

8 How Europe's risk regulations affect business

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Introduction

In the last century, one of the most formidable challenges faced by humanity was the rise of socialist and communist states around the world. While that threat has for the most part subsided, the 21st century could be defined by a different kind of economic central planning, in the form of burdensome and excessive regulation of business and economic activity.

Judging by the policies it has pursued, the European Union seems to be the world's most risk-averse region. The EU's regulations are motivated by a distrust of business, the politics of special-interest groups, and the rise of the precautionary principle (and indeed, those factors are related). Such regulations have exacerbated the burden of government on commerce, businesses and consumers. We are heading towards what might best be called a 'disutilitarian' society – one which strives for the 'least harm to the greatest number' rather than the greatest good for the greatest number.

Business now faces an environment of uncertainty in Europe. In general, businesses are content to work within an established regulatory framework which defines a level playing field. Large businesses are generally in a good position to comply as they can cover the necessary overheads, and through lobbying, they have a hand at designing regulations with which they can comply.

However, excessive regulation benefits big business at the expense of small and medium-sized enterprises (SMEs). Two-thirds of European labourers are employed by SMEs, and this sector will provide much of Europe's future economic growth. However, it is at a huge disadvantage due to excessive regulation.

This chapter explores how Europe's policy towards climate change and global warming affects businesses. Europe's regulatory responses could have significant effects on a wide range of business sectors, and on economic development more broadly. Business's own reactions to climate change will prove important in balancing its core pursuit of pleasing consumers and delivering a profit to shareholders, while helping humanity to adjust to a changing environment.

Current regulations and their impact

Although much of the regulation relating to climate change exists in international agreements, it would be useful first to understand the general process of how regulation is introduced in the European Union.

The EU has increasing influence over a range of activities in its Member States. Although individual countries determine their own tax and overseas policies, for example, large amounts of regulation of other areas originate from Brussels.

There are two types of European legislation: regulations and directives. Once agreed, regulations have immediate effect throughout the Union after a defined grace period, and do not need to be passed separately into national law. Directives, on the other hand, place a responsibility on EU Member States to enact legislation within a defined time period, normally eighteen months. This has two main consequences: first, that detailed national legislation may differ to some extent between countries, and second, that it may come into effect at different times amongst Member States.

The introduction of EU legislation at the Brussels level is complex and somewhat opaque. This is largely because there are three primary European institutions involved in this process:

- **The Commission** is effectively the European civil service. It is comprised of fifteen separate Directorates General which cover agriculture, the environment, consumer protection and the internal market, amongst other issues. Officials draft regulations, but these individuals have no decision-making powers.
- **The Parliament** was once relatively weak, but now has a major influence on the final legislation which is passed. Committees

of Members of the European Parliament (MEPs) review and propose changes to the Commission's draft legislation, and there is then a first plenary vote. This legislative draft is passed back to the Commission, which (along with the Council) makes revisions to achieve a compromise before the process is repeated and legislation is approved by a second parliamentary plenary vote.

- **The Council** is the final decision-making body and its members are Member State politicians. The body has a number of subdivisions (for instance, the Agriculture Council, made up of Member State agriculture ministers) and it is the appropriate one of these which reviews and approves proposed legislation as it progresses. The Council must approve legislation after it has been passed by the Parliament.

Whichever country holds the European Presidency (currently rotated between the fifteen Member States every six months, a system due to change on enlargement of the EU in 2004) signs the legislation, which is then published in the Official Journal and comes into effect.

In addition to the EU's own law-making, there are some areas of EU policy set by international agreements, such as the Framework Convention on Climate Change and the Kyoto Protocol, which effectively regulate other areas. Exactly how the EU views its obligations under the FCCC and Kyoto, and the policy which flows from its view, will be considered below. As implementation of the Kyoto agenda gathers momentum worldwide, we can expect to see an increasing range of regulations and directives introduced to give this the force of European law.

Moving from the general to the particular, we should examine the current situation in the climate change area.

Climate change and global warming

Climate changes: it always has and always will. However, there appears to be a widespread consensus among many governments, international agencies, some of the scientific establishment, and many NGOs, that the earth's climate has entered a period of unprecedented warming due to the release of increasing quantities of 'greenhouse gases', primarily carbon dioxide through the burning of hydrocarbon fuels.

Consequent to this conclusion, international political deliberations led to the formulation of the Kyoto Protocol, where signatory parties from the developed world have committed to significant reductions in their outputs of greenhouse gases. The initial period covered by Kyoto is 2008–12, with an overall target of a reduction in CO₂ output by 5% over 1990 levels. However, the intention is that Kyoto is only a first step towards more radical emissions reductions.

