspaper on Wednesday, "If we convert it into the electricity price, coal-driven plants cost us 0,5 cents while the subvention for renewable costs us 0,05 cents. The central question is: do we want to keep the coal alive or do we want to promote a technology that makes sense. And if we say that solar energy, wind and water make sense, then that's where the money goes".

(27) AUSTRALIA SETS SIGHTS ON FIRST SOLAR TOWER

Planet Ark

August 14, 2002

Internet: <http://www.planetark.org/dailynewsstory.cfm/newsid/17283/story.htm>

MELBOURNE - Australia is set to become home to the world's first Solar Tower, a one kilometre high structure with the potential to generate enough electricity to supply a city of more than 200,000 people. Federal Industry Minister Ian Macfarlane said yesterday the project had been granted "Major Project Facilitation" status, which defines projects of national significance and ensures streamlined decision-making for necessary government approvals. EnviroMission Ltd has proposed an investment of A\$800 million (\$431.2 million) in the project, which is due to be operating in south-west New South Wales by 2005/06 and has already received planning permission. "This project confirms Australia as a world leader in renewable energy production aimed at reducing greenhouse gases. The EnviroMission venture represents the world's first full-scale application of this new solar technology," Macfarlane said.

The 1,000 metre high tower will heat air at its base through the use of a transparent "solar collector" measuring seven kilometres in diameter. The air under the collector is about 30 degrees Celsius (91 degrees Fahrenheit) hotter than the air at the top of the tower and a resulting convection creates a powerful updraft within the tower, driving turbines which generate the clean green power. The Australian government's mandated renewable energy target requires electricity retailers to supply 9,500 gigawatt hours (GWh) per year from renewable sources by 2010. The Solar Tower would generate about 650 GWh per annum.

Shares in EnviroMission closed unchanged at A\$0.15.

(28) NGOS KYOTO-WARY

The Nation

August 13, 2002

Internet: <http://www.nationmultimedia.com/page.arcview.php3?clid=3&id=64056&usrss=1>

A non-governmental organisation yesterday called on the government to delay ratifying the Kyoto Protocol, which it views as a tool used by developed countries to pass the burden of reducing greenhouse levels to developing nations. The Alternative Energy Group said the government should provide the public with more information about the international agreement before ratifying it. "We don't think enough information about the protocol has been made public. There should be a public forum on this matter and parliamentarians should be given information so they can take part in the decision-making," said Ponglert Pongwanant, an official at the NGO. The pros and cons should be carefully considered before ratification, he added. Thailand is a signatory of the Kyoto Protocol to the United Nations Framework Convention on Climate Change, in which developed nations agreed to limit their greenhouse-gas emissions to the levels emitted in 1990.

(29) U.N. EARTH SUMMIT REPORT PROVIDES SOBERING ASSESSMENT OF PLANET IN PERIL

USA Today

August 13, 2002

Internet: http://www.usatoday.com/news/world/2002-08-13-earth-summit_x.htm

UNITED NATIONS (AP) - A U.N. report sets the stage for this month's Earth Summit with a sobering assessment of a planet where sea levels are rising, forests are being destroyed and more than 2 billion people face water shortages. The report, to be released Tuesday, reviewed the most authoritative data from U.N. and international organizations about the use of natural resources. Fossil fuel consumption and carbon emissions continued to rise in the 1990s, particularly in Asia and North America, according to the study. Signs of climate change linked to global warming were more apparent, including more frequent and intense droughts in parts of Asia and Africa and rising sea levels.

During the 1990s, the report said, 2.4 percent of the world's forests were destroyed, almost all in tropical regions in Africa and Latin America. The estimated total area destroyed - 220 million acres - is larger than the size of Venezuela. U.N. Undersecretary-General Nitin Desai, who will lead the Earth Summit in

Johannesburg from Aug. 26 to Sept. 4, said the report underscores that the world is at a crucial crossroads in the new millennium. "If we do nothing to change our current indiscriminate patterns of development, we will compromise the long-term security of the Earth and its people," he said. More than 100 world leaders are expected to attend the summit and adopt a plan aimed at accelerating economic development while preserving the environment. The report by the U.N. Department for Economic and Social Affairs, which Desai heads, focuses on five key issues: water and sanitation, energy, agricultural productivity, biodiversity and human health.

The need to feed a rising global population - now over 6 billion and projected to reach 8 billion by 2025 - is exacerbated by an increase in food consumption, from 2100 calories to 2700 calories a day in developing countries, and from 3000 calories to 3400 calories a day in industrialized nations, the report said. At the same time, it said, the capacity to produce enough food is diminishing, especially in developing countries. The report found that global water use has increased sixfold over the last century, at twice the rate of population growth, and that agriculture represents 70% of this consumption. The greatest drain on the world's freshwater supplies is inefficient agricultural irrigation systems. Meanwhile, about 40% of the world population face water shortages; by 2025 that figure is expected to increase to 50 percent, the report said. "A top priority at the summit is the need to agree on policies and programs that improve agricultural yields in order to meet our long-term food needs," Desai said. "Equally pressing is the goal of expanding sustainable agricultural practices, including the introduction of efficient irrigation systems." Despite some recent improvements, 1 billion people still lack access to safe drinking water and 2.5 billion lack adequate sanitation facilities, the report said.

More than 3 million people die every year from the effects of air pollution and 2.2 million people die from contaminated water, it found. The great majority of those who die from polluted air are children in developing countries who suffer from respiratory infections, the report said. The report praises some small-scale programs that address problems such as urban air pollution and child mortality linked to unsafe water. But it said these gains will be lost if action is not taken soon on a much larger scale.

(30) RWE THREAT OVER EMISSIONS

The Guardian

August 13, 2002

Internet: <http://www.guardian.co.uk/business/story/0,3604,773509,00.html>

The head of one of Europe's biggest utility groups issued a warning yesterday that his company would cancel a new power plant, which would create 4,000 new jobs, unless the European commission made significant changes to its planned environmental regime. Dietmar Kuhnt, chairman of RWE, which owns Thames Water and energy company Innogy in the UK, is angry about the way the commission rules that would govern carbon dioxide certificates trading would be introduced. He claimed that the regime placed a one-sided burden on parts of the energy industry and did not take enough account of cuts in carbon dioxide that had already been achieved.

RWE, which is about to commission a new lignite power plant in Germany that it says emits 2.9m tonnes of carbon dioxide a year less than the plant it is replacing, has plans for a second to be built by 2008. But Dr Kuhnt warned the second plant would not go ahead "if its profitability is jeopardised by unreasonably stringent sanctions or carbon dioxide penalties. "This could be the case if the EU implements the plans it has for carbon dioxide certificate trading without making the adjustments required by several constituencies."

In recent years RWE has spent more than €20bn (£13.16bn) building up what it describes as a multi-utility company spanning gas, electricity, water and environmental services. Yesterday it revealed that first half operating profits rose 9% to €2.2bn. Profits from its four core business areas rose by almost a quarter but the overall results were dragged down by the non-core, business-service stations and refining, printing equipment and construction. Yesterday's figures did not include results from Innogy though RWE said they would be taken into third quarter results and work was underway to identify synergies between Thames and Innogy. "It is a little bit early to be specific [about the synergies] but if you look a few months ahead I think we can make proposals," said a spokesman.

(31) MAZDA CUTS COATING EMISSIONS

The Asahi Shimbun

August 13, 2002

Internet: <http://www.asahi.com/english/business/K2002081300227.html>

Mazda Motor Corp. has developed an energy-saving technique for priming and coating auto bodies with solvent paints that reduces emissions of carbon dioxide and ozone-destroying pollutants known as volatile organic compounds. Dubbed the Three Layer Wet Paint System and touted as the world's first environmentally friendly coating technology, the process has enabled Mazda to reduce emissions of volatile organic compounds like toluene and xylene by 45 percent at its Hofu Plant 1 in Yamaguchi Prefecture.

The reduction brings Mazda's emissions of such compounds into line with those of European manufacturers that use waterborne paints. It has also enabled Mazda to cut emissions of carbon dioxide, a greenhouse gas believed to contribute to global warming, by 15 percent. While the automaker has been using the Three Layer Wet Paint System to coat parts of cars, this marks the first time it has used the technology to coat entire auto bodies. Conventional technology requires carmakers to coat auto bodies in a three-step process, with the body being baked after each step to ensure that the primer and paint adheres.

In the Three Layer Wet Paint System, the primer, base coat and clear coat are applied to the body in succession and then baked all at once. By eliminating repeated baking, the automaker is able to save energy and reduce emissions. The process was made possible by the carmaker's joint development of a low-solvent paint with Kansai Paint Co. and Nippon Paint Co. The new product produces smaller amounts of volatile organic compounds than conventional solvent paints. The automaker's introduction of more efficient painting robots also contributed to the reductions in gas emissions and paint consumption.

(32) EUROPEAN INSURERS FACE WEATHER CLAIMS

Xinhua News Agency

August 13, 2002

Internet: <http://library.northernlight.com/FD20020813720000108.html?cb=0&dx=1006&sc=0#doc>

GENEVA, Aug 13, 2002 (Xinhua via COMTEX) -- Insurers are facing huge bills for the floods that have devastated much of Europe, in Austria alone costs are expected to exceed 1 billion euros, Swiss Radio International (SRI) reported Tuesday. One insurer likely to have to shoulder much of the cost, Swiss Re, blames the unusual weather conditions on global warming. "The average global temperature has risen, which has pushed up average humidity. This in turn leads to flooding," Pamela Heck, a climate risk expert at Zurich-based Swiss Re, said to SRI. Swiss Re, the world's second largest reinsurer, estimated that the recent floods have wiped out 20 percent of crops in neighboring Germany.

Since the September 11 attacks, insurance companies have re-negotiated policies to reduce the amounts they would be required to pay out. But with the terror attacks foremost in their minds, the aim has been to limit their exposure to terrorist-related incidents. Now they are facing huge claims for weather damage from Germany and Austria where, like most developed countries, insurance cover is almost total. "The awareness of environmental risks is growing and there is a tendency toward improving coverage," said Heck. "That's why we have re-defined our risk criteria in the last months." SRI reported that the claims come at a time when increased competition is putting pressure on premiums, and weak equity markets are driving down insurers' reserves. The International Monetary Fund (IMF) last June found the Swiss financial system, including its insurance industry, to be in good health. But that was before the Swiss stock market went into free fall, with quoted insurance companies losing more than 30 percent of their value.

(33) EMISSIONS RIGHTS LOOM AS HOT NEW TRADE TOPIC

The Asahi Shimbun

August 13, 2002

Internet: <http://www.asahi.com/english/national/K2002081300247.html>

METI prepares to acquire greenhouse gas credits from developing nations. The government is increasingly looking overseas to meet its greenhouse gas reduction goals set out in the Kyoto Protocol. The Ministry of Economy, Trade and Industry plans to acquire emissions rights on greenhouse gases like carbon dioxide from foreign countries under an international system for such "trades" scheduled for implementation this autumn. In preparation for the system, the ministry plans to provide expertise on trade emissions to developing countries and to create online databases on emissions trade contracts involving the Japanese government and firms. The Kyoto Protocol provides that emissions rights be traded by:

*Joint implementation with other industrialized nations;

*A clean development mechanism (CDM), in which the amount of emissions reduced by conserving energy and planting forests in developing countries be transferred to industrialized countries that help in the process; and

*Selling or buying emissions limits among industrialized countries.

