
Carbon Monitor

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Clean Development Mechanism reaches 1 billion tonnes of offsets

The United Nations Climate Change Secretariat has pointed towards an exponential rise in investment into emission reductions through the Kyoto Protocol.

“The fact that the carbon market is enjoying such remarkable growth is a clear indication of the success of the Kyoto Protocol’s flexible mechanisms”, said Halldor Thorgeirsson, Deputy Executive Secretary of the United Nations Framework Convention on Climate Change.

In addition to the implementation of climate-friendly policies at home, the Kyoto Protocol allows countries to meet their emission targets through the treaty’s market mechanisms. For example, the clean development mechanism (CDM) allows industrialized countries to generate emission credits or allowances through investment in emission reductions projects in developing countries.

“In December 2005, there were 40 CDM registered projects, with 500 in the pipeline. Now we have more than 176 registered projects and approximately another 600 in the CDM evaluation process leading to registration. The numbers speak for themselves”, said Mr. Thorgeirsson. The potential of the CDM to deliver emission reductions even at an early stage of implementation is illustrated by the fact that the known project potential of the clean development mechanism is presently estimated to generate over 910 million tonnes of emission reductions by the end of 2012.

“We are presently fast approaching the one billion tonne mark in emission reductions, which corresponds to the present emissions of Spain and the United Kingdom combined”, said Richard Kinley, acting head of the UN Climate Change Secretariat in Bonn. His statement came five days ahead of a fresh round of UN-sponsored climate talks in Bonn. One round of talks has global participation and will explore options for longer-term climate change policy, including the potential of the carbon market. Another round of talks will involve the 163 Parties to the Kyoto Protocol and will focus on negotiating commitments for industrialized countries beyond the year 2012 – the end of the first commitment period of the Kyoto Protocol.

EU Market Experiences Instability and Strong Recovery

Recent trading saw the EU allowance prices drop 3 Euro to 9.10 Euro and then bounce back to over 19 Euro in matter of days. www.pointcarbon.com

Much of this has been attributed to access to EU compliance data which has been characterized as unauthorized and inaccurate. Criticism of the market has been substantial particularly from financial players.

The volatility of the market is an expected consequence of the imbalance of information in the market and sends a message to those regulating the market that this should be addressed.



Revised Web Site Launched

The EITG web site has been launched with additions covering the new Biofuels initiative.

Detailed explanations are given for biofuels and bio diesel. The site also provides detailed explanation of Jatropha and an online video of 11 minutes duration covering interesting aspects of Jatropha, intercropping with palm plantations and copra oil.

www.eitg.co.nz

Remember to refresh your browser to access the latest web site in case it is cached on your computer!

Biofuels from Sewage

A Marlborough company says it has made a huge breakthrough in alternative fuel by turning sewage waste into a diesel substitute. After eight months of research, the international team of New Zealand-

based scientists yesterday announced it had successfully turned sewage algae into biofuel.

Nick Gerritsen, director of Aquaflow Bionomic Corporation, said many people were finding it hard to believe that a viable fuel had been developed so quickly. The company was now increasing its capacity to produce one million litres over the next year from the Blenheim sewage ponds.

High sunshine hours in Marlborough already produced quality wines and most of the country's salt, and it was the same sunny climate that made the fuel project successful. Aquaflow spokesman Barrie Leay said the company had achieved a world first with the commercial production of biodiesel outside the laboratory.

The resulting product could be added to regular diesel, bulking it up without any need for engine modifications. Far from pooh-pooing the idea, the Marlborough District Council had welcomed the company into its sewage ponds, because the process provided a way of cleaning up excess algae.

"The market potential for this product is almost unlimited in the peak-oil environment we are in, as there is now a global demand for biodiesel of billions of litres per year," Leay said. Production of the necessary algae was enhanced by high sunshine, and Leay said that was why the oxidation ponds at the Wairau Lagoons were chosen.

"We expect to produce one million litres of biodiesel a year from Blenheim," Leay said. Gerritsen said the process had been designed so that plants could be set up at sewage ponds anywhere, providing a large quantity of fuel close to markets. The new fuel could also be made from dairy farm effluent and waste from food-producing factories.

The Government has a target of five per cent biofuel in its diesel by 2008. Leay said their production would help meet those targets and increase the ratio to 20% as production increased.

Gerritsen said the one million litres produced from the Blenheim ponds would be a commercial-scale trial. It was a drop in the bucket compared with what could be produced from sewage ponds round the country. Aquaflow had applied for government funding and would also raise money from a share float.

Gerritsen said there had been considerable interest in the product overseas. He said the United States Department of Energy had identified algae as the most promising large-scale source of alternative fuel after the last oil shock.

Methane from Forests a Smoke Screen – Nature Article Explained

In a recent study (Nature, 12 January 2006), scientists from the Max Planck Institute for Nuclear Physics, Utrecht University, Netherlands, and the Department of Agriculture and Rural Development for Northern Ireland, UK, revealed that plants produce the greenhouse gas methane.

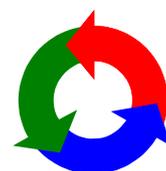
First estimates indicated that this could account for a significant proportion of methane in the atmosphere. There has been extended media coverage of this work with unfortunately, in many instances, a misinterpretation of the findings. Furthermore, the discovery led to intense speculations on the potential relevance of the findings for reforestation programs in the framework of the Kyoto protocol. These issues need to be put in the right perspective.

The most frequent misinterpretation in the media is that emissions of methane from plants are responsible for global warming. As those emissions from plants are a natural source, they have existed long before man's influence started to impact upon the composition of the atmosphere. It is the anthropogenic emissions which are responsible for the well-documented increasing atmospheric concentrations of methane since pre-industrial times.

Emissions from plants thus contribute to the *natural* greenhouse effect and not to the recent temperature increase known as 'global warming'. Even if land use practices have altered plant methane emissions, which was not demonstrated, this would also count as an anthropogenic source, and the plants themselves cannot be deemed responsible.

Furthermore, our discovery led to intense speculation that methane emissions by plants could diminish or even outweigh the carbon storage effect of reforestation programs with important implications for the Kyoto protocol, where such programs are to be used in national carbon dioxide (CO₂) reduction strategies.

The findings were preliminary with regard to the methane emission strength. Emissions most certainly depend on plant type and environmental conditions and more experiments are certainly necessary to quantify the process under natural conditions. As a first rough estimate of the order of magnitude was the global average methane emissions as representative to provide a rough estimate of its potential effect on climate.



These estimates show that methane emissions by plants may slightly diminish the effect of reforestation programs. However, the climatic benefits gained through carbon sequestration by reforestation far exceed the relatively small negative effect, which may reduce the carbon uptake effect by up to 4 per cent.

Thus, the potential for reduction of global warming by planting trees is most definitely positive.

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Related links:

[1] [Schulze, Beck, Müller-Hohenstein: Plant Ecology \(Springer Verlag, 2005\)](#)

Original work:

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Methane emissions from terrestrial plants under
aerobic conditions
Nature, January 12, 2006

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