The Kyoto Protocol is structured such that industrialised countries – calculated to be responsible for 55% of the world's current emissions of carbon dioxide – are listed in Annex 1. To come into force, the Protocol must be ratified by 55 of the total signatories to the Convention and by Annex 1 countries responsible for at least 55% of total emissions in the baseline year of 1990. The European Union Member States have enthusiastically signed up and have agreed an overall regional target of 8% by 2012. The USA has been hesitant towards the process and the Protocol, stating concerns over the Protocol's effects on the economy, and it has clearly stated that it has no intention of ratifying. The USA accounts for approximately one-quarter of global CO₂ emissions, so this rejection is significant.

Many parties including the EU have set emissions targets to comply with the provisions of Kyoto, and have encouraged Russia to ratify Kyoto so that the agreement enters into force worldwide. The EU published a White Paper which established targets for energy use and generation from a range of sources.¹ A subsequent White Paper set out more specific plans for renewable energy.² While markets for hydrocarbon fuels have been deregulated to the benefit of consumers, the EU has started the process of regulating future energy supplies to reduce emissions and to increase the contribution of renewable energy sources. This process will have a minimal effect on global warming, as Bjørn Lomborg points out:³ 'Several models have calculated that the consequences of Kyoto will be a temperature increase by 2100 of around 0.15°C less than if nothing had been done.'⁴ Yet the Protocol will be a significant impediment to economic growth.⁵

Commissioner Wallstrom commented on the 2003 assessment by the European Environment Agency (EEA) of greenhouse gas emissions:

The European Union is moving further away from meeting its commitment to achieve a substantial emissions cut under the

Kyoto Protocol. The progress we have made already needs to be backed up by additional measures. Especially the Member States that are not on track in reaching their targets urgently need to take additional action.⁶

This warning of the difficulties of achieving the emission control targets is borne out by the EEA figures of actual progress towards reaching the 2012 goals.⁷ The EEA reports that total GHG emissions in the EU were reduced by 3.5% between 1990 and 2000. However, further analysis reveals a picture which is more complex:

- Half the total emissions reductions occurred because of special circumstances in two Member States. The deregulation of the UK power generation industry led to a major switch from coal- and oil- to gas-fired power stations, and specific measures were put in place to reduce nitrous oxide emissions in the chemicals sector. In Germany, changes were brought about by restructuring in the eastern Lande and increased efficiency in power generation.
- In the last two years of the decade, carbon dioxide emissions actually rose.
- Nine out of fifteen Member States were not on track to meet their burden-sharing targets.
- Reductions in GHG emissions from most sectors, including industry, were partially offset by a 20% increase in emissions from transport.

The assessment of the ten EU accession countries shows an overall significant decrease in emissions during the decade. This is hardly surprising considering the dire state of their heavy enterprises, which were formerly governed by the public sector, and the massive restructuring which occurred in those economies during the decade.

The EU and Member State governments face the choice either of missing the targets or forcing economic changes which, at worst, could have a dangerously destabilising effect on society.

To some extent, obeying the strictures of the Kyoto Protocol fits with certain Member State energy policies. The contribution of North Sea oil and gas is decreasing: the UK, for example, will soon become a net importer of natural gas. As a region, the EU relies heavily on oil

imports from politically unstable areas. A move towards self-generation of power from renewable sources makes a great deal of sense in this context, and the 'global warming' dogma makes the costs somewhat more acceptable politically. In a similar way, France is in the unique position of generating a high proportion of its energy from nuclear fission and thus it already has a low emission economy. In these circumstances, signing up for the Kyoto Protocol is politically popular and appears to have little or no downside.

The effects of regulation on businesses

Regulation affects business in many ways, both direct and indirect. The most obvious effect is to make business more expensive and difficult.

Energy is a classic area where costs are manipulated in pursuit of government policy. For example, in the transport sector the majority of the price which consumers pay for fuel goes directly to government in the form of tax. This is a marvellous way of generating revenue, as traffic increases inexorably. At the same time, governments can justify tax and duty increases in the name of environmental protection, as a way of limiting road use.

In fact, this cynical argument holds no water: road transport use in particular seems to be rather price insensitive. On the other hand, such increases will eventually meet resistance: the fuel price protests in the UK in 2001 effectively capped further government fuel tax rises. The protests were led by the commercial sector: UK lorry drivers were being put at a significant competitive disadvantage against other European competitors in what has become largely a European rather than a national market.

