



Sue Hare / Joe Buchdahl - Co-ordinators
Atmosphere, Climate & Environment Information Programme,
aric
Dept. of Environmental & Geographical Sciences
Manchester Metropolitan University
Chester Street
Manchester M1 5GD

Tel: 0161 247 1590/3, Fax: 0161 247 6332

E-mail: aric@mmu.ac.uk

Internet: <http://www.ace.mmu.ac.uk/>

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EARTH SUMMIT SPECIAL

ENERGY TARGETS REJECTED...

Energy proved to be the most contentious issue at the World Summit on Sustainable Development in Johannesburg (August 2002) as debate raged over whether to raise targets for use of "green" energy.

The United States and oil producing countries firmly rejected demands from the European Union and nations such as Brazil, Norway, New Zealand, Iceland and Hungary to enshrine targets to boost use of renewable energy sources in the text.

The final deal pledged to make energy more accessible to the poor but there were no definitive targets forcing countries to switch away from the fossil fuels blamed for global warming to cleaner energy such as solar or wind.

The vaguely worded energy accord urges nations to "substantially increase" the global share of renewable energies like solar and wind power but stops short of setting any targets or time deadlines.

*Source: Climate Ark: <http://www.climateark.org/>;
Reuters, 4th September 2002.*

...BUT EU PUSHES AHEAD ANYWAY

Despite its failure to win green energy targets at the Earth Summit, the

European Union (EU) urged countries to join a new group to push for global goals on renewable energy.

The EU had sought a global target that would bind countries at the World Summit on Sustainable Development to derive at least 15% of their energy supply from renewable energy sources by 2015, but that plan was quashed by the United States, Japan and OPEC states.

The EU called on "like-minded states" to adopt time-bound targets to increase renewable green energy output by means such as solar and wind power to cut emissions from the fossil fuels blamed for global warming and to improve the health of people who use wood stoves as their main energy source.

The EU has its own target of doubling its use of renewable energy to 12% of total energy consumption by 2010.

The proposal, backed by several central and eastern European states, small islands, New Zealand, Norway and Turkey, said that while it endorsed the more modest goals agreed at the Earth Summit, targets would help guide investment and develop the markets for renewable energy technologies.

*Source: Climate Ark: <http://www.climateark.org/>;
Reuters, 6th September 2002.*

AN ENVIRONMENTALLY FRIENDLY EARTH SUMMIT?

Delegates to the Earth Summit in Johannesburg, convened to reduce poverty while saving the environment, emitted 290,000 tonnes of the greenhouse gas carbon dioxide but paid for schemes to offset only 40,000 tonnes, or one-seventh of that amount.

The scheme of offsetting carbon dioxide emissions encouraged governments and environmental groups alike to pay into a novel fund to compensate for the pollution caused by flying to South Africa, using electricity and driving around.

The organisers estimated that a delegate travelling from the United States, for example, would pay about \$100 to offset the 10 tonnes of carbon dioxide emitted by flying to and staying in Johannesburg.

The fund will put the money raised into environmentally friendly schemes ranging from solar water heating to tree planting and improving energy efficiency in buildings.

Many environmentalists labelled the World Summit on Sustainable Development, held at the end of August 2002, a waste of time and criticised what they saw as the waste and excessive consumption associated with the gathering.

Source: Climate Ark: <http://www.climateark.org/>; Reuters, 9th September 2002.

AIR QUALITY

POLLUTION CUTS REDUCE DEATHS

Deaths from heart and lung disease have been shown to be reduced through two research studies.

One of the studies, carried out in Dublin, highlights how deaths from heart and lung disease have fallen dramatically since the

1990 coal ban. Researchers looked at data for the six years before and after the coal ban. Following the coal ban, levels of black smoke decreased by 70%. There were also around 15% fewer deaths by respiratory disease and around 10% fewer deaths from cardiovascular disease each year following the 1990 ban on coal. This amounts to a reduction of approximately 359 deaths per year from heart and lung disease. The researchers attribute the reduced mortality directly with the reduction in particulate air pollution and suggest that other studies could have underestimated the benefits of cleaner air.

Another study, by Dutch scientists has also reinforced the link between cleaner air and fewer deaths from heart and lung disease. The research, looked at the likely exposure of 5000 adults, aged between 55 and 69, to black smoke and nitrogen dioxide between 1986 and 1994.

During the following eight years, 11% of the group studied died. Those who lived near a main road were around twice as likely to die from heart and lung disease, and 1.4 times more likely to die from any cause. Apart from lung cancer, no other direct link was found between exposure to pollution and mortality.

Source: BBC News, 17 October 2002: <http://news.bbc.co.uk/1/hi/health/2337025.stm>;

AMMONIA EMISSIONS IN THE UK

A report has recently been published by the Department for Environment, Food & Rural Affairs (DEFRA) on emissions of ammonia in the UK. The report highlights that 80% of UK emissions of ammonia result from agriculture, mainly from livestock manure and nitrogen fertilizers.