These programs would enable Japan to reduce 1.6 percent of the 6 percent target it promised in the Kyoto Protocol. The ministry-affiliated New Energy and Industrial Technology Development Organization (NEDO) will support joint implementations and CDMs. NEDO renovates older power plants and factories four or five times a year in Asian nations to encourage energy conservation and the use of cleaner fuels. Japan acquired 62,000 tons of emissions rights in exchange for renovating a power plant in Kazakhstan in June—the first successful trade in emissions rights. NEDO plans to ask other countries to transfer their emissions rights to Japan.

Developing countries under no obligation to reduce emissions have nothing to lose by transferring their emissions rights to developed countries. But these developing countries often lack the political institutions to handle CDM procedures and related projects. To remedy this problem, METI officials will soon visit China, India, Thailand, and seven Asian nations to train experts on emissions trade. The ministry is expected to help governments develop a national strategy on CDMs, select optimum locations, and develop model operations. METI also plans to bolster private sector action by providing information on prospective transactions and negotiations.

(34) GOVERNMENT TO PAY CASH FOR CO2 CUTS

The Asahi Shimbun

August 12, 2002

Internet: <http://www.asahi.com/english/business/K2002081000248.html>

In an effort to meet its international commitment to prevent global warming, the government will hand over cash for cuts in CO2 emissions made by schools, households, offices or other non-industrial energy users. The new program offers one point-worth 50 yen-for each actual 1 kilogram reduction, as opposed to a merely targeted reduction, in CO2 emissions, Environment Ministry officials said. The points will be distributed to regional groups set up specifically to reduce emissions, which can be formed by one or more local groups, including local governments, nonprofit organizations, consumer groups and commerce and industry societies.

Under the program, for example, all outlets in a shopping mall could join with a local emissions reduction council and make a commitment to raise the temperature setting of air-conditioning by 1 degree. Installing solar-battery panels in shops, forcing local schools to use low-emissions buses for school trips, and planting trees on idle land are among the activities that may also qualify for cash rewards under the program. Japan is anxious to make some progress in its pledge under the 1997 Kyoto Protocol to cut average annual emissions from 2008 to 2012 to a level that is at least 6 percent lower than 1990. By fiscal 2000, emissions had risen by as much as 8 percent compared to 1990, due mainly to a dramatic growth among non-industrial energy users.

Such emissions are more difficult to control than those from industry, where emissions growth is slowing. Local emissions reduction councils would include the estimates for CO2 reduction in its proposal to the Japan Environment Corp., which will oversee the project nationwide and will decide what payments are appropriate. The councils, which are responsible for tracking and proving emissions reductions by members, would then submit the results of its reduction efforts the following year to receive points, which

can be converted to cash. Points will be awarded based on ministry calculations, which put a numerical value on emissions cuts from a range of activities. The points which any one council can receive will likely be limited to 400,000, or 20 million yen.

(35) SOOT, PARTICLES, AEROSOLS: AN ASIAN BROWN COCKTAIL

ENS

August 12, 2002

Internet: <http://ens-news.com/ens/aug2002/2002-08-12-03.asp>

LONDON, UK, August 12, 2002 (ENS) - A hazy brown cloud covering South Asia to a depth of three kilometers (two miles) is disrupting seasonal monsoon weather patterns, damaging agriculture, and risking the lives of hundreds of thousands of people in the region, scientists working with an United Nations study said today. The pollution that is forming the haze could be leading to "several hundreds of thousands" of premature deaths as a result of higher levels of respiratory diseases in Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka, the report suggests. "Asian Brown Cloud: Climate and Other Environmental Impacts" is a UNEP Assessment Report, issued this morning in London by Klaus Toepfer, executive director of the UN Environment Programme (UNEP). "These initial findings clearly indicate that this growing cocktail of soot, particles, aerosols and other pollutants are becoming a major environmental hazard for Asia," warned Toepfer.

"The haze is the result of forest fires, the burning of agricultural wastes, dramatic increases in the burning of fossil fuels in vehicles, industries and power stations and emissions from millions of inefficient cookers burning wood, cow dung and other biofuels," he said. Studies indicate that the level of fatalities is rising along with the levels of pollution. Results from seven cities in India alone, including Ahmedabad, Kolkata, Delhi and Mumbai (Bombay), estimate that some kinds of air pollution were annually responsible for 24,000 in the early 1990s. By the mid-1990s they resulted in an estimated 37,000 premature fatalities. "There are also global implications not least because a pollution parcel like this, which stretches three kilometres high, can travel half way round the globe in a week," he warned. The concern is that the regional and global impacts of the haze are set to intensify over the next 30 years as the population of the Asian region rises to an estimated five billion people.

The findings on the Asian Brown Cloud have come from observations gathered by 200 scientists working on the Indian Ocean Experiment (INDOEX) supplemented by new satellite readings and computer modelling. The UNEP Scientific Panel behind the new report includes leading academics in the field such as Professor V. (Ram) Ramanathan of the Scripps Institution of Oceanography in the United States, Nobel laureate Paul Crutzen of the Max-Planck Institute for Chemistry in Germany, and A.P. Mitra of the National Physical Laboratory in India. Ramanathan, one of the best respected scientists in the field, has served as principal investigator on the NASA Earth Radiation Budget Experiment since 1979. He serves on the board Tata Energy Research Institute, Arlington, Virginia, and since 1991 has been director of the Center for Clouds, Chemistry and Climate at Scripps. He is co-chief scientist of the Indian Ocean Experiment (INDOEX) and chair of its International Steering Committee. The scientists are calling for an action plan to address the threats across Asia as a whole. "The haze problem is comparable, if not more severe, in South East and east Asia including China," the report says.

This blanket of pollution cuts the amount of sunlight or solar energy hitting the Earth's surface by as much as 10 to 15 percent. At the same time, "its heat absorbing properties are estimated to be warming the lower parts of the atmosphere considerably," the panel reports. "This combination of surface cooling and lower atmosphere heating appears to be altering the winter monsoon," the panel found, "leading to a sharp fall in rainfall over northwestern parts of Asia and increase of rainfall along the eastern coast of Asia." Comprehensive regional models and regional aerosol and climate observations are needed for verification. Project Asian Brown Cloud aims to establish observatories to study the haze and its impacts on agriculture, water supplies, and human health. UNEP said in a statement that the project is intended to "shed more light on the complex science linking pollution hazes in the region with issues such as global warming." The agency does not intend to use this pollution cloud as a reason to shut down economic growth. The goal is to help policy makers plan strategies that will help "reduce pollution and ensure the sustainability of the impressive economic growth rates in the region," UNEP said.

As UNEP Executive Director, Toepfer has been gearing up for years for the World Summit on Sustainable Development (WSSD) which opens in Johannesburg in two weeks, on August 26. The summit of heads of government and heads of state comes 10 years after the Rio Earth Summit of 1992 and is meant to achieve action, not just plans and pledges, to implement practical sustainable development that does not destroy the environment and natural resources. UNEP prepared this study as part of a series in advance of the summit in order to alert world leaders to emerging threats to the survival of life on Earth. "The huge pollution problems emerging in Asia encapsulate the threats and challenges that the summit needs to urgently address," Toepfer declared today. "These are how to achieve economic growth without sacrificing the long term health and natural wealth of the planet. We have the initial findings, and the technological and financial resources available," he asserted, "let's now develop the science and find the political and moral will to achieve this for the sake of Asia, for the sake of the world."

See Also:

ASIAN SMOG IMPACT NEEDS 5 YEARS STUDY, SAYS U.N. BODY CHIEF (ENN August 13, 2002)

http://www.enn.com/news/wire-stories/2002/08/08132002/reu_48113.asp

EXTREME WEATHER SET TO WORSEN THROUGH POLLUTION AND EL NINO (The Guardian August 12, 2002)

<http://www.guardian.co.uk/globalwarming/story/0,7369,773143,00.html>

ASIAN HAZE POSES 'WIDESPREAD THREAT' (August 11, 2002)

<http://news.bbc.co.uk/2/hi/sci/tech/2182783.stm>

BORNEO FIRES MAY INTENSIFY 'ASIAN BROWN HAZE' (NewScientist August 12, 2002)

<http://www.newscientist.com/news/news.jsp?id=ns99992660>

(36) GOVT EYES MARKET FOR CO2 CREDITS

Yomiuri Shimbun

August 11, 2002

Internet: <http://www.yomiuri.co.jp/newse/20020811wo11.htm>

The Economy, Trade and Industry Ministry likely will set up a commodity exchange-like market for private businesses to trade the right to emit quantities of carbon dioxide as early as autumn this year, ministry sources said Friday. The ministry plan is intended to help the nation attain its greenhouse reduction target under the Kyoto Protocol, which was adopted at the Third Conference of the Parties to the U.N. Framework Convention on Climate Change held in 1997, the sources said.

According to the ministry plan, the government will inaugurate a system for settling funds that change hands as a result of trading CO2 emission credits among companies by assigning the management of such transactions to commodity exchanges and other market mechanisms, the sources said. Specific transactions of emission credits will be closely monitored and recorded. Under the plan, a company that falls short of its target can purchase CO2 emission credits from another that exceeds its target at a price set by the market like any other commodity, fluctuating according to supply and demand.

The plan, if implemented, will be the nation's first market mechanism for trading CO2 emission credits, observers said, while Britain, for instance, introduced an emission-credit market in April. Initially, the ministry will select about 20 private businesses in various industries whose CO2 emission reductions far exceed the targets each has voluntarily imposed on itself, the sources said. The selected companies then will be requested to map out and submit a comprehensive midterm CO2 reduction plan effective up to the end of 2007, including plans for curbing energy consumption and facility renovations, to the ministry.

In fiscal 2003, the ministry will award a total of 1 billion yen in subsidies to all such companies relative to the amount of its reduction target each company has achieved. The successful companies will then also be eligible to sell their excess emission rights to other companies. While keeping track of the performance of companies in various industries in complying with an action plan for curbing CO2 emissions each of them voluntarily imposes on itself, the sources said, the ministry gradually will expand the market in terms of the number of participating companies and industries from next year on.

(37) WARMING MAY ALTER STATE'S CULTURE, ECONOMY BY 2100

Associated Press

August 11, 2002

Internet: http://www.greenbaypressgazette.com/news/archive/local_5404648.shtml

It is a balmy 98 degrees along Lake Michigan, but most relaxing along the beach don't dare go in for a swim. The shoreline is a vast canvas of blue, no longer dotted by the colors of boat sails or the hulking grayness of a cargo ship or barge. Mean lake levels - which have dropped about 4 feet since 2002 because warmer temperatures have caused lake water and groundwater to evaporate - make boating difficult. Efforts to keep crafts afloat, such as dredging the bottom of the lake, released once-buried toxins such as mercury and PCBs, creating dangerous conditions for people and fish. During the past century, average temperatures have gradually risen in Wisconsin, irreparably transforming the state. Most scientists believe this change was largely caused by the release of greenhouse gases such as carbon dioxide into the atmosphere, though others contend it has been a naturally occurring phenomenon.

Lambeau Field's famous Frozen Tundra is rarely frozen. Northern Wisconsin's once-thriving winter economy is virtually shut down by a lack of consistent snow. Cows no longer graze in picturesque serenity along roadsides; brutally hot summers have sent them huddling inside from the heat. The year began with the end of a 115-year tradition as the Polar Bear Club canceled its annual jump into Lake Michigan. The club said it had finally decided that water and air temperatures flirting with the 50-degree mark were too warm. A week later, the Tampa Bay Buccaneers knocked Green Bay out of the playoffs. The temperature at kickoff was 50 degrees, a typical occurrence which long ago cost the Packers their homefield advantage against warm-weather teams.

