

A life without subsidy

To cope with environmental regulations, organisations will need to consider whether their current business models are viable in a world where they have to pay the costs of the pollution they produce. By **Tim Kruger**

Sir John Harvey-Jones died recently and the BBC, by way of tribute to him, aired one of the episodes of *TroubleShooter* in which he starred. It focused on a toy manufacturer in the north of England in the late 1980s and early 1990s. Tri-ang had been the largest toy manufacturer in the world before the Second World War, but it had since fallen on hard times. Sir John attempted to help restore the company's fortunes. He failed.

Looking back on it now this is hardly surprising – in fact, with hindsight, it seems inevitable. Globalisation means that low-skill work moves to low-wage economies, and there is little space for such enterprises in the UK any more. While globalisation is something that many people saw coming, a lot of companies still got caught out by the scale of the changes it created.

The adaptation that companies will need to make to cope with environmental regulations will have a similar effect. The changes will be huge and companies are far from prepared. Organisations need to consider whether their current business models are viable in a world where they have to pay the costs of the pollution that they cause.

The cost of pollution

Companies need to consider how much they expect to be paying for carbon dioxide

emissions in the future. There is good reason to believe that these costs will increase substantially over the next few years, and *The Stern Review* calculated a figure for the societal impact of carbon dioxide at \$85 per tonne.

Carbon dioxide is a pollutant: it causes negative externalities – damage to society – by causing climate change. Currently, the principle of 'the polluter pays' is not being enforced; the costs of pollution are not being borne by the polluter and the 'permits to pollute' are less than the cost of the damage caused. This is a de facto subsidy of carbon dioxide producers.

So what should the price of emissions permits be? Assuming you accept Stern's analysis, the principle of proportionality would imply that the price should be \$85 per tonne. This figure, however, is not currently politically feasible. It would cause huge disruption to economies as they struggled to adapt to the new reality and governments would not be willing to destroy their own industries. But eventually, that figure (or whatever figure is determined by further analysis) is where we will end up.

In the long term, the price of carbon dioxide will rise to the cost of the damage that it causes, but what do we mean by the 'long term' and what are the implications of such a cost?

Removing the subsidy

The pricing of carbon dioxide is often referred to as a 'carbon tax'. This may be how it feels, but in reality it is not a tax – rather, it is a reduction in a subsidy. With carbon dioxide producers not paying the cost of the pollution that they are causing, they are in effect being subsidised by society – a transfer of wealth from society to polluters.

It appears inevitable that the 'polluter pays' principle will be enforced sooner or later and many businesses that are dependent on the implicit subsidy will find that their operations are no longer economical. This will cause great turmoil and dissent – companies will protest at the removal of the subsidy which they should not have had in the first place and complain that they will be out-competed by companies that continue to be subsidised in other countries.

The slave trade has some powerful lessons to teach us in this area. A nineteenth-century plantation owner could have justifiably claimed that slavery was integral to the economic viability of the production of rubber and might have complained that British companies would be at a competitive disadvantage if they were no longer able to keep slaves while their Belgian counterparts kept theirs.

The reality is that what society perceives as acceptable changes over time. Once it is morally repugnant to enslave people, it is necessary to factor that reality into the costs of production. The solution to the problem of unethical competitors is not to stoop to their level, but to apply moral and trade policy pressure on them to mend their ways.

Once the moral case is made, society finds expression for its views through regulation. Climate change is already occurring and, once it becomes more apparent, there will be a demand to rectify the situation. Once the conceptual switch is thrown – from 'carbon dioxide emissions are not a significant issue' to 'carbon dioxide emissions are responsible for the problems we are facing' – the reaction is likely to be rapid. It may take some time before people recognise that it is not the imposition of a carbon tax but rather the removal of a carbon subsidy, but when

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they do there may be no half-measures and the subsidy could be eliminated very rapidly.

