

E-news update June 19 2006

In this issue:

ENERGY AND EMISSIONS

- 1.1. Fewer night flights could cut climate change impact
- 1.2. Scientists urge G8 not to ignore global warming

CLIMATE IMPACTS

- 2.1. Melting permafrost seen as danger
- 2.2. Climate Change Push Polar Bears Toward Cannibalism

CONFERENCES

- 3.1. Energy justice versus energy security
- 3.2. EcoSecurities' Climate Change Policy and Forestry Course

PUBLICATIONS

- 4.1. CEPS publications
- 4.2. Air pollution by ozone in Europe in summer 2005
- 4.3. CAN Europe's NAP report

ANNOUNCEMENTS

- 5.1. New Climate Change Resource for Social Services and International Development Practitioners
- 5.2. WISIONS -new brochure and new call

ENERGY AND EMISSIONS

- 1.1. Fewer night flights could cut climate change impact

14 June 2006, Reuters

By Patricia Reaney

Cutting the number of flights that take off at night could help to reduce the contribution of aviation to global warming, researchers said on Wednesday.

Night flights contribute to climate change because the white streaks of condensation, or contrails, left behind by jets trap energy emitted from the Earth's surface.

Daytime flights have less impact because contrails also reflect some of the sun's energy back into space which has a cooling effect.

"If you wanted to minimize the contrail climate effect you might want to think about rescheduling flights," Dr Nicola Stuber of Reading University said in an interview.

The researchers discovered that although only about 25 percent of flights in Britain take off between 6 p.m. and 6 a.m., they account for 60-80 percent of global warming linked with contrails.

On the east coast of the United States the 36 percent of flights that take off at night account for 53 percent of the annual warming due to contrails. In southeast Asia, which had slightly fewer late flights, the percentage is about 70.

"Night flights contribute disproportionately to the daily mean effect of contrails," said Stuber.

Although the overall effect of contrails on climate change is small, about 3.5 percent of the potential from all human causes, the scientists warned it could gain importance as the volume of air traffic increases.

Stuber and her team used a computer program to analyze flight data and atmospheric conditions to determine when contrails are most likely to form and what impact they would have on the Earth's temperature.

They found that, in addition to night travel, flights during the winter months account for half of the annual warming from contrails.

"So you get half of the climate warming effects from flights during one quarter of the year," said Stuber, who reported the findings in the journal Nature.

Although there are fewer flights during the winter months, the conditions needed to form contrails -- the right temperature, amount of moisture in the air and aircraft altitude -- are found more often.

"If you have all these conditions, you will have formation of persistent contrails. The effect of these conditions is larger than the effects of the air traffic," Stuber said.

1.2. Scientists urge G8 not to ignore global warming

14 June 2006, Reuters

By Jeremy Lovell

World leaders must not allow concern for energy security to distract them from taking promised action on global warming, top world scientists said on Wednesday.

Climate change solutions agreed at the G8 summit in Scotland a year ago risked being pushed off the agenda at next month's G8 summit in Russia by worries about security of energy supply, they said.

"One year on from the UK Gleneagles Summit, where the G8 committed to taking action on climate change, this crucial issue must not be allowed to fall by the wayside," said Martin Rees, president of the UK's Royal Society.

Rees is a signatory to the statement from the science academies of the G8 and China, Brazil, India and South Africa.

"The G8 must demonstrate that this was a serious pledge by integrating climate concerns with their discussions regarding security of supply," he said.

Britain pushed global warming to the top of the agenda during its presidency of the G8 in 2005, eliciting promises of action from some of the world's major polluters.

But energy supply worries have increased as Russia briefly turned off gas supplies in December in a dispute with Ukraine, Iraq's insurgency has escalated as has a nuclear row with Iran, factors that boosted oil prices to record levels.

Environmentalists say the topic has dominated discussions in the lead up to the G8 summit in St Petersburg from July 15-17, pushing a follow-up to the resounding Gleneagles climate change declarations all but off the agenda.

President Bush, who signed the Gleneagles declaration but has not ratified the Kyoto Protocol on tackling human-caused global warming by cutting carbon dioxide emissions, has called for reduced U.S. dependence on imported oil.

