

Lieberman (Independent, Connecticut) would allow companies to use the CDM to keep their emissions under the cap. But critics see this as a 'dodge' that won't reduce global emissions.

Then there's the issue of which sources and gases to include. The EU scheme applies only to large industrial emitters — and covers only carbon dioxide emissions. Including the vast emissions generated by transportation is problematic. "You can't actually measure all those sources very accurately," says Damien Meadows, deputy head of the European Commission's trading-scheme unit. "Maritime and transport may come in later — but you need absolute accuracy."

Unlike the EU scheme, the McCain-Lieberman bill — and a rival proposal backed by Senator Jeff Bingaman (Democrat, New Mexico) — would include not just carbon dioxide but all six major greenhouse gases. In the sole carbon-emission market already functioning in the United States, the Chicago Climate Exchange (CCX), participants volunteer to sign legally binding contracts committing them to cut emissions of the six major gases by 6% from a pre-agreed baseline by 2010.

But because it is voluntary, the CCX is tiny, trading just 1.23 million tonnes of carbon in 2005, according to Point Carbon, compared with the 362 million tonnes traded in the EU scheme that year. The Chicago market's supporters nonetheless advocate it as the most sensible forum for emerging US trading based on mandatory caps. They say that an experimental trade conducted by Baxter Healthcare of Deerfield, Illinois, last year showed that it would make for good interoperability between US and European markets.

But Henrik Hasselknippe of Point Carbon says that carbon trading could end up happening in any forum that proves to be convenient. "The market tends to make its own marketplace," he says.

Overall, the highest concern of those at the Washington meeting was that the US approach should be tied as closely as possible to the EU scheme. That will require it to contain certain features, such as synchronized phases, and to exclude others that have been mooted in the United States, such as a cap on how high the price of emission credits can go. "A safety valve or a price cap in the United States would make linking incompatible," says Meadows. "I would emphasize the need for simplicity."

There are no good reasons for the two schemes to differ, says James Cameron, vice-chairman of European investment banking group Climate Change Capital. He calls for the US system to mirror the European one. "Don't reinvent, connect," he says. ■

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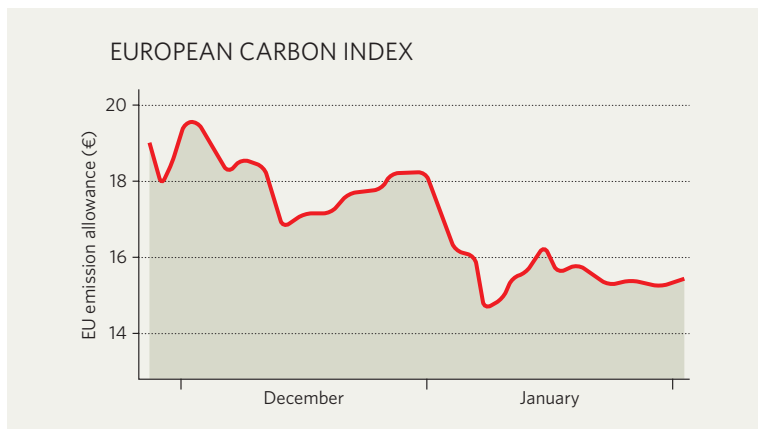
IN BRIEF

SAFETY STEPS The US Food and Drug Administration (FDA) has announced a set of measures to improve the science it does, the safety of drugs it has approved, and the way it communicates safety concerns to the public (see *Nature* 443, 372; 2006). Among these is a pilot programme to assess the safety of drugs with novel active ingredients 18 months after they have gone on market. But Senator Christopher Dodd (Democrat, Connecticut) says the measures don't go far enough and, with Senator Chuck Grassley (Republican, Iowa), he has introduced legislation that would give the drug agency additional powers to enforce the safety of existing drugs.

CELL BANK Richard Branson, flamboyant chairman of Virgin Group, has set up a company that will charge parents £1,500 (US\$2,900) to store blood stem cells from umbilical cord tissue for possible future use in the treatment of blood diseases. Virgin Health Bank, which will run the store in collaboration with London-based investment company Merlin Biosciences, will also put half of each sample in a bank for public health use. Branson says that profits will be donated to fund stem-cell research.

BIOFUELS WINNER BP says it will spend \$500 million over ten years on biofuels research at an Energy Biosciences Institute to be established at the University of California, Berkeley. The university won the race to host the centre against rivals reportedly including the Massachusetts Institute of Technology and Imperial College London. Its bid was backed by Arnold Schwarzenegger, the governor of the state, which will also contribute \$40 million to the centre. It will operate as a consortium that will include the nearby Lawrence Berkeley National Laboratory and the University of Illinois at Urbana-Champaign.

MARKET WATCH



Allowances to emit one extra tonne of carbon dioxide in Europe during 2007 can now be bought for a song — €2.30 (US\$2.99) last week — and all eyes are turning towards the second phase of the European Union (EU) emissions-trading system, which runs from 2008 to 2012.

Carbon futures for 2008 are being traded at €15 — down from almost €20 two months ago and sharply below last April's peak of €32.

Market-watchers say that the decline reflects steadily falling prices for natural gas. The resultant switch from coal to cheaper and cleaner gas by European electrical utilities has dampened demand for emissions credits, as companies grow confident that they will stay below their emissions caps. And on 30 November, the European Commission loosened restrictions on

the number of credits that companies can obtain on the basis of emission reduction projects outside the EU.

As a result, phase-two allowances are selling for a lot less than the €20–30 predicted by London-based consultancy, New Carbon Finance, back in November.

But Guy Turner, an analyst at the consultancy, says that right now it is more important for the market to prove that it can operate successfully, than for it to attain a high price that will force emissions reductions in Europe. "Political integrity is more important than environmental integrity at the moment," he says. "The EU needs to show the United States and China that it's possible to manage the process — that emission trading can be done and is a club worth joining." ■

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