Ski resorts opened late, and when temperatures were cold enough to create snow, below-freezing conditions didn't last long enough to cover the brown patches that developed along the slopes. Dozens of Northwoods industries - ranging from restaurants to snowmobile rental companies - have folded over the decades, succumbing to the inconsistent winter seasons. In southern Wisconsin, numerous ice fishermen have suffered injury over the decades trying to set up on lakes that weren't fully frozen. Those who still want to spend a weekend fishing in a shack now go to the state's extreme northern corners and Canada. Hunters still come up north, but the hunting seasons and prey have changed.

The state Department of Natural Resources extended deer-hunting season through January because more fawns are surviving the milder winters; the traditional Thanksgiving week season has given way to a newer tradition - the New Year's Day hunt. Wisconsin's new wolf-hunting season - implemented after the wolf population grew because they feed on the abundant deer - is now the rage for hunters. The American Birkebeiner cross country ski race has suffered; it was canceled for a second straight year. Officials are considering discontinuing it, another victim of inconsistent snowfall. Driving through Wisconsin offers a far different view from a century before. Trees that once decorated the state's byways - aspen trees, with their golden leaves, and maple trees, with their brilliant red and yellow leaves - are virtually nonexistent. They could not survive Wisconsin's new climate. In their place stand oak, elm, ash and pine trees - their duller reds and greens a sharp contrast for those who remember trips to Door County to look at the bright fall foliage.

And gone are the once-familiar cows and corn mazes along the roadside. Warmer conditions dried up many of the irrigation sources, causing farmers to switch to crops such as wheat that don't need water in harvesting season. While growing and harvesting seasons are longer, pests - such as moths and mosquitos - stick around longer because of the delayed first frost. More troubling for farmers are seasons that are complete washouts because of extreme weather such as floods and droughts.

Warm weather forced dairy herds indoors because farmers fear they will lose their ability to create milk in the extreme heat. At least the cows are still around; catching cold water fish such as trout and cisco is nearly impossible. Most died when Wisconsin's waterways warmed. Now warm water fish such as bass and carp dominate the state's inland lakes and streams. The heat has brought new diseases once relegated to tropical and subtropical environments. Researchers and doctors are struggling with ways to fight an influx of malaria and dengue fever. They are facing challenges hardly imaginable in the early 21st century. Now, what the 22nd century may bring is even harder to fathom.

(38) DEVANEY LAUNCHES CLEAN FUEL FUND

Daily Telegraph

August 11, 2002

Internet:

[http://www.dailytelegraph.co.uk/money/main.jhtml;\\$sessionid\\$D3PNR2AQIZHKDOFIQMFCFFOAVCBQYIV0?xml=/money/2002/08/11/cndev11.xml&sSheet=/money/2002/08/11/ixcity.html&requestid=6439](http://www.dailytelegraph.co.uk/money/main.jhtml;$sessionid$D3PNR2AQIZHKDOFIQMFCFFOAVCBQYIV0?xml=/money/2002/08/11/cndev11.xml&sSheet=/money/2002/08/11/ixcity.html&requestid=6439)

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John Devaney, who revealed two weeks ago that he will step down in the autumn as chairman of logistics giant Exel, is to launch a £30m fund to invest in renewable electricity generation. The first project is expected to be a windfarm in North West Scotland. Potential backers for the new fund could include Atlas Ventures and a major US investment bank. The Government has said that electricity suppliers will have to buy at least 10 per cent of their power from renewable sources by 2010. Ministers are consulting on ways of reducing emissions of greenhouse gases in the run-up to an energy white paper which is due to be published early next year. Devaney, who has chaired Exel since its formation from the merger between NFC and Ocean, is also the founder and chairman of BizzEnergy, one of the UK's largest independent electricity supply companies. Atlas was one of the original backers of the energy trading venture, which now has a turnover of £75m and is expected to float on the stock market next year.

(39) MINISTRY SUPPORTS MORE PLASTIC-BURNING FACILITIES

Yomiuri Shimbun

August 10, 2002

Internet: <http://www.yomiuri.co.jp/newse/20020810wo34.htm>

The Environment Ministry has decided to support the generation of thermal energy by burning plastic industrial waste, and plans to establish 150 waste-to-energy facilities by 2010, ministry officials said Thursday. According to the officials, Japan will be the first country to generate energy from plastics for commercial use. The ministry will initially allocate funds from next fiscal year's budget to support the five facilities currently in operation.

The ministry was originally opposed to the idea of waste-to-energy facilities, which would have competed with wind-power plants and other facilities producing natural energies. However, it began to actively support such facilities after determining that they would help reduce global warming, the officials said. The Kyoto Protocol, which Japan has ratified, requires the nation to reduce its greenhouse gas emissions by 6 percent. To achieve the goal, the government plans to use alternative energy forms to produce 1 percent of the nation's energy by 2010.

Wind and biomass power plants are not capable of producing large amounts of energy, but a single waste-to-energy facility can generate more than 20,000 kilowatts of power. Officials say the facilities can be considered major alternative energy sources, equivalent to solar power plants. Despite its current efficiency, the ministry is reportedly aiming for a fivefold increase in power output for future facilities. Waste-to-energy facilities convert heat--that would normally be released into the atmosphere--into electricity. This process allows for a decrease in the amount of fossil fuels consumed by thermoelectric power plants, which in turn reduces carbon dioxide emissions.

The facilities are expected to produce large amounts of power as plastic industrial waste emits a large amount of heat when burned. Newly developed incinerators to be used in the facilities are expected to limit dioxin emissions from burning plastic, the officials said. Ministry officials also said the ministry would cover half the costs of businesses investing in the building of efficient incinerators--which produce more power than current incinerators--as part of its plan to support the facilities.

In fiscal 2000, 4.89 million tons of plastic was dumped, of which 25 percent was recycled into plastic products and three percent was burned in facilities capable of producing energy. Six percent of the plastic was burned for no practical purpose and 42 percent was buried. Ideally, discarded plastic should be

recycled, but there are some plastics that cannot be recycled. As there is a lack of landfill sites for plastics to be buried, more plastic waste must be burned, the officials said.

(40) GROUPS TO BE PAID FOR EMISSIONS CUT

Yomiuri Shimbun

August 10, 2002

Internet: <http://www.yomiuri.co.jp/newse/20020810wo33.htm>

The Environment Ministry will start paying shopping malls and nonprofit organizations to help reduce carbon dioxide emissions in next fiscal year as a measure to tackle global warming, ministry officials said Friday. The ministry-affiliated Japan Environmental Corporation will assess efforts of regional groups set up by shopkeepers associations, nonprofit organizations and public service groups, awarding one climate point for each kilogram of carbon dioxide emissions the groups manage to cut.

The corporation will pay 50 yen per climate point and buy up to 400,000 points, worth 20 million yen, from each group. The ministry will request about 200 million yen for the program in the budget for next fiscal year. The ministry plans to pay for efforts including:

- Setting air conditioners one degree higher in each shop in a shopping district.
- Using solar panels at department stores and supermarkets.
- Using low-emission buses for school excursions
- Introducing bicycle-sharing systems, under which people can rent bicycles at parking lots of stations, local government buildings and apartment complexes.

The nation recorded record high carbon dioxide emissions in fiscal 2000. Among private energy consumers, including individual households and company offices, emissions increased 21.3 percent from fiscal 1990. The ministry has been calling on the public to save energy, but decided economic incentives were needed to reduce carbon dioxide emissions within local communities.

(41) NUNAVUT PREMIER STANDS FIRM ON GLOBAL WARMING

ENS

August 9, 2002

Internet: <http://ens-news.com/ens/aug2002/2002-08-09-04.asp>

IQALUIT, Nunavut, August 9, 2002 (ENS) - Premier Paul Okalik used a simple story about his children to help derail Alberta's attempt to forge an anti-Kyoto Protocol consensus among Canadian premiers meeting in Halifax. At last week's provincial-territorial premier's conference, Okalik refused to side with Alberta premier Ralph Klein, who wants Ottawa to soften its position on reducing Canada's greenhouse gas emissions by 2012. As the world moves into the second half of what could be its warmest year on record, Okalik is fighting hard for Canada's ratification of the Kyoto Protocol. "We did not condemn Kyoto, as some premiers wanted to do, but we said no, we can't do that. There's some of us that are in agreement with it, and there's some that aren't, so there's no consensus on it," Okalik said.

"I made it clear that Nunavut is in favour of Kyoto and I was very pleased with the other premiers that were with Nunavut. Even with those premiers that weren't for Nunavut's position on Kyoto, we understood each other as to why we were for or against Kyoto." Manitoba Premier Gary Doer and Quebec Premier Bernard Landry lined up with Nunavut on the global warming issue.

At a nationally televised press conference last Friday, Okalik publically confronted Klein after the Alberta premier warned that the terms of the Kyoto agreement could reduce oil rich Alberta's equalization contributions to have-not regions of the country. Okalik responded by telling reporters about his attempt to cross a river near Pangnirtung with his children last summer. The river, normally at low levels at that time of year, was too dangerous to cross - because of water from melting glaciers.

Under the December, 1997 Kyoto agreement, 159 nations agreed to reduce the emission of greenhouse gases below 1990 levels by the year 2012. Scientists believe that greenhouse gases such as carbon dioxide, which is produced by the burning of fossil fuels like oil and coal, are responsible for trapping the sun's heat in the upper atmosphere and reflecting it back onto the Earth. Although individual nations have their own reduction targets, the overall goal of the Kyoto Protocol is to reduce the human production of greenhouse

gas by 5.2 per cent below 1990 levels by 2012. Canada's individual target is to reduce the nation's production of greenhouse gases by six per cent below 1990 levels by 2012. Alberta, however, has complained that this could throw thousands of Albertans out of work and take billions of dollars out his province's economy. Klein has also said that the U.S. refusal to ratify Kyoto would make it difficult for Alberta to compete with U.S. oil producers.

In 1999, oil rich Alberta accounted for 69 percent of all the energy produced in Canada. (Photo courtesy Alberta Economic Development) By the end of their conference, premiers agreed to disagree on the Kyoto issue, and put the matter off to a future federal-provincial-territorial meeting. In an interview this week, Okalik had some conciliatory words for Alberta, saying he recognizes Alberta's position. "Alberta's done a lot in reducing their emissions as well, I think they deserve a lot of credit for that. They've done a lot more than, actually, Nunavut. They, like all premiers, support it [the Kyoto Protocol] in principle. It's just that the targets will put economic constraints on their province, for Alberta in particular." Okalik says he will have a much easier time dealing with the global warming at next week's Inuit Circumpolar Conference (ICC) in Kuuujuaq, where the issue sits high up on the conference's agenda. A statement on climate change in the Arctic is likely to be included in the "Kuuujuaq Declaration," a document that would set out the ICC's future goals and principles.

"There will be a more common position there because we all live in the North and we won't have to do any educating there, it's just a matter of how we work together on this issue," Okalik said. On the health care funding issue, premiers also agreed to hold another meeting with Ottawa, some time after Roy Romanow issues his one-man commission's report on the future of Canada's health care system. Okalik said he used last week's conference to once again point out that the federal government is not meeting its fiduciary responsibility to pay health care costs for aboriginal people in the northern territories. "All the premiers know our issue and supported us in our position, and supported each other, in making sure that aboriginal health is improved and the current situation is unacceptable," Okalik said. The government of Nunavut is now seeking a 50-50 cost sharing agreement with Ottawa to pay for the construction of three badly needed health facilities in Nunavut, including a replacement for Iqaluit's aging hospital building. "We continue to wait for the federal government to live up to its obligations," Okalik said.

