CLEAN ENERGY

FINANCIAL TIMES **SPECIAL REPORT** | Monday January 19 2009

Inside
Insulation is the key to change, says the UK's chief scientist
Page 4

www.ft.com/clean-energy-2009

The case for turning the stimulus green

Economic ills threaten alternative energy investment but public spending plans could turn it into a cure, reports **Fiona Harvey**

Becalmed: as conventional energy prices have dropped, so has the impetus in the US to invest in projects such as this wind farm near Palm Springs, California David McNew/Getty

Clean energy companies, which had been flying high on the back of soaring oil prices, tumbled to earth in the last few months of 2008. The boom in renewable and low-carbon alternatives to fossil fuels looked by November to have suffered a sudden bust.

The WilderHill New Energy Global Innovation Index, which tracks the performance of 88 clean energy stocks worldwide, plunged almost 70 per cent between the start of the year and November, with 84 out of the 88 companies seeing their share price fall. This was in sharp contrast to the previous year, when the index rose 58 per cent.

Clean energy sectors suffered particularly as the markets punished companies with high capital needs, and as investors sought safe havens in longer-established businesses, according to an analysis by New Energy Finance, a research specialist.

But against the backdrop of the World Future Energy Summit 2009 in Abu Dhabi, supporters of the sector warn against writing off clean energy just yet. Although this year will be difficult, prospects remain bright.

Michael Liebreich, chief executive of New Energy Finance, says: "2008 was a bruising year for clean energy shares. There was a point when [the WilderHill index] was at a level we haven't seen since September 2003, before the ratification of the Kyoto protocol. . . That's plainly absurd, even in the light of the unsustainable surge in valuations in 2006 and 2007. The growth prospects for clean energy investment remain exciting."

The arguments in favour of clean energy are becoming familiar to most businesspeople. Energy security is now a pressing concern for importers of oil and gas – the dispute between Russia and Ukraine in early January proved a jolting reminder to Europe of the problem of over-reliance on any single energy supplier. The US is equally wary of relying on politically unstable regions such as the Middle East for its fuel imports.

The soaring price of energy in recent years has intensified these worries, forcing governments and businesses to explore alternatives to oil and gas. Added to this has been another growing concern about oil: finding new sources of supply as the most easily tapped resources are depleted, and attention shifts to unconventional sources, such as oil sands, which are more expensive to exploit.

If "peak oil" theorists are correct, this problem will worsen markedly in the next two decades, and prices will rise further.

Climate change is the other reason to switch away from fossil fuels. Rising concentrations of greenhouse gases have outstripped scientific predictions, bringing us closer to what climate experts warn is the brink of a catastrophic degree of global warming.

Scientific evidence has been piling up, and the world is now less than a year away from a conference aimed at forging a new global deal on emissions.

Added to these pressures, pollution has prompted rapidly industrialising countries to seek cuts in their consumption of dirty fuels such as coal and oil.

Governments have sought to respond with fresh regulations. Europe has led the way with its greenhouse gas emissions trading scheme, but other countries have taken steps to set up their own trading systems: Japan, Australia and several US states have all embarked on carbon trading.

Some developing countries have also pursued lower-carbon strategies – China has stiff laws on car fuel economy, India has a national plan on carbon, and Mexico has pledged to halve emissions by 2050.

But these were the policies and realities of the boom. Last year's financial crisis was accompanied by a precipitous fall in oil prices, and vociferous calls for a loosening of environmental regulations that would raise fuel prices.

The economics of alternative energy have reversed sharply: high energy prices made still-costly alternatives such as wind and solar power much more attractive, but as conventional energy prices have dropped, so has the impetus behind renewables. T Boone Pickens, the legendary Texas oilman, signalled the sudden change last year, when he drastically scaled down plans to invest in US wind power.

The lack of credit is also braking the growth of renewables, says Neil Suslak, managing director of Braemar Energy Ventures, a clean energy investor: "The current financial crisis will continue to slow the deployment of new renewable projects in the US in 2009 due to lack of capital available for projects generally, and a reduction in demand for currently more expensive renewable energy by energy users."

Governments have also grown more wary of strengthening environmental regulations that could push up costs to hard-pressed businesses and consumers. European companies succeeded in wringing key concessions last year on the extension of the emissions trading scheme.

On the face of it, then, the recession and financial crisis spell disaster for clean energy as investors take fright and the economics of energy swing back in favour of oil. But as the recession takes hold, a new argument is gaining currency. The need for an economic stimulus, funded from the public purse, is now accepted by governments across the world. The US, Europe, Asia and others are all engaged in reigniting their economies by bringing forward public investments. Some governments are now suggesting this stimulus should be green – that investments should be directed towards creating an infrastructure for energy that would shift economies on to a low-carbon footing.

The US president-elect, Barack Obama, is the chief proponent of a green stimulus. He has pledged $150bn of investment in low-carbon infrastructure, creating millions of jobs. Gordon Brown in the UK has also espoused a "green new deal" to create jobs, and other countries are also considering the idea.

Mr Liebreich notes: "Obama is not the only leader seeing clean energy as an important element in the programmes they are planning to help stimulate economic activity."

That is good news for the clean energy industry, says Mr Suslak. Although past recessions have halted the growth of alternative energy, the problems of energy security and climate change are not going away. "In prior periods where we have had wild commodity swings, the rush to alternatives essentially stalled when energy prices fell. We believe there are many more factors at work now which will keep opportunities alive, but at a more measured pace," he says.

The "Obama bounce" led the WilderHill index to recover by about 45 per cent in December.

Other investors agree that the concept of a green stimulus will lift the sector, despite the worsening outlook. "We cannot ignore the recession," says Ian Simms of Impax. "However, many companies operating in environmental markets are likely to see sustained demand for their products and services.

"If we are going to make tangible progress towards targets to reduce carbon dioxide emissions, there will be a marked increase in some areas, particularly equipment and materials that improve energy efficiency, cleaner fuels and renewable power."

Tom Burton, head of the energy practice at Mintz Levin in the US, predicts: "The investment community will not forsake clean tech in the light of the recession. The fundamental investment theses, broadly speaking, have not changed. There are still large, untapped markets."

He concludes: "It's true that the sector will suffer from a slowdown, but that is no different from other technology sectors, I believe that the clean tech sector will be among the first to emerge from the ashes of the recession."

Inside this issue