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A coat of green

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Still Pictures

A fair wind

Business is becoming more environment-minded, but only because government is pushing

CARBON DIOXIDE is a waste product from turning heavy oil into hydrogen. Pumped into greenhouses to boost plant growth, it is also an input into the market-gardening business, where it can increase productivity by a quarter.

In the Botlek area of the Netherlands, a Shell refinery used to release around 1m tonnes of CO_2 a year into the air. Meanwhile the greenhouses in the area were making their own CO_2. In the winter it was a by-product of their heating systems, but in the summer they had to burn gas to make CO_2 and release waste heat.

Shell realised that its supply of CO_2 and the market gardeners' demand for the stuff could be put together to both businesses' advantage. So, since last year, it has been pumping some of its CO_2 directly into 500 greenhouses full of roses, tomatoes and cucumbers. As a result, its CO_2 emissions into the air are 170,000 tonnes a year down, and the greenhouses are using 95m fewer cubic metres of gas.

Business seems to be buzzing with green activity. Newspapers are full of advertisements from companies parading their environmental credentials. Some of this is driven by consumers. Greenness has become a moral issue, and companies such as Wal-Mart, which are seen by some as oppressing their workers and destroying communities, can improve their image by looking good environmentally.

Some of it is driven by recruitment. Oil companies need talented graduates, many of whom want to make the world a better place. Chris Mottershead, BP's adviser on energy and the environment, says the company is happy with the green splash it has made: "We are attracting the best graduates again. When they come for an interview, they find that people are talking about things that resonate with them."

Some of it is about saving money. In most companies energy consumption has not, until recently, been much of an issue. "Nobody ever became vice-president by cutting the electricity bill," says Alex Farrell, of the Energy and Resources Group at the University of California at Berkeley. But rising electricity prices have focused attention on energy, and companies that cut their electricity bills also cut their emissions, and can boast about that.

Most of the wave of greenery, however, is driven by government. Companies are investing in climate-friendly products and processes because governments have changed the rules to make it worthwhile doing so, and because companies believe that there will be more of the same in the future. That is the main reason for the advertising, the public relations and the quieter but energetic lobbying.

If there is going to be regulation, companies want to help shape it. "We started looking at this issue a few years ago," says David Hone, Shell's group climate-change adviser, "and realised that there would be new products and new rules. It was in our interest to be part of the discussion, in a constructive way." Companies that were hostile to green regulation were not going to be invited to the table, so those that wanted to be involved had to acquire some green credentials and flaunt them.

There were indeed new rules, in the form of Europe's Emissions-Trading Scheme, and industry did well to be involved in the discussions. Economists were arguing for a carbon tax. Industry wanted emissions limited by quantity, rather than by price. "We didn't want a tax," says a BP executive. "We didn't want a system in which the level was set by the budget deficit rather than by the cost of carbon." Industry won.

Economists argued that the most efficient way to run the system would be to auction permits to emit CO_2. Industry wanted permits handed out free. Again, industry won, and has profited nicely from the scheme. The fact that so many European polluters have done so well out of the ETS is one reason why some airline bosses, including Sir Richard Branson of Virgin and Sir Rod Eddington, the former chief of British Airways, are arguing for a trading scheme for their industry; and why American companies are now less hostile to the idea than they were before the ETS started up.

But there is more than just lobbying going on. Climate-change regulation, and the prospect of more of it, is changing the way business thinks about carbon and leading it to invest in new areas.

The Shell greenhouse project is an example of how regulation drives investment. Thanks to the ETS, says Mr Hone, "CO_2 gets attention from people like oil-refinery managers these days. There's a clear price signal. Projects to control emissions are worth investing in."

And there is a bit more investment in cleaner technology and renewable energy than there used to be. The wind business, for instance, is booming, thanks to subsidies in Europe and America. "We've had a wonderful run," says Lorraine Bolsinger, head of GE's green Ecomagination division. "The business is growing at 18%. We've sold out to the end of 2008. We're investing $70m annually in R&D."

Flaunt it

But the green-business boom needs to be kept in perspective. Take BP, which announced last November that it would be investing up to $8 billion in renewables and alternatives over ten years. It sounds a lot, but at this year's rate of capital spending it would be only 4% of BP's total over that period. Shell is spending $1 billion on renewables over five years.

GE has made much of Ecomagination, which is made up of 32 clean-technology products. Ecomagination recently announced revenues of $10 billion last year, and forecast that at the current rate of growth they would rise to $20 billion by 2010. R&D spending on Ecomagination products is to rise from $700m (out of a total of $5 billion for GE as a whole) to $1.5 billion by 2010.

Ecomagination is certainly ahead of the rest of the business, which is growing at around 6% a year. But there is a bit less to all this than meets the eye. First, GE's overall revenues are $150 billion, so Ecomagination does not loom very large. And second, the division's products are not that different from the rest of GE's offerings.

To qualify as part of Ecomagination, says Ms Bolsinger, a product has to be both "environmentally better or inherently green" and also "economically better than what it's replacing". But new products tend to be more efficient than old ones (which is one reason why rich countries' energy efficiency increases by around 2% a year); and if some of that efficiency is used to cut fuel consumption, they can be defined as environmentally better. It would, therefore, be surprising if quite a lot of GE's newer-generation products were not environmentally better than the older ones.

Indeed, much of the Ecomagination product list is made up of new, somewhat more efficient, versions of old products. The GEnx aero-engine, for instance, is 15% more fuel-efficient than the one it is replacing. The new Evolution rail engines are 4% more efficient. Both qualify as Ecomagination products, but sound more like the consequence of run-of-the-mill product improvement than a green revolution.

Shareholders should draw comfort from this. If GE really were the revolutionary it makes itself out to be, it might be quite a risky investment. But the bet it is making is small and perfectly sensible.

GE, BP, Shell and their peers all believe that governments will regulate CO_2 a bit more in the future than they have done in the past. That will tip the market towards greener technologies, and the modest investments they have made in environment-friendly products will pay off. "This is contingent investment," says Mr Mottershead. "We think the political commitment to renewables around the world will grow, and we'll have more of the answers than our competitors will. We're happier with our position than we were three years ago, because the world seems more inclined to change."

There is some evidence that managers are rewarded for being green. "We have made a notable attempt to make this part of the way we analyse people," says Abby Cohen, Goldman Sachs's chief American investment-portfolio strategist. "When you look at the at-risk industries—those that make their living out of environmentally challenging businesses—some players have made a much better job of moving the technology forward."

Ms Cohen points to important pools of assets—such as CalPERS, the Californian state employees' pension fund, and CalSTRS, the Californian teachers' pension fund—that prefer to invest in green companies. The number of such investors may be increasing. At the first conference of the Investor Network on Climate Risk, in 2003, participants represented assets of $600 billion. Last year, they represented $2.7 trillion.

In a paper published last year in the *Financial Analysts Journal*, Jeroen Derwall of the RSM Erasmus University in Rotterdam and colleagues found that the average annual return between 1995 and 2003 on a portfolio of companies that ranked high on greenery was 12.2%, compared with 8.9% for low-ranked companies. Maybe easier access to capital (which the green investors presumably offer) helps. Maybe it's just that companies that are well-managed overall also tend to pay attention to their environmental profile. Either way, greenery seems to go with success.