(42) METHANE-EATING LIFE FORM MAY HALT GLOBAL WARMING

The Guardian

August 9, 2002

Internet: <http://www.guardian.co.uk/globalwarming/story/0,7369,771725,00.html>

Scientists have discovered an organism believed to be the world's oldest life form, which lives on methane and could be harnessed to help combat global warming. The organism lives in the bottom of the Black Sea, an area previously believed to be without life. Researchers from the Max Planck Society in Germany were surprised to find corals, made by micro-organisms, processing methane and sulphates in what is the largest oxygen-free area on the planet. Traditional views of early life on Earth centre on plants which convert carbon dioxide to oxygen. They are believed to have begun life between three billion and three-and-a-half billion years ago. The newly discovered organisms are thought to have originated four billion years ago. The German scientists believe they could prove useful in ridding the earth of excess methane, the second most important greenhouse gas after carbon dioxide. Methane is produced in the digestive systems of cows and termites, in rubbish tips and in rice paddies, and is 30 times as potent a warming gas as carbon dioxide, although there is far less of it. Research into reducing the volume from such sources is part of the international campaign to curb global warming.

Much of the methane from rubbish tips is now collected and used to power turbines for electricity. Large quantities of methane are trapped below the Earth's surface, for example in permafrost, and there are fears that as the Earth warms large quantities will be released, worsening the already poor situation. The discovery of these coral-forming micro-organisms at depths where no oxygen and no light is present has given hope that these reservoirs of methane could be digested. Previously, scientists had thought that methane could only be broken down with oxygen. "It could be a way of hindering climate catastrophe," Professor Antje Boetius, the joint author of the study, said. "Perhaps micro-organisms like those found in the Black Sea were the original inhabitants of the earth during a long period of the Earth's history." The

two-year research was carried out by the scientists from Hamburg University, the Alfred Wegener Institute in northern Bremerhaven in addition to the Max Planck Society

(43) NEW HEAD OF U.N. CLIMATE BODY VOWS INDEPENDENCE

ENN

August 9, 2002

Internet: http://www.enn.com/news/wire-stories/2002/08/08092002/reu_48093.asp

GENEVA - The new chief of a U.N. panel probing the effects of greenhouse gases on the global climate said Thursday it would consult the oil and coal industries, but pledged that its advice would be independent. Rajendra Pachauri, chairman of the Intergovernmental Panel on Climate Change, also said that the panel's reports would put more emphasis on assessing regional impacts of carbon dioxide and other gases in the atmosphere. The Indian scientist was elected in April, ousting American Robert Watson at the helm of the 192-state body which advises governments. Watson advocated action against global warming and was a strong supporter of the Kyoto Protocol aimed at reducing industrial nations' emissions of greenhouse gases created by burning fossil fuels such as coal, oil and gas.

Environmentalists said the U.S. administration engineered Watson's defeat after announcing it would not back him for another six-year term to lead the 30 scientists. Washington has walked away from the Kyoto pact, calling it flawed and costly. Pachauri, a longtime member, was asked about the influence of the private sector on the panel, set up in 1988 and due to present its fourth assessment of climate change in 2007. "We listen to everyone but that doesn't mean that we accept what everyone tells us ... While we may listen to all elements of society, including the oil and coal industry and so on, we don't necessarily have to subscribe to any set of views that is put forward to us," he told a news briefing held in Geneva. "Ultimately this has to be an objective, fair and intellectually honest exercise," Pachauri said. "But we certainly don't prescribe any set of actions. That is for the decision-making community." Geoff Love, secretary of the panel, said, "The panel is seen, I think, as the authority on climate-change issues. What we have to do is produce assessment reports that remain credible and relevant." The Australian scientist added, "In the fourth assessment, we will be trying to encourage the critical community as well as the community that believes that greenhouse is a major problem."

(44) JET TRAILS 'CAN LEAD TO CHANGE IN CLIMATE'

Daily Telegraph

August 8, 2002

Internet:

[http://www.dailytelegraph.co.uk/news/main.jhtml:\\$sessionid\\$5B5ROLRY4WOF5QFIQMFSFFWAVCBQ0IV0?xml=/news/2002/08/08/wjet08.xml&sSheet=/news/2002/08/08/ixworld.html&requestid=51065](http://www.dailytelegraph.co.uk/news/main.jhtml:$sessionid$5B5ROLRY4WOF5QFIQMFSFFWAVCBQ0IV0?xml=/news/2002/08/08/wjet08.xml&sSheet=/news/2002/08/08/ixworld.html&requestid=51065)

The steady stream of aircraft across our skies is altering the weather, making days cooler and nights warmer, according to research. A study has shown that vapour trails left by passenger jets reflect sunlight away from the earth during the day, but trap heat at night. It has long been known that condensation trails, or contrails, left high in the atmosphere can turn into cirrus clouds under the right atmospheric conditions. But it has been impossible to measure their effect on weather because air traffic never stops, particularly over Europe and North America.

Scientists were given an unexpected chance to tease out the impact of contrails on September 11, 2001, when all commercial planes were grounded in America for three days. A team from Wisconsin University compared the average daily highest and lowest temperatures over North America for the flightless days with temperature records going back to 1977. They found that the range of temperatures was more than one degree wider if no planes were flying. The effect usually occurred on a regional scale, at the level of one or two states, said Dr Travis. But in extreme cases, contrail "outbreaks" could cover the entire east or west coasts of America. Contrails are most frequent near areas with the busiest flight paths. The change in temperatures last September was most noticeable in the midwest, north-east and Pacific north-west, he said. "I have seen many situations where contrails cover more than half the sky with artificial clouds and, in some rare cases, can produce a nearly complete overcast sky," he said.

Satellite images often revealed as many as 50 contrails occurring simultaneously across the same region, he said. Planes typically produce contrails at cruising altitudes of 30,000 to 40,000ft. "They are not more likely to occur near busy airport hubs, but instead more likely to occur between the hubs which allow sufficient time for the aircraft to get up to cruising altitudes," he said. "A single plane would have little effect. Our findings refer to situations where multiple planes are crossing through an atmosphere favourable of supporting persisting contrails across a time span of many hours. "It is difficult to say exactly how many planes are needed to have an effect, but probably at least 10 and all must be producing contrails." Dr Travis said similar effects were probably occurring above Britain and Western Europe during days of otherwise clear blue skies.

See Also:

RESEARCHERS REPORT JET CONTRAILS LEAVE THEIR MARK ON CLIMATE (Nando Times August 8, 2002)

<http://www.nandotimes.com/healthscience/story/492575p-3929437c.html>

JET CONTRAILS ALTER AVERAGE DAILY TEMPERATURE RANGE (Science Daily August 8, 2002)

<http://www.sciencedaily.com/releases/2002/08/020808075457.htm>

JETS' TRAILS MAY ALTER CLIMATE (Washington Post, August 12, 2002)

<http://www.washingtonpost.com/wp-dyn/articles/A6713-2002Aug11.html>

9/11 STUDY: AIR TRAFFIC AFFECTS CLIMATE (CNN August 8, 2002)

<http://europe.cnn.com/2002/TECH/science/08/07/contrails.climate/index.html>

(45) TREES LESS EFFECTIVE AT STORING CARBON DIOXIDE, STUDY INDICATES

Miami Herald

August 8, 2002

Internet: <http://www.miami.com/mld/miamiherald/news/3820218.htm>

LOS ANGELES - (AP) -- Scientists have overestimated the potential of trees and shrubs to soak up carbon dioxide from the atmosphere, according to a new study. The reassessment casts doubt on whether planting trees is always a positive step in the fight against global warming, as President Bush and others have suggested.

In the study, published in today's issue of the journal Nature, Duke University scientists say trees and shrubs growing in areas of abundant rainfall are less effective storehouses for carbon than native grasslands they have steadily replaced across much of the western United States. Vegetation stores carbon that otherwise might trap heat in the atmosphere, driving up temperatures and leading to climate change. Previous studies have ignored what was going on below ground, said Robert Jackson, lead author of the study and an associate professor of biology at Duke. In wet locations, replacing grass with shrubs and trees actually can lead to a decrease in the amount of carbon locked up in organic matter mixed in the soil, Jackson said. The amount can be enough to offset any gains achieved above ground. "The study suggests that we need to look very closely at what's below ground before we add up just what's stored above ground in tree trunks," Jackson said.

Scientists studied six pairs of adjacent western grasslands. In one of each pair, trees and shrubs had cropped up sometime in the past 100 years. In the drier sites, the invasive growth led to an increase in the amount of carbon locked up in the soil. In wetter areas, however, the opposite was the case, Jackson said. It is not clear what caused the change. "Grasses are deceptively productive," Jackson said. "You don't see where all the carbon goes so there is a misconception that woody species store more carbon. That's just not always the case." Previously, studies estimated that U.S. shrublands contain about 440 million tons of carbon. The number may be closer to 280 million tons, Jackson said. That result suggests shrublands, by absorbing carbon from the atmosphere, do less to balance emissions from the burning of fossil fuels than previously thought, Jackson said. The study helps dispel the notion that humans can plant their way out of global warming, said Daniel Becker, director of the Sierra Club global warming and energy program. "We are going to need to tackle the industrial sources of emissions head-on rather than just plant a bunch of trees," Becker said.

See Also:

REPLACING GRASS WITH TREES MAY RELEASE CARBON (ENS August 8, 2002) <http://ens-news.com/ens/aug2002/2002-08-08-07.asp>

(46) PHOTOS SHOW GLACIER'S DECLINE

BBC

August 8, 2002

Internet: <http://news.bbc.co.uk/2/hi/world/europe/2181463.stm>

The environmental group Greenpeace has released photographs which it says dramatically illustrate the changes being wrought by global warming. Greenpeace activists travelled to the coast of the Norwegian island of Svalbard, 600 kilometres (375 miles) north of the country's mainland, in the ship Rainbow Warrior. They have released a photograph they took there, along with one taken from almost exactly the same spot in 1918, to illustrate how much the Blomstrandbreen glacier has retreated. "The blame can be put squarely on human activity," Greenpeace says in a statement on its website. "Our addiction to fossil fuels releases millions of tonnes of greenhouse gases into the atmosphere, and this is what is causing temperatures to rise, and our future to melt before our eyes." The contrast between the two photos is stark. In the 1918 photo, the horizon is dominated by a massive white glacier, the island's mountains almost hidden. In the 2002 photo, the glacier is almost gone, leaving chunks of ice floating in the water and the mountains almost bare.

Rising waters

Greenpeace's photos echo the results of a recent study of Alaskan glaciers by US scientists that concluded the ice was melting even faster than previously thought. The resulting melt waters, researchers said, could drive up global sea levels by 0.14 millimetres a year. But Keith Echelmeyer, of the University of Alaska Fairbanks Geophysical Institute, who conducted that study, said it wasn't clear whether man-made global warming was the culprit. Other factors, such as a reduction in snowfall, could also be to blame for the shrinking glaciers, he said last month.

See Also:

GLACIERS FEEL HEAT OF CLIMATE CHANGE, NZ Herald, August 10, 2002

<http://www.nzherald.co.nz/.latestnewsstory.cfm?storyID=2348835&thesection=news&thesubsection=general>

(47) FORD'S CEO SAYS ISSUE OF ENVIRONMENT HAS HURT DETROIT

Sfgate

August 8, 2002

Internet: <http://www.sfgate.com/cgi-bin/article.cgi?file=/chronicle/archive/2002/08/08/BU38981.DTL&type=business>

Traverse City, Mich. -- William Clay Ford Jr. said on Wednesday that a credibility gap on environmental issues has eroded America's love for cars. Ford, the chairman and chief executive of the Ford Motor Co., also said he wanted to "lower the temperature" of the industry's often contentious relationship with California regulators. "During the nearly 25 years I've worked in the industry, the love affair that people have had with automobiles has in some ways grown stale, and some would say it's even dying," Ford said. "If you remember, in California, people used to write songs about T-Birds and Corvettes. Today, they write regulations. "

Two weeks ago, Gov. Gray Davis signed a landmark bill that would reduce greenhouse gas emissions by the 2008 model year, the first such action at the state or federal level. The auto industry is greatly concerned with the potential costs of the measure and said it would probably challenge it in court. State regulators are also intent on forcing carmakers to produce electric vehicles, but that plan, due to start this year, has been delayed by a court challenge from General Motors and DaimlerChrysler. Ford's speech, at an industry conference, was his most forceful address on environmental issues since becoming chief executive of the struggling company in October. Before taking the helm, he was one of the few industry executives to talk about issues like global warming. But environmental groups have bitterly criticized Ford

recently because of his company's lobbying campaigns against increasing federal gas mileage standards and California's initiatives.