This particular example in the transport sector is an extreme case of a specific interest group influencing policy directly and very publicly. More generally, there is sustained lobbying activity behind the scenes by a range of pressure groups, each of which is seeking to maximise its own benefits. (See 'Bootleggers, Baptists and the global warming battle', Chapter 9).

The fact that governments are demonstrably influenced by lobbying has led to a mushrooming of pressure groups and business lobbyists in the last few decades, each arguing their often narrow specialist agendas. On the issue of climate change and energy policy, the balance

in Europe tends to be clearly in favour of the environmental lobby, as well as scientists (who obtain research euros from government), international agencies such as the United Nations, and the news media.

Business has almost entirely stopped opposing the lobbying of environmental groups, and instead is conspiring to ensure that regulations protect its own narrow interests. A particularly striking example of this was the dissolution of the Global Climate Coalition, following the initial defection of BP. The company took the path of least resistance by ensuring that it influences energy policy from the inside and is in a better position to benefit from it.

In the wider energy use area, the net effect until recently has been for deregulation of power supplies to reduce consumer prices in both the private and commercial sectors. However, the trend will now be for energy costs to increase, not for market reasons but because governments have started to impose measures to reduce energy use and carbon dioxide emissions to achieve the Kyoto targets. Ian Russell, Chief Executive of Scottish Power, recently estimated that by 2010, electricity prices will increase by 15%.⁸ He suggested that regulatory pressures 'could add approximately 15% in real terms to unit costs by the end of the decade ... It could be more than this depending on circumstances, but the component parts are already clear. The energy efficiency commitment, carbon trading and the renewable obligations are guaranteed to put upward pressure on unit prices.' Would similar changes across the EU drive economies back into an inflationary spiral?

Estimates have been made of the effect of compliance with Kyoto targets on the economies of EU countries. For example, DRI-WEFA produced a series of reports in 2002 for the International Council for Capital Formation, looking at two cases for CO₂ emissions.⁹

- The agreed first period (2008–12) commitment plus reduction by 60% from 1990 levels by 2050.
- The agreed first period commitment plus zero net emissions by 2050.

Some of the main findings for key countries up to 2020 are given below. For the first period, the EU has a target of 8% CO₂ reduction, but individual country targets vary widely.

- In the **UK**, emissions need to be reduced by 11% by 2010 and 14% by 2020. The result for 2010 would be a 57% increase in the price of natural gas and 59% increase in the cost of electricity. The net effect on the economy would be significant: a projection of an increase of 400,000 people unemployed by 2010 and a loss of 1.9% in GDP for the same year. Going forward to 2020, unemployment would continue at the same level, and GDP would still be 1.7% below baseline projections.
- **Germany** has similar targets: 10% by 2010 and 14% by 2020. Industrial energy prices would increase, with natural gas rising by 27% and electricity by 60%. Overall effects on the economy would be greater. GDP would fall 2.7% below the baseline for the first period, and would continue at 2.5% below by 2020. Unemployment would increase by about 1 million in 2008–12, reducing by only about 20% of this by 2020.
- The effects on **Spain** would be dramatic, since emission reductions of 25% and 27% would be needed by 2010 and 2020 respectively. This would lead to industrial gas and electricity prices increasing by 63% and 70%, and petrol by 18%. The GDP would shrink by 4.8% and by 2010, unemployment would rise by 850,000.

There will clearly be a very significant effect on the EU economy if these reductions go ahead. But few countries seem to be on course to meet their initial targets, and it is unclear how much political will exists to force the structural changes needed. Perhaps voluntary free market initiatives will have a larger part to play than has previously seemed likely.

In a world where the Kyoto Protocol and subsequent treaties are fully implemented, globalisation and trade will mean that business will move to wherever costs are lowest. This is a trend that we have seen for decades, as heavy industry moved to East Asia, assembly plants proliferated in countries such as China and Mexico, and even call centres began to relocate to India. In the future, manufacturing capacity could increasingly move from high-cost to low-cost energy countries.

Not that the picture is necessarily equally gloomy for all businesses in Europe; there are always those who benefit. These we might term

the 'silver lining' companies. These would include specialist firms offering their expertise in increasing energy efficiency and reducing emissions. Waste management and environmental protection is a growing business; such companies would undoubtedly focus some of their efforts on activities which reduce overall emissions of GHGs.

How has business responded to climate change?