Emissions of most air pollutants, particularly sulphur dioxide and nitrogen oxides have been reduced during recent years through the use of cleaner technologies. However, little action has

yet been taken to control emissions of ammonia. There has only been a very small reduction in ammonia emissions in the last decade.

Ammonia is known to cause damage to sensitive habitats, particularly heathlands, affecting plants and biodiversity. International agreements are now in place to curb emissions of ammonia from 2010 through the UNECE Protocol to Abate Acidification, Eutrophication & Ground-level Ozone and the National Emission Ceilings Directive (2001/91/EC).

The consequences of ammonia pollution causes environmental problems to vegetation, soils and water. Ammonia also contributes to long-range acidification. Heathlands are particularly sensitive and ammonia pollution can cause heathlands to be taken over by grass. Moss-dominated heathlands in upland areas of Britain are also reduced and species of vegetation that only require low levels of nutrients are also lost.

The 90 page report on ammonia and a summary booklet are both available on the DEFRA website:

<http://www.defra.gov.uk/environment/air/quality/ammonia/index.htm>

Source: DEFRA News Release, 18 October 2002; Ammonia in the UK, DEFRA.

DIRTY LORRY BANS LIKELY IN LONDON

The Mayor of London, Ken Livingstone, is likely to ban highly polluting lorries, taxis, vans and buses from London. The Mayor is expected to introduce a Low Emission Zone (LEZ) as part of the Air Quality Strategy for London.

The LEZ is likely to ban all large vehicles that fail to meet European emission standards from the whole of the Greater London area. It is thought that HGVs,

taxis, buses and coaches would be targeted because these result in the highest emissions. There are currently no LEZs in the UK and it is likely that the London LEZ will be introduced in 2006.

London has also recently been granted permission to charge motorists a £5 levy for congestion which will be introduced next year.

Source: The Independent 20th September 2002.

ARIC ENCYCLOPEDIA RATING

The Air Quality Management journal has awarded the **aric** Encyclopedia of the Atmospheric Environment, 3rd position in the Air on the Internet Web Survey and recommends that all local authorities should link to the site.

The encyclopedia can be found at:

www.ace.mmu.ac.uk/aric/

Source: Air Quality Management, September 2002.

CLIMATE CHANGE

YET ANOTHER CLIMATE SUMMIT

Climate change and its impact on economies and agriculture was the focus of yet another environmental conference, hosted by Delhi, India, last month on behalf of the United Nations and 185 participating nations.

The aim of the conference was to reach agreement – in the form of a Delhi declaration - on actions that need to be taken to halt global warming, in the run up to the implementation of the Kyoto Protocol next year.

However, no important decisions were reached at the Delhi conference, and in the aftermath of the failures of the Earth

Summit in Johannesburg in August, many green campaigners will see this latest discussion group as a forum for more hot air.

Source: BBC News Online: <http://news.bbc.co.uk>, 22nd October 2002.

CHINA RATIFIES KYOTO PROTOCOL

China, the world's second biggest emitter of greenhouse gases after the United States, announced in September that it has ratified the Kyoto Protocol to reduced greenhouse gas emissions, bringing the climate treaty one step closer to implementation.

However, because China is regarded as a developing nation, it is not required to curb emissions. Instead, it would be eligible to earn credits by setting up emission-reducing projects and other so called clean development mechanisms, including emissions trading with developed nations.

China, which accounts for over one tenth of global carbon emissions into the atmosphere, was widely expected to ratify the agreement, which requires industrialised nations to reduce 1990 carbon dioxide emissions by 5.2% by 2008-2012.

Russia is also expected to ratify the agreement by the end of the year, a move that would virtually ensure the 1997 treaty is introduced, despite its rejection by the biggest greenhouse gas polluter, the United States.

Source: Climate Ark: <http://www.climateark.org/>; Reuters, 4th September 2002.

US CITIES WARMING

According to climate researchers at Cornell University publishing in the *Journal of Climate*, American cities have been warming significantly faster than

surrounding rural areas during the past half a century, particularly at night.

US cities now have an average of 10 more hot summer nights each year than they did back in the early 1960s. At the same time, rural area temperatures have remained relatively constant.

Such a trend, the researchers say, is highly statistically significant, although global warming is unlikely to be the only or even main culprit. Considerable urbanisation has taken place in the last 40 years, particularly along the East coast of America, and it is possible that there is now a much greater heat island effect associated with major conurbations.

Source: *Global Environmental Change Report*, 11th October 2002.

OZONE DEPLETION

OZONE LAYER RECOVERING

Later this year, the United Nations Environment Programme (UNEP) and World Meteorological Organization (WMO) will be releasing the latest scientific assessment of stratospheric ozone depletion.

According to a preliminary summary report, the new assessment details evidence that the abundance of ozone depleting chemicals in the stratosphere will now be peaking, and should start to decline hereafter over the next decade.

UNEP/WMO argue that this is a clear sign that the 1987 Montreal Protocol to ban emissions of ozone depleting chemicals is working. However, they also stress that full recovery of the ozone layer to pre-Antarctic ozone hole levels will only be achieved with continuing strict adherence to the Protocol's full provisions.

Source: *Global Environmental Change Report*, 11th October 2002.