The Sierra Club in June began an ad campaign to pressure carmakers to improve fuel economy and said it singled out Ford because he portrays himself as an environmentalist. On Wednesday, Dan Becker, director of the Sierra Club's global warming and energy program, applauded Ford's comments. "It's a welcome change that he's calling for dialogue and progress rather than what the rest of industry is pushing, which is: 'We'll see you in court and overturn this law,'" Becker told Bloomberg News. Ford, while saying he did not support California's plan to force companies to produce zero-emission vehicles like electric cars, said his industry did face a problem on environmentalism akin to what others face in accounting and corporate governance.

"The same basic issue, lack of trust, is there," he said, but added that he believed the industry was making a good-faith effort to solve the problem by pushing hard on two technologies: vehicles with hybrid engines, which combine gasoline and electricity, and fuel cells, a clean but complex technology that draws power from hydrogen. Toyota and Honda are already selling hybrid cars, and Ford has said it will sell a hybrid SUV by the end of next year.

Dieter Zetsche, chief executive of the Chrysler Group, a unit of DaimlerChrysler, said his company would make bolstering its car business a priority. Chrysler derives 70 percent of its sales from light trucks -- SUVs, minivans and pickups. That proportion is far higher than the industry at large; last year was the first in which light-truck sales exceeded those of passenger cars, a trend that has been driving down the gas mileage of the average new vehicle. "We will refocus our attention on passenger cars," Zetsche said. "Two-thirds of the 21 new and refreshed vehicles we will soon introduce will be car-based."

But that does not mean they will be passenger cars, a Chrysler spokesman said. The term "car-based" is a confusing one in Detroit. Small SUVs are considered car-based in their design because their underbodies have more in common with a car. But many car-based vehicles, including Chrysler's PT Cruiser and the Audi Allroad, can still be configured to be regulated as light trucks and permitted to consume 33 percent more gasoline. Several executives also extolled diesel technology, which is prevalent in Europe but has faced regulatory hurdles in the United States. No manufacturer could meet the new rules now, Zetsche said. "Either we find a way to meet those extremely demanding targets or we should have meaningful discussions with legislators to see if this really makes sense."

(48) INDIA RATIFIES KYOTO PROTOCOL

Xinhua News Agency

August 08, 2002

Internet: <http://library.northernlight.com/FC20020808160000048.html?cb=0&dx=1006&sc=0#doc>

NEW DELHI, Aug 8, 2002 (Xinhua via COMTEX) -- With the Earth Summit coming in a fortnight, India has sent the right signal by ratifying Kyoto Protocol, the roadmap to containing emissions of green house gases (GHG). Environmentalists in the country have welcomed the decision which was taken late on Tuesday night at an Indian Cabinet meeting. "India has sent a good signal by taking the lead in the region and showing that multilateral approach is better than unilateral," said Center for Science and Environment director Sunita Narain. The Kyoto Protocol requires the developed countries to reduce their emissions to an average of 5.2 percent below the 1990 levels by 2012. Countries which are a party to the United Nations Framework Convention on Climate Change (UNFCCC) adopted the protocol in 1997. But the United States has failed to acknowledge the treaty because it fears it could clash with their economic growth.

Subodh Sharma, an adviser to the Ministry of Environment and Forests, said that India didn't have to commit anything right now, adding that the ratification means India has confirmed its willingness to be bound by it in future. As a developing country, India is not required to reduce the emissions of GHG under the Kyoto Protocol. Rather, it is expected to benefit from transfer of technology and additional foreign investments into sectors like renewable energy, energy generation and afforestation project when the Kyoto Protocol comes into force. Accession to the Kyoto Protocol will also enable the country to take up clean technology projects with external assistance in accordance with national sustainable development priorities.

India's decision is significant because it will host the 8th Conference of Parties to the UNFCCC in New Delhi later this year. The US stand has put a question mark on the protocol's relevance because it can come into force only after at least 55 parties to the convention -- signifying 55 percent emission -- ratify it. So far, only 77 countries accounting for 36 percent emission have ratified the document. "Although it (the protocol) may not go through with the stand the United States has taken, India has aptly demonstrated commitment to global environmental issue," said Leena Srivastava, leader of an ecological group.

(49) GERMANS DISCOVER ANCIENT LIFE, OFFER CLIMATE HOPE

Reuters

August 08, 2002

Internet:

http://reuters.com/news_article.jhtml;jsessionid=R5SUMSBSOXPBCCRBAEKSFFA?type=sciencenews&StoryID=1308706

By Philip Blenkinsop BERLIN (Reuters) - German scientists have discovered micro-organisms deep under the sea that may provide an insight into some of the earth's first life-forms and offer hope in the fight against global warming, the Max Planck Society said on Thursday. The marine biologists and geologists believe they have shown life could have existed by processing methane without the presence of oxygen. Their findings could also prove useful in ridding the earth of excess methane, one of the greenhouse gases many scientists believe is responsible for global warming.

Traditional views of early life on earth center on plants which converted carbon dioxide to oxygen. "These (plant life-forms) date back to between three and 3.5 billion years ago... We have found biomass (large cluster of organisms) using methane that geologists show could have existed around four billion years ago," Professor Antje Boetius, joint author of the study, told Reuters. The two-year research by the scientists from Hamburg University, the Alfred Wegener Institute in northern Bremerhaven and the Max Planck Society centered on coral-forming micro-organisms in the Black Sea at depths where no oxygen and no light is present.

The Black Sea contains the largest oxygen-free basin in the world. The life-forms were able to process methane together with sulphates within the water, producing carbonates, in the form of coral, as waste. That they were able to do so without oxygen suggests they may have been around before plant life. "Perhaps micro-organisms like those found in the Black Sea were the original inhabitants of the earth during a long period of the earth's history," said Boetius. She believes the findings could prove useful for climate control. Previously, scientists had thought that methane, found in abundance in the sea and produced through agriculture, could only be broken down with oxygen. The German researchers believe the discovery of a pool of organisms that process methane without oxygen could lead to a way of cutting down potentially harmful greenhouse gases without burning oxygen and producing similarly damaging carbon dioxide. "It could be a way of hindering climate catastrophe," Boetius said

(50) GLOBAL WARMING IS CHANGING TROPICAL FORESTS

ENS

August 7, 2002

Internet: <http://ens-news.com/ens/aug2002/2002-08-07-01.asp>

PANAMA CITY, Panama, August 7, 2002 (ENS) - Human activities are changing the global climate, and these changes are having far reaching effects on tropical forests, according to scientists from around the world gathered here last week for the Association for Tropical Biology annual meeting. The scientists were hosted in Panama City by the Smithsonian Tropical Research Institute. They explored the Smithsonian's tropical biology research station at Barro Colorado, located on the hilltop that became an island when central Panama was flooded during the construction of the Panama Canal in 1911. The Association for Tropical Biology says that tropical forests are undergoing unprecedented changes as 1.2 percent of the remaining forest is removed each year, as atmospheric carbon dioxide which fuels plant growth increases by 0.4 percent each year, and as global climate change begins in earnest. Yadvinder Mahli from the University of Edinburgh's Institute of Ecology and Resource Management provided an overview of ongoing climate changes as a result of increasing carbon dioxide and other greenhouse gases in the

atmosphere. Since the mid-1970s all tropical forest regions have warmed, Mahli said, although with regional variation in intensity. There has been even more regional variation in precipitation, but there appears to have been an overall global decline. No global trend in dry season intensity has been detected.

Higher global temperatures and increases in atmospheric carbon dioxide, the major greenhouse gas, will increase the amount of carbon stored by tropical forests by stimulating tree growth, data analysis and models have suggested. University of Missouri scientist Deborah Clark, who works at the La Selva Biological Station in Costa Rica, re-evaluated the evidence and told the symposium that tropical forests may not be carbon sinks that can be used to absorb carbon dioxide generated by the burning of fossil fuels. Instead, tropical forest may end up contributing even more carbon dioxide (CO₂) to the atmosphere as temperature rises, she said. Data from La Selva show a strong negative correlation between tree growth and higher temperatures. Temperatures experienced by canopy leaves may be close to the point at which respiration exceeds photosynthesis so that net production of carbon dioxide results, Clark suggests. Positive feedback between higher temperatures and CO₂ production by tropical forests could be catastrophic by resulting in accelerated increase in global CO₂ levels, she said.

Dr. Oliver Philips of the University of Leeds School of Geography presented analyses, conducted with Malhi and others, of data from permanent plots in mature forests throughout the tropics. Tree turnover, the difference between mortality and the recruitment of new individuals into the population through growth, has doubled throughout the tropics in recent decades, he said, from one percent annually in the 1950s to two percent in the 1990s. The total area of the plot occupied by tree stems has increased in Amazonia, but not in the rest of the tropics, and large lianas have increased in western Amazonia. Such widespread changes over such large areas suggest that a common mechanism is at work, said Dr. Philips.

(51) PANIC AND POLITICS FUEL KYOTO

Calgary Herald

August 7, 2002

Internet: <http://www.nationalpost.com/commentary/story.html?id={94BD24B5-DA35-4615-94A4-99DF0161F1D6}>

Last week Lloyd Axworthy, Canada's former minister of Foreign Affairs, shared his views on the Kyoto Protocol and "global warming." His tone was desperate, his anxieties palpable. His opinions were offered because the Prime Minister is planning to attend a crucial United Nations meeting later this month in Johannesburg to discuss sustainable development. According to Axworthy, Jean Chrétien's decision at this so-called Earth Summit "will be the defining moment for this country for many years to come." Canada, he said, must fulfill its commitments and take part in "one of the most significant international undertakings of this new century," the Kyoto Protocol. Signing Kyoto will be both "momentous" and "historic." But it can be done, he said, only if the opponents are overridden, resisted, discounted and ignored. After squishing the opposition, Axworthy assured his readers, Canada can "plot a course distinct from our southern neighbour and fire up the political system for a major mobilization." But time is short because "we are living in a carbon-induced climate maelstrom."

A few days later the premiers met in Halifax, chiefly to discuss health care, but also to consider the implications of Kyoto. The government of Alberta was the prime opposition that Axworthy singled out to be overridden. And in fact there is absolutely no question that Alberta will be overridden so long as the debate remains political, as it has been for the past five years. The terms of the Kyoto agreement are well known, and hardly need to be rehearsed. They require a significant reduction in the production of "greenhouse gases," chiefly carbon dioxide and water vapour -- also called clouds. These gases are produced mainly from burning fossil fuels, and are devoutly believed by members of the pro-Kyoto faction to be a cause of global warming. The consequences of Kyoto for Alberta, which produces most of the fossil fuel in the country, are also well known. A few weeks ago Alberta Premier Ralph Klein compared Kyoto to the detested National Energy Program of the Trudeau era. The analogy is a good one. The NEP did enormous damage to Alberta and did nothing to actualize the purposes that it was supposed to serve. In the context of Kyoto, however, the importance of the NEP analogy is that it was imposed by the federal government over the objections of Alberta. This is basic: The federal government decisively won the NEP war.