In 1989, at the very beginning of the global debate about climate change and global warming, a number of businesses formed the Global Climate Coalition to lobby against policies that were being developed at the international level to address global warming (including the Kyoto Protocol). The GCC was obviously a self-interested effort – the members were concerned that governments might enact policies that were short-sighted, in light of scientific uncertainties, and could be costly for their own operations as well as for consumers. However, they did succeed in influencing the debate to consider the economic costs of policy actions, which might have otherwise been missing.

The GCC's members had divisions, though, and they also faced the constant ire and criticism of their environmental critics. In 1993–94, splits emerged in the GCC on issues such as carbon trading and voluntary emissions restrictions, and the GCC lost some of its lobbying power.

In the meantime, European governments were working overtime to negotiate the Kyoto Protocol, and European businesses were being pressured to agree to restrictions on emissions. In some ways, their efforts reflected the European Commission's need to find a justification for its existence and to raise revenues. Vested interests, mainly from the environmentalist community, provided the impetus for the EC to push forward on Kyoto.

In 1997 there was strong international pressure to finish the agreement, and to set targets and timetables. At the time, European businesses were hard-pressed to resist the regulators and it was increasingly clear that they needed to make a tactical decision. Thus, two major businesses decided that they could not continue resisting the basic principles of Kyoto – BP/Amoco withdrew from the GCC, and shortly after the Brent Spar incident Shell also withdrew. These defections led to the withdrawal of other companies, and the ultimate

collapse of the GCC. Of course, when BP/Amoco and Shell accepted the fundamental premise of climate change, it allowed them to influence the regulations that they would ultimately have to bear, both at the European level and at the international level.

Business's approach to climate change in recent years has been somewhat divided between businesses such as Shell and BP, who are attempting to shed the image of being 'big, polluting, profit-mongering oil companies' by publicising their non-oil based activities, and those such as Exxon, Toyota, General Electric and Schlumberger, in conjunction with Stanford University, which have joined together for a 'blue-skies' research project called the Global Climate and Energy Project (G-CEP).

'BP' – a highly recognised brand and trading name – originally stood for 'British Petroleum'. Now, with a new (green) logo, BP portrays itself as being 'Beyond Petroleum' which has afforded some beneficial short-term publicity. BP is a 'leading photovoltaic power supplier', but this is merely reported as part of an overall 'gas, power and renewables' sector, in turn accounting for only 3.5% of group operating profit. In review of its achievements for 2002, the company reports that it cut its emissions of greenhouse gases by 10% and committed to maintaining the same net level of emissions for the next ten years. For this major energy company, the view seems to be that freedom to operate is more easily guaranteed by subscribing to the dominant view on climate change than opposing it on rational scientific grounds. But it remains to be seen whether 'beyond petroleum' will prove a viable, long-run strategy for a company whose profits are still almost entirely based on hydrocarbon energy.

The Ford Motor Company has faced the same problems as General Motors, Daimler-Chrysler and other major car manufacturers: overcapacity and increasingly stringent regulation. Despite producing ever safer and more economical vehicles, they face constant pressure from environmental groups, who often has a major influence on government policy. Ford has responded by working to establish its green credentials while concentrating on its mainstream business of making and selling cars profitably. For some time, Ford has produced cars which run on LPG and ethanol, and cars powered by fuel cells will be introduced in 2004. On the environmental front, Ford has pursued a strategy which probably makes sense – decreasing its own energy use, and increasing the fuel efficiency of its vehicles.

Shell has similarly called for the world ‘to shift to low or zero-carbon alternatives such as solar, bio-fuels and fuel cells running on hydrogen.’¹⁰ It has publicly advocated its investments in renewable fuels, and has criticised its competitors, which have not lobbied in favour of the Kyoto Protocol. In 2001, it announced that it would spend £714 million on research into renewable energy sources.

The G-CEP project illustrates a very different approach by companies to the issue of energy sustainability. According to its website, the purpose of G-CEP is ‘to unite scientific researchers and private industry from around the world in the search for commercially viable technologies that foster the development of a global energy system where greenhouse emissions are much lower than today’.¹¹

Their justification for the project is the ‘possibility that the world will need an energy system that has much lower emissions of CO₂ and other greenhouse materials to the atmosphere in the future’. The businesses who support G-CEP have also been subject to extreme criticism by environmental campaigners, but feel that the best path forward is one which recognises that the fundamental purpose of business is to provide goods and services to consumers, and to generate revenue for shareholders, but still be mindful of the future. It is likely that such a strategy will pay off in the future – for the earth (if lower emissions of CO₂ are necessary), for shareholders and for consumers.