Partly as a result of energy security worries there has been a surge in interest in nuclear power and coal as power sources.

"As some of the most intensive users of energy in the world, the G8 nations bear a special responsibility to help stimulate the clean energy revolution that will deliver economically, environmentally and socially while ensuring the lights stay on," Rees said.

CLIMATE IMPACTS

2.1. Melting permafrost seen as danger

17 June 2006, LA Times-Washington Post Service

Janet Wilson

Ancient woolly mammoth bones and grasslands locked in a 400,000 square mile stretch of Siberian permafrost are starting to thaw, and have the potential to unleash billions of tons of carbon and accelerate global warming, a team of Russian and American scientists have concluded.

"It's like taking out food out of your freezer . . . Leave it on your counter for a few days, and it rots," said University of Florida botany professor Ted Schuur, describing the process by which decaying animal and plant matter in the soil is converted by bacteria into carbon dioxide, methane and other harmful greenhouse gases.

The study, published in yesterday's issue of Science, warned that while other global warming researchers are including carbon reserves in the ocean, soils and vegetation on the earth in their calculations, they have ignored vast amounts of carbon trapped in permafrost in the north plains of Siberia and central Alaska.

If all the permafrost thawed and was released as heat-trapping carbon dioxide, it could nearly double the 730 billion metric tons of carbon in the atmosphere, the scientists said. They said what was most surprising was the size and depth of the terrain they found that could be affected - a piece two-thirds the size of Alaska and an average of 80ft deep with roughly 500 billion metric tons of carbon.

"It's like finding a new continent under the earth," said lead author Sergey Zimov, in telephone conversation from northern Siberia. He said the vast, carbon-rich area had been buried over many

millenniums by a unique layer of wind-borne "loess" dust that covered bones of mammoth, bison, sabre-toothed tiger, and abundant grasses they fed on, then froze about 10,000 years ago.

Contrary to earlier assumptions that permafrost was as barren as polar desert, samples taken by the research team found 10 to 30 times as much carbon as in deep soils elsewhere. Another recent study estimated that about 10ft of permafrost will melt in the 21st century, still meaning billions of tons could be released if global warming is not slowed or halted.

The research team, funded by the National Science Foundation in the US, also found that carbon stored over tens of thousands of years could bubble up from thawed soil in as little as 100 years. "If the permafrost begins to melt, billions of gallons of greenhouse gases will be released from these ancient soils," said Mr Zimov.

The authors said they hoped the findings would spur quicker reductions of human-caused greenhouse gas emissions.

"It's not hopeless," said Prof Schuur. "We're just at the beginning of this cycle, so we can, through the controlling of emissions, have a hope of slowing down this rate of global warming that would slow the melt of the permafrost."

2.2. Climate Change Push Polar Bears Toward Cannibalism

16 June 2006, AP

By Dan Joling

"During 24 years of research on polar bears in the southern Beaufort Sea region of northern Alaska and 34 years in northwestern Canada, we have not seen other incidents of polar bears stalking, killing, and eating other polar bears," the scientists said.

Free Security Software

Get the tools you need to stop adware and viruses from these expert resources.

Polar bears in the southern Beaufort Sea may be turning to cannibalism because longer seasons without ice keep them from getting to their natural food, a new study by American and Canadian scientists has found.

The study reviewed three examples of polar bears preying on each other from January to April 2004 north of Alaska and western Canada, including the first-ever reported killing of a female in a den shortly after it gave birth.

Desperate Measures

Polar bears feed primarily on ringed seals and use sea ice for feeding, mating and giving birth.

Polar bears kill each other for population regulation, dominance, and reproductive advantage, the study said. Killing for food seems to be less common, said the study's principal author, Steven Amstrup of the U.S. Geological Survey Alaska Science Center.

"During 24 years of research on polar bears in the southern Beaufort Sea region of northern Alaska and 34 years in northwestern Canada, we have not seen other incidents of polar bears stalking, killing, and eating other polar bears," the scientists said.