That too is the danger of Kyoto, and it is why Alberta will lose the fight if the debate remains political. The interests ranged against the province are great. For example, Manitoba annually exports some \$300-million of hydro-generated electricity to the United States, and last year Axworthy was the chairman of a Manitoba task force on climate change. Manitoba supports Kyoto. Quebec has staked an enormous amount of its future prosperity on the increased development of its hydro power in the north. To the surprise of no one, the government of Quebec supports Kyoto. If the federal government thinks it can obtain support in Quebec by agreeing with Premier Bernard Landry, that is one more reason to support Kyoto. At the moment, however, the federal government is dithering. In the course of a few days David Anderson, the federal Environment Minister, announced that global warming was responsible for flash floods, drought and forest fires in Alberta, and that Kyoto was the way to deal with these events. The foolishness of this remark was pointed out to him by his Alberta counterpart, Lorne Taylor, and Anderson beat a hasty retreat into the rhetoric of "clarification."

In order not to lose the way Alberta lost on the NEP, Taylor and Klein will have to fight Kyoto on the grounds that it is based on panic, not science. There is plenty of solid science around to counter the unsubstantiated and apocalyptic claims of the pro-Kyoto fanatics. Start with the thousands of scientists opposed to Kyoto. For those who, like Minister Anderson, claim the "science of global warming" is settled, it is important to insist that, while there may be a science of climate change, there is no science of global warming. On that topic, nothing is settled. This is a time for some serious, unvarnished truth-telling by the Alberta government. If Kyoto is implemented there will be real global economic and environmental damage because energy-intensive industries will relocate to Kyoto-exempt countries where typically there are no controls over the most basic kinds of air and water pollution. If Axworthy's thinly disguised anti-Alberta and anti-American rhetoric carries the day, all Canadians will be losers.

See Also:

UN Report Blames Human Activity for Many Deaths in Natural Disasters (Voice of America August 9, 2002) <http://www.voanews.com/article.cfm?objectID=8280F2A2-77F2-442D-8CE9E2E3538F9AAD&title=UN%20Report%20Blames%20Human%20Activity%20for%20Many%20Deaths%20in%20Natural%20Disasters&catOID=45C9C786-88AD-11D4-A57200A0CC5EE46C>

(52) GAME BIRD FACES SECOND EXTINCTION

The Guardian

August 7, 2002

Internet: <http://www.guardian.co.uk/globalwarming/story/0,7369,770203,00.html>

A rare and eccentric game bird could become extinct for a second time in Britain because of global warming, an RSPB report warned today. Numbers of the capercaillie, a protected species which is as big as a chicken, have sunk to less than 1,000 from 20,000 15 years ago. Warm and wet summers in Scots pine forests mean capercaillie chicks running across the forest floor die from the damp on cold nights. The bird, which survives in Scandinavia and across Siberia, is good to eat and was hunted to extinction but reintroduced in the 18th century for shooting. It thrived. Despite being heavily protected and efforts being made to recreate the best pine wood habitats, the capercaillie has continued to decline. Since it survives in Siberia, it is the damp rather than cold that is causing the problem. The bird known as the cock of the woods is prized by fly fishermen for catching trout and salmon. Stealing feathers, however, can be hazardous since the bird attack humans. RSPB spokesman Andrew South said: "They have a reputation for being a bit mad. There was a famous bird in Abernethy that used to attack Land Rovers." The RSPB's report, The State of the UK's Birds 2001, reveals that milder winters in Europe could mean other birds that now migrate to Britain to find more favourable climates stay away.

(53) GREENHOUSE WARMING: STUDY: THAILAND GETTING HOTTER

The Nation

August 6, 2002

Internet: <http://www.nationmultimedia.com/page.arcview.php3?clid=2&id=63676&usrsess=1>

Preliminary findings of a study by the Office of Planning and the Environment and the Thai Institute for Environment indicate that temperatures rose between 1997 and 2002. This may eventually cause rising water levels and flooding in Songkhla, Surat Thani and Bangkok and possibly reduce the level of Thailand's principal river, the Chao Phya, by a third or more. The office recommended that Thailand sign the Kyoto Protocol on climate change, which will be submitted to the National Environment Commission this month. Sirinthorathep Taoprayoon, an instructor at King Mongkut Institute of Technology, said the study found that the amount of carbon dioxide had doubled between 1997 and 2002, causing the rise in temperatures. The result was a serious drought in northeastern Thailand and greater humidity in the South and Bangkok.

Citing a study released in 1997, Sirinthorathep said the overall rice production in Asia had decreased and new breeds of rice may be needed to withstand higher temperatures. Increased evaporation from major reservoirs like Srinakharin Dam may cause a shortage of water in five to 10 years, Sirinthorathep said, while stressing that the findings needed further study. World Wild Fund energy manager Wanan Permpiboon said changes in the world's climate patterns were due chiefly to the greenhouse effect. There are 77 signatories to the Kyoto Protocol so far. The European Union and Japan signed in June. Russia and Poland have said they would sign by the end of this year. The United States, the world's biggest producer of greenhouse gases, has signed the agreement but refused to ratify it.

Wanee Sampantharak, deputy secretary-general of the Office of Planning and the Environment, said signing the protocol would demonstrate Thailand's willingness to cooperate in the problems of world climate change, and provide benefits such as negotiating power and participation in drafting provisions of the protocol, know-how to reduce carbon dioxide emissions and other related technology, and channels for foreign investment in clean development.

(54) MOVE OVER POWER PLANTS: STUDY BLAMES CARS FOR MASSIVE CO2 EMISSIONS

Octane Week, Vol. 17, No. 30

August 05, 2002

Internet: <http://library.northernlight.com/FD20020805420000127.html?cb=0&dx=1006&sc=0#doc>

Aug 05, 2002 (Octane Week/PBI Media via COMTEX) -- Cars and light trucks produce one-fifth of all U.S. carbon dioxide (CO2) emissions, and those emissions are on the rise after decades of decline, according to a study by the group Environmental Defense (ED). Less efficient vehicles, such as light trucks, sport-utility vehicles (SUVs) and minivans are to blame, the group said. It's time for automakers and policymakers to acknowledge the carbon emissions and identify ways to reduce them, such as raising fuel efficiency, the environmentalists charged.

The U.S.'s 210 million motor vehicles were responsible for emitting 302 million metric tons of CO2 in 2001, according to the report Automakers' Corporate Carbon Burdens: Reframing Public Policy on Automobiles, Oil and Climate. "Carbon burden" is how much CO2, the main greenhouse gas, is put into the atmosphere each year after a car company sells a new group of vehicles. Put in terms of oil use, every million barrels per day of oil that cars consume translates into 36.8 million metric tons of annual carbon emissions, said the report. Since U.S. cars and light trucks together consume 8.2 million b/d of oil, that translates into the 302 million metric tons of carbon that comes from U.S. cars and trucks every year.

"Each year automakers roll out fleets of cars and trucks that add increasing amounts of carbon dioxide to the atmosphere," said John DeCicco, senior fellow at ED and the study's chief author. "Over the past decade, they have put their design and marketing talents into anything but addressing their products' harm to the planet and liability for oil dependence." Chrysler's Jeep Grand Cherokee, weighing just under two tons, emits over three times its body weight in CO2 per year, according to ED. "Now imagine all the millions of cars on the road today, and you start to get the picture. Clearly, controlling CO2 emissions from cars and light trucks by improving their fuel efficiency would be one of the most important steps we can take to curb global warming, as well as reducing our country's dependence on oil imports." The report comes just weeks after California enacted legislation regulating greenhouse gases passenger vehicles sold in the state. Automakers claim California's newly passed law is an effort to increase vehicle fuel economy, and they have vowed to sue to overturn the law.

ED counters that technology exists to cut vehicle CO2 emissions, but car companies are not factoring the carbon part of their responsibility for global warming into their product strategies. "Since they are not doing it of their own volition, there's a real need to go forth with public polices, like the California greenhouse gas car bill, to compel them to do what in fact they have the ability to do," DeCicco urges. "Once a vehicle is designed, that model is going to be produced more or less the same way, except for cosmetic changes, for anywhere from four to six years," he said, adding that the vehicle is going to stay on the road for another 12 to 15 years. "When that new car is rolled off the assembly line, that car's fuel economy is essentially set for its life; that represents a carbon burden for an individual vehicle that's going to be emitted into the atmosphere for the next 12 to 15 years."

DeCicco calculates that GM is the top auto industry global warmer because its marketshare is the largest. GM's success carries with it "a proportionate responsibility to address the carbon pollution from its vehicles," DeCicco claims. "The responsibility for addressing the problem is directly related to the extent of a company's role in causing the problem, and in this case GM bears the greatest responsibility."

GM is by no means alone. Toyota has received praise for its Prius, the world's first hybrid car. But sales of Prius are still quite small, and from 1990 to 2000, Toyota moved more heavily into SUVs and light trucks, the environmentalists note. As a result, Toyota's carbon burden grew by 72%, by far the largest growth in carbon burden of any company, they said. For Toyota to undo its growth in CO2 emissions over the past decade, it would have to sell more than 10 times more hybrids. "The real take-home message is that to reduce automotive carbon burdens, fuel economy has to be improved across the board," said DeCicco. "If all companies were required to have their SUVs and light trucks meet the same standards as passenger cars that would be a significant step forward - but that too wouldn't be enough to control the problem. The real bottom line we want both car makers and policy makers to look at is tons of carbon emissions and how to reduce them."

COMMENT AND ANALYSIS

(55) LESS HOT AIR NEEDED TO CUT GREENHOUSE EMISSIONS

The Guardian

August 19, 2002

Internet: <http://www.guardian.co.uk/worldsummit2002/story/0,12264,777268,00.html>

Tom Delay is chief executive of the Carbon Trust, a not-for-profit company that invests in low carbon technology

The Johannesburg World Summit provides another important opportunity for the international community to face up to the fact that 10 years on from Rio and five after Kyoto climate change remains a very real and global issue that we are only beginning to tackle. Scientific opinion generally accepts that rising levels of greenhouse gas concentrations in the atmosphere will cause significant changes to global climate patterns. This, in turn, could result in catastrophic floods and storms as well as major population and economic dislocations. If the global community agrees that actions to address climate change represent viable economic and social opportunities, acting now not only acknowledges the weight of scientific opinion, it also represents a rational approach. The challenge is to be rational towards something that is still so remote from our everyday lives, however convincing the evidence and however great the impact it may have in the long term. Johannesburg offers a chance to reflect on the notion that a realistic global approach to tackling climate change must not only focus on reducing greenhouse gas emissions but also on supporting economic development and growth. In addition, any approach must recognise that the means of achieving these two aims will differ significantly from country to country: there is no panacea.

Having said this, a tonne of carbon dioxide in the atmosphere is a tonne of carbon dioxide wherever it happens to be in the world. It is, therefore, less important to focus on where reductions are made than on how effective reductions in emissions can be made at the lowest cost. While we must be concerned, we should also be reassured to know that there is a relatively straightforward answer to this problem. To reduce carbon dioxide emissions there must be a shift towards what is often referred to as a "low carbon economy". Three measures can help: an economy with lower energy consumption per unit of GDP; better use of energy through greater energy efficiency and more use of low-carbon energy sources such as

efficient gas or renewables. Each of the three measures can be seen as levers for change. Different countries can pull each lever to a greater or lesser extent depending on their existing levels of energy use and the relationship of usage to per capita economic contribution. In terms of reaching global targets, achieving significant improvements in energy efficiency across the whole of North America could be equivalent to China committing to using non-coal energy sources in the future. The balance will depend on cost, concerns about security of supply and public acceptance. The ongoing debate about nuclear power in the UK shows how varied opinions can be on what is the best way forward in just one country. There are some big decisions to be made. Climate change is accepted as a real and global issue, but when is the right time to start dealing with the problem?