‘Greenwashing’ and its progeny

The 2002 World Summit on Sustainable Development in Johannesburg provided an opportunity for strange bedfellows to publicise their relationships. At the WSSD, the World Business Council on Sustainable Development and Greenpeace co-sponsored activities to encourage governments to ratify the Kyoto Protocol. In a joint statement, they said:

Given the seriousness of the risks of climate change, and the need to reduce greenhouse gas emissions, [Greenpeace and the WBCSD] are shelving our differences on other issues on this occasion and call upon governments to be responsible and to build the international framework to tackle climate change on the basis of the UN Framework Convention on Climate Change and its Kyoto Protocol. We both agree that this is the essential first step.¹²

But despite the efforts of Shell and BP to be green and progressive, environmental campaigners are still displeased because most of their revenue continues to come from hydrocarbon fuels. An NGO awarded both Shell and BP (two major companies who form part of the WBCSD) a 'Greenwash' award during the World Summit.

Environmental campaigners have cynically responded to business's efforts to promote less carbon-intensive energy by referring to those efforts as 'greenwashing.' They claim that business is 'greenwashing' when it engages in any economic activity which is not its core activity:

if a company's core (or main) business is based primarily on an activity which has been identified as significantly contributing to environmental pollution or destruction, there is a strong presumption that any assertions that it supports environmentally sustainable development are greenwash.¹³

In our experience, for every company that is genuinely trying to improve its social and environmental performance, there are many more that are merely engaged in 'greenwash' (PR exercises designed to give the impression of a greener company) but with little real change to corporate activities.¹⁴

Of course, companies' efforts are motivated by enlightened self-interest, since they may well be investing now in technologies which will provide major new revenue streams for them in future. In other cases, business reacts to pressure groups to address particular claims, in order to secure freedom to operate in their mainstream businesses. But either way, business is responding rationally to concerns driven by environmental campaigners.

Now it seems that such accusations have led environmental campaigners to suggest that a global agreement on corporate accountability should be negotiated and implemented, so that corporations will be subject to an international body of law which governs their activities.

Friends of the Earth International (FoEI) lobbied for such a convention at the WSSD:

Unless all corporations are made equally accountable for their environmental and social impacts there remains little incentive for a general improvement in behaviour. What is more, those

corporations which want to become more socially responsible are being held back by competitors who can undercut them by continuing to externalise costs and by demonstrating no responsibility.¹⁵

Such an agreement would entail a global set of 'binding corporate accountability' rules to make corporations legally accountable not just to their shareholders but to any group who claims that they have been harmed by a business's activities. FoEI and other organisations continue to lobby, both explicitly (ie. for a specific UN convention) and implicitly (by including such rules in other agreements or through the WTO), for this agreement.

Of course, most smaller businesses are focused on day-to-day activities, and they are less subject to outside criticism from NGOs and the public. They also are less involved in lobbying to design regulation to benefit their interests. In the future, small businesses will probably face a regulatory requirement to address corporate social responsibility issues, and this will mean increasing costs of compliance. In practice, many businesses already cover these issues in a piecemeal fashion via employment law, regulations on waste management and initiatives designed to ensure the meeting of Kyoto targets, such as the UK climate change levy. Yet again, it will be the innovative small company sector which will suffer disproportionately from increased regulation.

Business and the environment

But are global rules needed to force businesses to be environmentally sustainable? There is good reason to believe that companies which operate in a market framework have largely always acted to reduce industrial waste and pollution, thus benefiting the environment. Pierre Desrochers, an economist who works on industrial ecology issues, explains

Virtually all contemporary experts on sustainability assume that traditional economic development was characterised by a linear approach in which materials and energy were extracted, processed, used and dumped in a linear flow into, through and out of the economy. Much historical evidence, however, indicates that industrial resource recovery was much more widespread than is currently thought ...¹⁶

Today's companies are getting better at explaining their core activities in such a way that consumers, and the public, understand the environmental benefits of their production processes and products. This is a challenge for businesses, because, as Desrochers suggests, 'Individuals are more familiar with municipal waste disposal practices than industrial behaviour towards by-products ... Current environmental regulations are squarely based on the notion that industrial by-products are a nuisance to be destroyed rather than potentially valuable inputs.'