Environmentalists contend shrinking polar ice due to global warming may lead to the disappearance of polar bears before the end of the century.

The Center for Biological Diversity of Joshua Tree, Calif., in February 2005 petitioned the federal government to list polar bears as threatened under the federal Endangered Species Act.

Cannibalism demonstrates the effect on bears, said Kassie Siegal, lead author of the petition.

"It's very important new information," she said. "It shows in a really graphic way how severe the problem of global warming is for polar bears."

Deborah Williams of Alaska Conservation Solutions, a group aimed at pursuing solutions for climate change, said the study represents the "bloody fingerprints" of global warming.

Changing Behavior

"This is not a Coca-Cola commercial," she said, referring to animated polar bears used in advertising for the soft drink giant. "This represents the brutal downside of global warming."

The predation study was published in an online version of the journal Polar Biology on April 27. Amstrup said print publication will follow.

Researchers in spring 2004 found more bears in the eastern portion of the Alaska Beaufort Sea to be in poorer condition than bears in areas to the west and north.

Researchers discovered the first kill in January 2004. A male bear had pounced on a den, killed a female and dragged it 245 feet away, where it ate part of the carcass. Females are about half the size of males.

"In the face of the den's outer wall were deep impressions of where the predatory bear had pounded its forepaws to collapse the den roof, just as polar bears collapse the snow over ringed seal lairs," the paper said.

"From the tracks, it appeared that the predatory bear broke through the roof of the den, held the female in place while inflicting multiple bites to the head and neck. When the den collapsed, two cubs were buried, and suffocated, in the snow rubble."

In April 2004, while following bear footprints on sea ice near Herschel Island, Yukon Territory, scientists discovered the partially eaten carcass of an adult female. Footprints indicated it had been with a cub.

The male did not follow the cub, indicating it had killed for food instead of breeding.

A few days later, Canadian researchers found the remains of a yearling that had been stalked and killed by a predatory bear, the scientists said.

CONFERENCES

3.1. Energy justice versus energy security

Russia, St-Petersburg, July 10-15 2006

You are invited to the Alternative Energy Forum in Russia in Petersburg. This event will happen just before the summit of G8.

The main topic of the G8 summit will be energy security. There are several strong disagreements between environmentalists, greens and leaders of G8 on this topic unfortunately. One of the key points is the relationship to the nuclear energy. Calls from the side of environmentalists and greens to stop to subsidize the nuclear energy do not have any support from G8 leaders. More over, some countries (e.g. Russia are going to built 40 new reactors) want to develop the nuclear energy actively. G8 approves building of international nuclear waste storage in Russia. All this is unacceptable for environmentalists and greens.

Movement GROZA (Green Alternative) and Ecodefense! in cooperation with Bellona-Russia plan Alternative Energy Forum to discuss and declare the position of environmentalists and greens just before the G8 summit. We are doing this because we want green alternative view on global energy security to be known and, hopefully, will be used by G8 countries.

Draft agenda of Alternative Energy Forum

09.07.2006 - East-West Green Dialogue meeting - Policy and Energy

10-11.07.2006 Alternative Energy Forum (Participants from Green Parties and environmental NGOs)

12.07.2006 - Press-conference with presentation of Alternative recommendations on energy security for G8

13.07.2006 - Meeting with sherpas, passing of Alternative recommendations Yours faithfully, Andrey Ozharovskiy, ANPED Nuclear Issues / Sustainable Energy Working Group Co-ordinator.

fdc@elnet.msk.ru

3.2. EcoSecurities' Climate Change Policy and Forestry Course

EcoSecurities will run the 2006 edition of its Forestry and Climate Change Policy Course on July 21th in Oxford, UK. This one-day course will give a comprehensive overview of all aspects of policy and market developments in relation to carbon trading from and with forestry projects. It will cover international rules and regulations regarding carbon forestry projects, as well as carbon finance issues and technical aspects such as baseline methodologies. The course will mainly focus on forestry-based climate change mitigation measures under the Kyoto Protocol's Flexibility Mechanisms (CDM & JI).