Measures are being taken across the globe but their pace and impact are constrained by doubts about technical feasibility and the fear of increased cost. The Carbon Trust has assessed the relative impact of new technologies and the outcome is clear. It is technologically feasible to reduce UK carbon dioxide emissions by 60% or more by 2050, making the transition to a low carbon economy in the timeframe indicated by the Royal Commission on Environmental Pollution's report to the government. Similar reductions should also be possible in many other developed countries, although the actual levels will vary depending on local circumstances.

This may all be achieved at little or no cost in the long term, particularly if you consider the economy as a whole and accept that there will always be winners and losers in a transition of this scale. Economic research suggests an impact ranging from a 3% increase to a 4% loss in GDP. In the former case, we would be better off economically, in the latter we would lose one or two years of economic growth over a century. Few would argue that the transition to a low carbon economy is going to be cheap. However, this needs to be balanced against huge longer-term financial benefits that a low carbon economy will bring - but which are often not obvious at the present time.

The climate change debate is, in some ways, analogous to an elastic band. Pulling at one end you have existing suppliers who see the issue as a threat to their businesses, fearful of the stranded assets they could be left with. Pulling at the other end are the pressure groups and lobbying organisations who want change to happen immediately and for nations to move to a "selfless" position as soon as possible. Governments are in the middle, needing to carry the support of the public and business so that both ends of the elastic band are prevented from stretching too far and ultimately snapping. At the same time, as awareness of climate change increases, it may be possible for the band to be stretched in a new direction that takes everyone else with it. For example, instead of more big and costly energy sources, the low carbon economy of the future could be built around more efficient use of energy combined with smaller scale, decentralised generation.

At the moment, mitigating climate change raises issues about which there is still low awareness. It is important that people know that it is a problem that can be solved.

Bodies like the Carbon Trust, designed to help foster the transition in the UK, can offer highly practical approaches that help industry to address the challenges in the UK. Solving climate change, however, does require global action. It should not be forgotten that the Kyoto Protocol as a piece of global legislation represents a huge international consensus on the issue.

The challenge for Johannesburg is to set the specific commitments on climate change in the context of the overriding need of poorer countries for development.

With countries such as the UK helping to lead the way we can show that the low carbon economy is not a threat to development, but an opportunity for better development. For example, developing a decentralised and actively managed electricity network in the UK will require major changes from current practice. Developing countries do not face some of these obstacles, and given the right support, could move faster. Much as developing countries are "leapfrogging" developed countries in moving directly to mobile telephone use without the need to sink costs in remote landlines, they could develop more active, decentralised and efficient electricity systems based heavily upon more efficient practices and domestic renewable energy resources. We need to become more rational and extend the reach of our vision. Governments, businesses and consumers must consider the future of this and subsequent generations. They should accept what the scientists are telling us about the impact of our actions. The problem is there and we need to do something about it. Johannesburg cannot and should not dictate the choices of any countries, let

alone the poorest. But with developed countries paving the way, it could help the rest of the world to seize the opportunities for sustainable energy development - ultimately to everyone's benefit.

(56) 'AMERICA DID IT' by Paul Martin

THE WASHINGTON TIMES

August 15, 2002

Internet: <http://washingtontimes.com/world/20020815-80822361.htm>

LONDON - Leftist politicians and environmentalists sought yesterday to link Europe's worst floods in decades to U.S. reluctance to endorse the Continent's approach to fighting global warming. The target of their efforts was the Bush administration's decision not to support the Kyoto protocol. The torrential rains, which have killed dozens of people across Europe and threatened treasured landmarks from Prague to Dresden, hit about two weeks before a U.N. environmental conference in Johannesburg. Conferees there are expected also to discuss heavy downpours in Nepal, Iran and the Philippines, as well as the destruction of harvests from droughts in southern Africa, Vietnam, Australia and the United States. Meanwhile, in Germany, where the Social Democratic Party of Chancellor Gerhard Schroeder is trailing in polls before elections scheduled for Sept. 22, leftist politicians were eyeing the floods as a campaign issue, blaming German conservatives for their lack of wholehearted support toward global-warming efforts.

Conservatives - led by Christian Democratic party leader Edward Stoiber - accused the left of trying to make political capital out of human misery. Members of the Greens party, Mr. Schroeder's coalition partner, which has been losing public support, said the floods highlighted the importance of environmental protection and reinforced the case for energy taxes, which conservatives reject. "If we don't want [volatile weather] to get worse, then we must continue with the consistent reduction of environmentally harmful greenhouse gases," Environment Minister Juergen Trittin said on German radio. Mr. Schroeder was highly visible as he toured devastated areas and contrasted his government's track record on the environment to that of states run by his conservative opponents. However, he did not directly attribute blame as he announced plans to raise funds for disaster relief, mainly in the formerly communist east of the country, where eight persons have been reported dead in the state of Saxony, which includes the city of Dresden.

Army helicopters flew more than 400 Dresden hospital patients to safety yesterday as authorities sought to empty the city, which was waist-deep in places, ahead of a flood crest expected last night, Reuters news agency reported. Cities further down the Elbe River, including Dessau and Magdeburg, also braced for the floods. About 180 miles upstream, hastily erected defenses succeeded in protecting medieval buildings and frescoes in Prague as the waters of the Vltava River reached their crest and began to ebb slightly, said relieved authorities.

Environmentalists across Europe linked the flooding to global warming. Benedict Southworth, speaking for Greenpeace UK, the British chapter of the global environmental organization, said that temperature records were being broken across Europe and that the frequency of extreme events would increase. "Now we're getting the first sense of urgency of what it will be like when climate change really starts to bite," he said. Gallus Cadonau, the managing director of the Swiss Greina Foundation for the preservation of Alpine rivers and streams, urged that a punitive tariff on imports from the United States be imposed to force cooperation on greenhouse gas emissions. "This definitely has to do with global warming. We must change something now," he said. "Those nations that really are careless with the environment should have to compensate." U.N. Environment Program chief Klaus Toepfer also got into the act, saying this instance of extreme weather should convince rich nations of the need to act quickly to reduce emissions of carbon dioxide and other gases that are believed to contribute to global warming. "We must massively fight that, and it is above all an obligation of industrialized countries," Mr. Toepfer told a Berlin radio station.

The United States produces a quarter of the world's carbon dioxide emissions. It has been the target of European environmentalists after President Bush last year pulled out of the Kyoto agreement on reducing greenhouse gases, saying it would cripple the U.S. economy and give unfair exemptions to developing countries. But other Europeans are less certain that global warming is to blame for the floods. Mr. Trittin said global warming was by no means the only cause. He also attributed blame to construction along riverbanks and flood plains. "In many cases, we don't need more dikes but fewer dikes. Rivers should not

be forced to act like canals but [be] given the space to spread onto the plains," he said. In Romania, where 10 persons have died because of bad weather in recent weeks, Ion Simion, adviser to the Environment Ministry, said cutting down forests in his country and elsewhere in Europe contributed significantly.

(57) CLEANING UP ENERGY by Jennifer Morgan

WWF

August 14, 2002

Internet: <http://panda.org/news/features/story.cfm?id=3081>

Jennifer Morgan is Director of WWF International's Climate Change Programme

From air pollution to climate change and global warming, the burning of coal, oil, and gas for energy is threatening people and the environment. The World Summit on Sustainable Development provides an opportunity to take action on the future of our energy - to ensure that it is clean, affordable, and sustainable.

Energy is central to all human economic activity and, for the 2 billion people who lack access to a modern energy supply, is essential for poverty alleviation and development. However, supplying clean, affordable, and sustainable energy to the world is a major challenge. Nearly 80 per cent of the energy used today comes from fossil fuels: coal, oil, and gas. As well as being unsustainable in the long term, fossil fuels are highly polluting. Their extraction and transport leads to numerous environmental problems — witness the many oil spills that have wreaked havoc on fragile marine areas. When burned for energy, fossil fuels release a variety of pollutants, such as sulphur and nitrogen oxides, carbon monoxide, soot, and smoke. These pollutants are responsible for acid rain and smog, and contribute to a number of respiratory problems, including bronchitis, pneumonia, and asthma. Burning of fossil fuels also releases carbon dioxide (CO₂), the main cause of climate change. CO₂ in the atmosphere traps the sun's heat in the so-called greenhouse effect. With increased burning of fossil fuels for energy over the last century, worldwide CO₂ emissions are now some 12 times higher than they were 100 years ago. This has led to higher levels of greenhouse gases being present in the atmosphere than at any time in the past 420,000 years. The resulting increase in global temperature — 0.6°C over the past century and still rising — is seriously disrupting the world's climate.

The effects are already apparent. Sea levels have risen, threatening people in low-lying areas. The frequency of extreme weather events — for example, droughts, hurricanes, heat waves, and floods — has increased four-fold over the last 40 years. Insurance companies are warning that premiums for floods and other weather-based disasters are set to rise due to climate change and global warming. They are also warning that more subtle effects, such as crop failures due to increased temperatures, will also lead to higher insurance premiums.

Not just people are affected. According to the Intergovernmental Panel on Climate Change (IPCC), even a small increase in mean global temperature could threaten a range of plants and animals with local or global extinction. There has already been an overall reduction in the extent and thickness of sea ice in polar regions, threatening a variety of ecosystems and species, including polar bears. Rising ocean temperatures are causing increased coral bleaching, which has serious consequences for all ocean life. And the situation does not look set to improve. The world's consumption of energy increased by 10 per cent between 1992 and 1999, and two billion people — one-third of the world's population — still lack access to modern energy services. If the ever-increasing demand for energy is met using traditional fossil fuels, the impact on the planet and its people will be devastating. There are alternatives to fossil fuels that are unlimited and produce little or no pollution: renewable energy sources such as solar, wind, energy crops, and geothermal power. But at present, these sources constitute only two percent of the world's primary energy supply. Projections show that fossil fuel will continue to dominate the world's energy sources for some time to come.

This doesn't have to be the case. The World Summit on Sustainable Development (WSSD) provides the perfect opportunity for the world to take serious action about the future of our energy — to ensure that it is clean, affordable, and sustainable. While the WSSD Draft Plan of Implementation, which will be finalized at the summit, includes a draft action plan on energy, it lacks the key elements — targets, time lines, and action plans — necessary to make any progress in cleaning up our energy problems. As it stands, the draft plan simply means more promises without any guarantees of action. The text on the Kyoto Climate Treaty

— the world's only agreement for limiting global warming pollution — is also being obstructed because of the Bush Administration's strong opposition to the treaty, despite the fact that the US is the world's largest carbon polluter. World leaders must go further than rhetoric. Aggressive action programmes with clear targets and timetables are needed to ensure that the world's poor receive access to energy and that renewable sources make up a larger portion of the world's energy mix.

If the WSSD is truly to address sustainable development and people's basic needs, it must launch an aggressive action programme for the two billion people without access to energy. It needs to ensure that these people will have access to clean, sustainable energy sources and that they will not suffer the same negative impacts of "dirty" energy development that have occurred elsewhere. It also needs to include capacity building for indigenous development of renewable resources so that developing countries create their own industries and do not merely provide new markets for companies from wealthier countries. World leaders also need to commit to ten per cent of global primary energy supply coming from new renewable energy sources by 2010. This target needs an action programme that includes policy intervention to level the playing field so that renewable energy sources can compete with traditional fossil fuels. Although a ten percent new renewable energy target faces major opposition from countries such as the United States, Saudi Arabia, Russia, and Canada, it is achievable. A number of countries, including Brazil, support this target. In addition, many countries, including Denmark, Indonesia, China, Germany, and India, have already adopted national targets for renewable energy sources. The world must not be held hostage to fossil fuel-dependent countries. It's more than ten years since scientists alerted the world to the dangers of human-induced climate change. We're still waiting for governments and business to introduce effective measures to reduce emissions of CO₂ and other greenhouse gases. Sustainable energy must be a priority on the WSSD agenda. The planet cannot afford otherwise.