2007: 'year zero' for litigation

A scientific consensus has formed that, human activities cause climate change and emissions of greenhouse gases cause environmental damage. The question that companies which would suffer from the imposition of a higher carbon tax need to consider is whether opposition to the consensus will be interpreted as principled debate or simply a self-serving argument to put off the day when they have to bear the true costs of their emissions. If it is the latter, then polluters could find themselves on the receiving end of lawsuits and windfall taxes on a scale that makes the tobacco industry's tussles seem insignificant.

Lawsuits can seek damages retrospectively, and activities which were legal at the time of their undertaking can still result in damages being awarded. The tobacco industry was legally selling cigarettes, but still wound up on the sharp end of multibillion-dollar lawsuits. The report by the Intergovernmental Panel on Climate Change, *Climate Change 2007*, concluded that human activity is responsible for current changes to our climate and will result in significant changes in the future.

Last year, 2007, was 'year zero' in terms of litigation: before that date, companies could legitimately claim that no consensus existed on the science – now such denial is no longer credible. In the future lawsuits will be able to point to the report and claim damages back to 2007. Companies may therefore need to hold a contingent liability on their balance

“What would be the impact on power companies, manufacturers and banks – and their customers – if they were forced to pay the full cost of the pollution that they produce?”

sheets for all the greenhouse gases they produce from that date onwards.

An uncertain future

What would the impact on business be if the price of carbon dioxide were \$85 per tonne? Consider the following:

- The price of coal increases by \$280 per tonne.
- The price of natural gas increases by \$4.40 per MMBTU.
- The price of oil increases by \$39 per barrel.

These are the direct translation of a US\$85 per tonne levy on carbon dioxide emissions. In reality, the impact would be greater as this analysis does not factor in the cost of the carbon footprint of obtaining the coal, gas or oil in the first place.

What would the impact of these cost increases be? Initial thoughts turn to power companies. Forced to pay the full cost of the pollution that they produce, they would transfer the costs to their customers. The economics of power generation would shift away from fossil fuels towards nuclear – renewables would make sense without subsidy.

Manufacturers would need to weigh up the carbon footprint of their products and perhaps redesign them. They would need to understand whether it makes sense to manufacture closer to the market they are selling to in order to cut down on transport costs. Decisions on plant and machinery would be tilted further towards more energy-efficient models.

That such considerations should occur to power companies and manufacturers is fairly apparent, but what about banks? A bank may claim to be carbon-neutral in its

activities, dutifully offsetting miles travelled and energy consumed, but at the same time not taking into account the impact of a reduction in carbon subsidies on its core business: lending money.

A bank that lends money to a company that extracts oil from tar sands may be criticised for enabling an environmentally damaging enterprise – that is a moral argument. But setting morals aside and looking at the issue through a purely economic lens, it may still not make sense to lend to that company as the reduction in the carbon subsidy would lead to the project not being profitable in the long term – and that could lead to a default on the loan. Assessing the viability of a project against different prices for carbon dioxide emissions will need to become a routine exercise.

Ethics and economics

This article presents an economic, rather than a moral, case for considering the cost of carbon dioxide at \$85 per tonne. But the moral case cannot be ignored. While no consensus on climate change existed it was permissible – indeed economically responsible – not to consider the cost of carbon dioxide emissions. Now, however, the jury has reached its verdict and companies can no longer take cover behind a lack of consensus. They know that carbon dioxide does cause damage and not assessing the costs of that damage is to be complicit in causing it, with all the legal ramifications that such complicity implies.

How would your business look if carbon subsidies were eliminated? Would you source your raw materials more locally? Would you change your product set dramatically? If you are a bank, which companies would you continue lending money to? If you are a manufacturer, could you find a bank to lend money to you?

If your business is not capable of operating with a price of carbon dioxide at \$85 per tonne, then it will not be sustainable in the long term. ■

For a copy of the research report Green Lean: Delivering extraordinary results by combining your environmental and business initiatives, contact Joanna Bowen at joanna.bowen@corven.com

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