Europe unveils ambitious energy plan

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- * NewScientist.com news service
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Plans which would make Europe a world leader in tackling climate change and renewable energy policy were released by the European Commission on Wednesday.

The proposal describes how the European Union can reduce its greenhouse gas emissions to 20% below 1990 levels by 2020.

The package has been called "brave" by the Dutch environment agency and has been welcomed by the UK government, which says the package will give industry the secure framework it needs to build a low-carbon economy.

Other environmental groups, meanwhile, say that it could and should have done more.

The European Commission first adopted the 20% by 2020 target in 2007. Today's proposal describes a package of concrete measures and policies, which the commission says will allow Europe to meet this target.

As part of that, Europe will increase the share of renewables in its energy mix to 20% by 2020 – an 11.5% increase on current levels.

Biofuel controversy

The energy package takes a contentious stance on biofuels. It says that by 2020 at least 10% of transport fuels should be biofuels. This target has been criticised recently for encouraging an industry which could cause more harm than good.

The production of many biofuels generates more greenhouse gas emissions than burning gasoline and recent increases in food prices have been blamed on the biofuels market.

EC president José Manuel Barroso claimed that the EC energy package provides the world's first system for ensuring that biofuels are sustainable. Fuels used to meet the 10% target will need to demonstrably produce 35% less emissions than the equivalent gasoline.

Environmental groups say this threshold is insufficient because the knock-on effects of boosting biofuels have not been given sufficient consideration by the EC. Using food crops to make biofuels will require importing replacement food crops, many of which degrade the environment, for instance by encouraging deforestation.

Adrian Bebb from Friends of the Earth says a 50% threshold should have been the minimum.

Another contentious aspect of the biofuels proposal is how it defines degraded land. Under the current text, biofuels production must not change the use of land from how it stands in January 2008.

"This means you could have been chopping rainforest a few weeks ago and planting biofuels now and calling it sustainable," says Bebb. Emissions trading

The package extends the life of the European Emissions Trading Scheme, which is Europe's system of putting a price on carbon dioxide emissions. So far, the scheme has been tied to the emissions reduction targets of the UN Kyoto protocol, which ends in 2012.

"Setting a clear long-term downward trajectory for the emissions cap for the [trading scheme] gives businesses and the market the certainty they have been looking for," said UK environment secretary Hilary Benn.

The package also calls for carbon capture and storage to be tested in 12 sites.

Barroso says the package would cost 0.5% of Europe's gross domestic product by 2020. "That is the equivalent of 3 euros a week on average for each EU citizen," he told the European parliament.

In comparison, says Barroso, the cost of not acting on climate change as predicted by Nicholas Stern in 2006 amounts to 10 times that.

Neelie Kroes, European commissioner for competition, pointed out that the energy package would cost less than the 0.6% of GDP which dealing with drug cartels costs the EU each year.

'Meagre effort'

"The proposed 20% reduction by 2020 is a meagre effort," says Keith Allott, head of climate change at WWF-UK, who would have liked to see the EC adopt a 30% target. The EC has said it will increase reductions to 30% below 1990 levels only if developed nations outside the EU did the same.

This is an oblique reference to the United States, which has not ratified the UN Kyoto protocol on climate change and therefore does not have any targets for reducing its emissions.

At the major climate change summit in Bali, Indonesia, in December, global governments discussed eventually reducing emissions to 25-40% below 1990 levels, but in the end dropped the range from their document.

The 25%-40% range comes from the predictions of the Intergovernmental Panel on Climate Change, which has said that such reductions could limit global warming to 2 °C above pre-industrial levels.

More recent research from the UK's Met Office, however, has suggested that even

these ambitious reductions may not be enough to avoid a 2°C rise in temperatures.

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