(58) KYOTO ALL OVER AGAIN

Insight Magazine

August 14, 2002

Internet: <http://insightmag.com/news/260776.html>

BORDEAUX, France, Aug. 14 (UPI) -- The figure of 18 percent is going to become rather familiar over the next three weeks as the Second Earth Summit gets under way in Johannesburg, South Africa, and Uncle Sam goes into the dock again as global villain. Eighteen percent is the amount by which emissions of carbon dioxide -- widely blamed for climate change and global warming -- have increased in the United States since the first summit in Rio ten years ago. But these carbon emissions have risen by just ten percent for the whole planet over the same period, which makes it easy for 'Green' critics to condemn the U.S. as almost twice as bad a polluter as anyone else.

George Bush's America has been cast as environmental enemy number one since he rejected the Kyoto Protocol on Global Warming in his first months in office. This demonization will doubtless accelerate at the new earth summit, and the Bush administration seems so resigned to international criticism that there is little sign of its fighting back or even making the case against the deeply flawed hypocrisy that is the Kyoto Protocol.

Perhaps the best thing that can be said about the Kyoto Protocol to require cuts in carbon emissions is that it was well intentioned. The second-best thing that can be said of Kyoto is that if it works as planned it might marginally delay the process of global warming. The biggest problem with Kyoto is that it leaves out the two countries likely to be the biggest polluters of the 21st century -- China and India. Developing nations in general get a pass under Kyoto, which requires only developed industrialized countries to impose the controls. There is a voluntary provision for the developing countries to join in once they have grown enough to afford it, but no sign that they will.

The second biggest problem with Kyoto is that it hits the U.S. particularly hard among developed countries, because of a fancy piece of footwork by the Europeans. The benchmark date for Kyoto is 1990, and the Protocol requires signatory countries to reduce their carbon emissions in that year. That sounds fair. But 1990 was the year of German unification, the last year that the filthy old 'brown coal' or lignite that powered Communist East Germany and polluted eastern Europe was being produced and burned in full

spate. Once the lignite was banned, German carbon emissions plummeted - making it much easier for Europe to reach the Kyoto targets. By the same token, it made life tougher for Americans.

These arguments have failed to make much headway in the face of a public opinion that seems prepared to swallow green propaganda that makes Uncle Sam the bad guy. But maybe, just maybe, the basis of the entire environmental argument -- and thus of Kyoto -- is about to change. This summer it starts to look as though the world's biggest environmental challenge may not be climate change or the hole in the ozone layer or even the critical state of fisheries worldwide. Instead, the threat that is really starting to worry thinking environmentalists is the Asian brown cloud, a vast swathe of smog two miles thick that in satellite images stretches from India in a great arc across South-east Asia and up through China to South Korea. It is like the old smog belt of Los Angeles repeated on a continental scale.

For the past five years, forest fires in Indonesia have darkened skies and made eyes water in Singapore and Bangkok, and most of the blame has been placed on illicit timber harvesting and land clearance. Now that the first detailed scientific assessments on the Asian brown cloud are emerging from the United Nations-backed Indian Ocean Experiment, it is clear that illegal logging is hardly a fraction of the problem. Asia's brown cloud includes the usual industrial pollutants, coal and wood ash, aerosols, carbon, and flecks of carbonized animal poop from cow dung fires in Asia's new giant cities like New Delhi and Jakarta, Mumbai and Shanghai, Calcutta and Bangkok. The world's new smog belt represents the success of China and India and other Asian countries over the past twenty years in transforming their economies -- and ruining their environment in the process.

Klaus Toepfer, director of the UN Environment Program, calls it "a major environmental hazard for Asia" but stresses that there are "global implications because a pollution parcel like this, which stretches 3 km (2 miles) high, can travel halfway round the globe in a week." So with luck, the Earth Summit might take a break from bashing the U.S. and George Bush, and think about how an improved Kyoto Protocol Mark II could bring in the developing countries into a broader pollution and carbon control system. After all, now that the evidence is clear that they are part of the problem, they will have to be part of the solution -- which is more than can be said for Kyoto Mark I.

(59) KYOTO ACCORD A DISTANT MEMORY by Eric J. Lyman

Nando Times

August 8, 2002

Internet: <http://www.nandotimes.com/healthscience/story/492724p-3930705c.html>

ROME (August 8, 2002 12:29 p.m. EDT) - The World Environment Summit in South Africa was expected to be the stage on which the much-heralded Kyoto Protocol on global warming finally took effect. Now amid limited international support for the agreement, the 1997 accord will hardly be on the agenda. After more than four years of negotiations, the Kyoto agreement was finalized last year in Morocco. Afterwards, advocates of the agreement boldly predicted that despite a lack of support from the United States - which produces more than a quarter of the world's greenhouse emissions - that the required 55 countries would have signed the treaty by the time the Johannesburg got underway on Aug. 25.

Since then, the 12-member European Union and 19 small nations have signed the protocol, leaving the 55-country threshold within reach, but the goal of including country's representing at least 55 percent of emissions remains far off. Signers include only 17.1 percent of world emissions and in addition to the absence of the United States, do not include heavyweight countries such as Russia, Japan, Canada and Australia. "At the meetings last year in Morocco, support was lined up from enough countries that if everything went just right and no country had problems pushing the protocol through their parliament then the agreement would barely pass," Marco Giannicini, an official with the Italy-based environmental lobby Legambiente told United Press International. "We were counting on the best-case scenario ... (which) no longer seems so realistic."

Because of the problems with passing the Kyoto agreement, its place in the world's consciousness has faded in recent months. On its official agenda, the Johannesburg talks have replaced what most environmentalists say is the world's biggest environmental danger with a focus on helping poor nations develop. That seems

an unlikely fate for an agreement that was born ten years ago, at the Rio de Janeiro Earth Summit, where climate change was officially recognized as global danger and the United Nations Framework Convention on Climate Change - which drafted the Kyoto Protocol five years ago - was created. Then as now, scientists predicted that if steps are not taken, temperatures will rise globally, causing a host of climate-related disasters such as floods, drinking water contamination, severe rains in dry areas and desertification of lush areas.

The Kyoto agreement aims to reduce the greenhouse gases scientists say are responsible for global warming to around 5 percent below their 1990 levels by 2012 at the latest. And while some countries, such as Russia, have seen their emissions drop dramatically because of industrial collapse over the last decade and others, such as most of Western Europe, hold steady because of conservation measures and the shift toward renewable energy, world wide emissions have risen by just over 24 percent since 1990. That means that in order to reach the reduction targets set out in Kyoto, emissions would have to be reduced by nearly 30 percent over the next decade - a near impossibility.

"Many political leaders support efforts to combat climate change in the broad sense, their support erodes when they look at what dramatically reducing emissions would do to their economies," Richard Ells, an analyst with the Global Climate Change Fund, told UPI. "That is no doubt why so many countries that like the idea have yet to sign the agreement." That's exactly why the U.S. said it would not support the agreement more than two years ago. President George W. Bush said that the economic impact of reducing emissions by the required amount was too much given what he said was unclear scientific evidence that the Kyoto Protocol would be effective in combating climate change.

See Also:

LOW PROFILING KYOTO PROTOCOL by Dee Ann Divis (UPI Science and Technology Editor August 10, 2002)

<http://www.upi.com/view.cfm?StoryID=20020809-065420-1133r>

ON THE WEB

(60) RATIFY KYOTO – ECONOMISTS

14th August 2002

News release

Internet: www.tai.org.au

More than 250 of Australia's academic economists today called on Prime Minister John Howard to ratify the Kyoto Protocol without delay. The 254 economists, including 39 Professors, are signatories to a statement calling on the Prime Minister to ratify the Protocol in Australia's economic and environmental interests. "As economists, we believe that global climate change carries with it serious environmental, economic and social risks and that preventive steps are justified," the statement says. "Policy options are available that would slow climate change without harming employment or living standards in Australia, and these may in fact improve productivity in the long term." The economists' statement follows warnings from 2000 international scientists under the auspices of the Intergovernmental Panel on Climate Change of new and stronger evidence that global warming is attributable to human activities, and warnings from the CSIRO that climate change has the potential to seriously disrupt agricultural output, water flows and natural systems in Australia. The statement and full list of signatories may be viewed under What's New on The Australia Institute website. www.tai.org.au

(61) WWF WELCOMES THE POLISH RATIFICATION OF THE KYOTO CLIMATE TREATY

WWF

August 9, 2002

Internet: <http://panda.org/news/press/news.cfm?id=3073>

Yesterday's ratification of the Kyoto Climate Treaty by Poland is a turning-point in creating international legislation for climate protection. The decision of the Polish parliament came after months of governmental debates and NGO lobbying. WWF welcomes the decision of the Polish authorities. WWF has been running

a 200-day campaign - Go for Kyoto - which aims to convince governments to ratify the Kyoto Climate Treaty this year. Additional support for the campaign in Poland was provided by some members of the WWF Corporate Club, who joined the international e-mission 55 initiative in July 2002. "By joining other countries who have ratified the Kyoto Climate Treaty, Poland will not only gain international recognition, but also significant economic advantages," said Mr Wojciech Stêpniewski, WWF Poland's Climate and Energy Project Leader. According to the Polish Minister of the Environment, Poland could earn one billion Euro by utilising the emission trade mechanism. Benefits for business resulting from the Kyoto Climate Treaty are expected to include a marked increase in market competition within areas concerning solutions and technology involved in the reduction of fossil fuel energy sources, as well as in increasing the use of renewable energy sources. The Kyoto Climate Treaty will be the first legally binding, international agreement for environmental protection and sustainable development on a global scale. Many governments have aimed to finalize the ratification process before the World Summit on Sustainable Development (WSSD), which will be held in Johannesburg from 26 August - 4 September 2002. So far, 74 countries responsible for 36 per cent of greenhouse gas emission in developed nations have ratified the Kyoto Climate Treaty. Ratification by Poland and Russia, where the ratification process is still ongoing, will enable the treaty to become international law.

(62) UPDATE ON THE CLEAN DEVELOPMENT MECHANISM (CDM)
UNFCCC

Internet: <http://unfccc.int/press/prel2002/pressrel200802.pdf>

CDM Accreditation Process launched. Invitation to Roundtable at WSSD on the "CDM: From idea to reality" Bonn, 20 August 2002 – Nine months after governments met in Marrakech to finalize the procedural rulebook for the Kyoto Protocol on climate change, the Executive Board of the Protocol's Clean Development Mechanism (CDM) has announced that companies and other organizations may now start applying for accreditation as "operational entities" of the CDM. The 1997 Kyoto Protocol established the CDM as a way of promoting sustainable development while minimizing the costs of limiting greenhouse gas emissions. In return for investing in a sustainable development project that reduces or avoids emissions in a developing country, companies will earn "certified emission reductions" that developed countries may use to meet their Kyoto commitments. The CDM's "operational entities" will play a crucial role by checking whether projects conform with the CDM's rules. They will be responsible for validating proposed projects before they are registered by the CDM's Executive Board. They will also verify and certify the emission reductions achieved by a registered CDM project before the Board issues the "certified emission reductions". Applications for accreditation of "operational entities" can be submitted to the Climate Change secretariat in Bonn. Further information on the CDM and its procedural guidelines for accrediting "operational entities" can be found at www.unfccc.int/cdm