This year the course will focus on the recent developments in the carbon market for forestry projects under the Clean Development Mechanism and on the methodological and procedural steps forward that upcoming projects are currently taking. These developments are of interest for both sellers and buyers of carbon credits in the forestry sector. In general, the course is of great relevance to all those interested in the carbon forestry market and its underlying policy and technical issues.

The course is run as part of ProForest's Summer Training Programme. A small fee of £250 (VAT included) will be charged to cover organizational costs. For further information on location, accommodation options and course subscription please go to www.proforest.net. Further information on EcoSecurities can be found at www.ecosecurities.com.

PUBLICATIONS

4.1. CEPS publications

Centre for European Policy Studies, based in Brussels, is pleased to announce a set of recent publications related to climate change or energy policy (in chronological order):

Fujiwara, N., J. Núñez Ferrer and C. Egenhofer, 2006, "The political economy of environmental taxation in European countries", CEPS Working Document, No.245, June.
http://shop.ceps.be/BookDetail.php?item_id=1339

Kruger, J. and C. Egenhofer, 2006, "Confidence through compliance in emissions trading markets", CEPS Policy Brief, No.99, April. http://shop.ceps.be/BookDetail.php?item_id=1323

Brewer, Thomas L. 2006, "The US administration's 'Advanced Energy Initiative': New programmes and more funding, or old programmes and less funding", CEPS Policy Brief, No.94, March.
http://shop.ceps.be/BookDetail.php?item_id=1303

Egenhofer, C. and N. Fujiwara, 2006, "Reviewing the EU Emissions Trading Scheme: Priorities for short-term implementation of the second round of allocation (Part II)", CEPS Task Force Report, No.57, March. http://shop.ceps.be/BookDetail.php?item_id=1308

Egenhofer, C. and N. Fujiwara, 2005, "Reviewing the EU Emissions Trading Scheme: Priorities for short-term implementation of the second round of allocation (Part I)", CEPS Task Force Report, No.57, December. http://shop.ceps.be/BookDetail.php?item_id=1288

For other CEPS publications please see <http://shop.ceps.be/Default.php>.

For further information on CEPS activities related to climate change or energy policy, please see http://www.ceps.be/Article.php?article_id=12 or contact Noriko Fujiwara, noriko.fujiwara@ceps.be.

4.2. Air pollution by ozone in Europe in summer 2005

Technical report No 3/2006, published at: http://reports.eea.europa.eu/technical_report_2006_3.

Abstract: In summer of 2005 levels of ground-level ozone were high in southern Europe with widespread exceedances of the information threshold value (180 Åµg/m³) laid down in the ozone directive (2002/3/EC). The frequency of exceedances of the information threshold was similar to earlier years, except for the summer 2003, which had a record number of exceedances. The highest one-hour ozone concentration in summer 2005 (361Åµg/m³) was observed in Portugal. Other high hourly ozone concentrations between 360 and 300 Åµg/m³ were reported from Greece, Italy, France, Romania and Spain. The directive's long-term objective to protect human health, an ozone concentration of 120 Åµg/m³ over 8 hours, was extensively exceeded in the EU and other European countries. In large parts of Europe the target value to protect human health was also exceeded.

4.3. CAN Europe's NAP report

The full NAP report is available on the CAN E website:
http://www.climnet.org/EUenergy/ET/0506_NAP_report.pdf"http://www.climnet.org/EUenergy/ET/0506_NAP_report.pdf.

ANNOUNCEMENTS

5.1. New Climate Change Resource for Social Services and International Development Practitioners

Climate Action Network Australia and Friends of the Earth Australia have developed a web-based summary of the expected effect of climate change on the world's social systems: How we source food, harvest water, sustain employment, and build our houses and cities.

The website (www.cana.net.au/socialimpacts) is a compilation of major national and international research on a range of topics including cost of living, insurance, tourism, agriculture, health, housing, planning in Australia and overseas.

The result is clear: In a hotter and more volatile world both rich and poor stand to lose. However those already affected by poverty, malnutrition and disease will face displacement and new hardships as a result of climate change exacerbated drought, heat and extreme weather events.

