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## A special report on climate change and the carbon economy

# The green slump

## Why investors have been deserting clean energy

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The clean-energy business has had a hard year. Investment in the sector tanked in late 2008, as did share prices (see chart 2). Private equity and venture capital held up a little better, but not much. The beginning of 2009 was “scary”, according to Michael Liebreich, chief executive of New Energy Finance, a consultancy.



The industry suffered particularly badly in the credit crunch. Almost by definition, renewable energy sources have low running costs but high up-front costs. And because they are regulated assets with long-term pre-defined revenue streams, they are particularly suited to debt finance, and therefore tend to have high debt-to-equity ratios (typically 80-20). ....

As the flow of finance to electricity generators dried up, so did the orders to equipment manufacturers. Mr Clover reckons that wind-turbine manufacturers' order books so far this year are

down by 55-60% on the same period in 2008.

But the problem was not just the shortage and cost of capital. The credit crisis also revealed a basic problem with the clean-energy business. Fossil fuels are, in terms of the energy they store, remarkably inexpensive to get out of the ground and sell. That makes dirty industrial processes irresistibly cheap—so long as they are not required to cover the costs of the pollution they cause. Companies cannot be expected to abandon them unless they get a clear signal from consumers or governments that it is in their financial interest to do so. And they are not getting such a signal.

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Second, the world's biggest emitter when Kyoto was signed, America, has not ratified the protocol, and the biggest polluter per person among countries with significant emissions, Australia, did so only two years ago. It might reasonably be argued that the blame should fall on those countries' governments, rather than on the treaty itself; but a treaty in which the most important parties play no part cannot be said to be a success.

Third, some countries have failed to cut their emissions as promised. In 2007 Canada's emissions were 29% above their 1990 level and Spain's 57%. ....

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