Desrochers concludes that:

Our ancestors did not expand their economies by simply doing more of what they had already been doing, but by inventing new kinds of goods and services and by creating wealth out of what had hitherto been considered valueless things. It therefore seems fair to say that all of today's recyclable products were considered waste at one point in time, before value was created out of them through the use of human creativity and entrepreneurship. The market process is, of course, not perfect ... It may be that in today's economies, regulatory barriers and price-distorting subsidies are more serious obstacles to creating value out of by-products than traditional market incentives.¹⁷

Successful companies today are no different from those in the past. Their business is to satisfy consumers and generate profits for shareholders, and often to reinvest their profits into researching and developing technologies which yield less energy- and resource-intensive production of goods and services. Businesses, of course, do not set out with the intention to pollute the environment, use up natural resources, or encourage profligate consumption, as alleged by many environmental campaigners. As Desrochers indicates, businesses naturally strive for improved efficiency and profitability – and generally, this means that their activities, and the goods and services they produce, are more and more environmentally benign. What has happened, though, is that businesses are better at communicating to consumers and the public about how their activities fit in with, and most importantly do not undermine, people's core values and priorities.

In either case, it is clear that some environmental NGOs are motivated by a desire to both lighten humanity's footprint on the earth

and promote widespread human well-being. Moreover, some of these groups even understand that it is important for business to operate in a flexible and conducive environment to achieve such goals. However, other environmental NGOs, even some considered part of the ‘establishment’, clearly seek to undermine business, or at least they are uninterested in the impact that regulations might have on business, because they are narrowly focused on environmental protection, regardless of the benefits or problems for humanity which result from it.

It is these NGOs who are largely cynical about business and the environment. Their self-interest is obviously not to earn a profit for shareholders and to please consumers, but to convince people of the urgency of their claims. To that end, they will continue to promote the myth that the earth is in peril because of consumer culture, and that business is the cause.

Alternative approaches to risk regulation

The primary purpose of good regulations should always be to protect the citizen or society at large. The trouble is that the net of protection is cast wider and wider in Europe especially, with no well-defined limits to government’s intervention in how companies conduct their business. As we have seen, continued reliance on the precautionary principle means that there is no accounting for cost/benefit relations, and this is not a rational basis for regulation.

Since individual regulations have specific aims, it should be possible both to justify their introduction and to monitor their effect. The regulatory cycle, in an ideal world, would therefore look something like this:

- Identify preventable harm and/or desired positive outcome.
- Propose and assess possible regulatory routes to achieve the outcome, including full cost/benefit analysis and assessment against agreed objective criteria.
- If justified by the analysis, introduce appropriate regulations with effective enforcement regime.
- Ensure that regulation is broadly based. Consider input from all stakeholders but do not allow one to have more influence than another.

- Monitor the effect of the regulation, both for the desired outcome and unexpected consequences.
- Review the data after an agreed time period.
- If necessary, repeal or modify the regulation.

In practice, regulation is too often influenced primarily by lobbying from one group of stakeholders – whether business, environmental groups or other special interests – or it is introduced with insufficient evaluation of alternative approaches. Even worse, if such regulations prove ineffective, they are often either replaced by more stringent versions, or simply left on the statute books to be enforced arbitrarily.

Lobbying is, unfortunately, an integral part of the development of regulation. Sometimes, its effect can be pernicious, particularly if one view dominates. This is clear from the increased influence of the environmentalist lobby, particularly in Europe's enthusiasm for meeting Kyoto targets, and from the influence of large businesses which have a hand in designing regulations which are designed to help their bottom line, but – whether intentional or not – provide a competitive disadvantage to their smaller competitors.

Climate change policy will have a great and widespread effect on both business and society. Are there more constructive ways in which this issue could be tackled? Indeed, are there bodies other than national governments who are better placed to take overall responsibility? Politics may be the art of the possible, but it also has short time horizons. Political bodies which look no further into the future than the next election are arguably ill-equipped to handle the development of long-term, consistent strategies to deal with issues of global significance on a generational timescale.

Business, unfortunately, often has equally limited time horizons. The need to meet annual (and quarterly) financial targets often leaves long-term strategy by the wayside. Activists in the environmental and consumerist organisations, on the other hand, often have a much clearer, if blinkered, vision of the future: they know what their long-term goals are, and use whatever tactics are necessary to work towards them. Clearly, short-term successes are needed, but the effectiveness of their lobbying is derived from the tenacity that comes from moral certitude.

But the over-regulation we are now suffering is not just due to lobbying: it is also cultural. Our current manner of assessing and dealing

with risk has two major drawbacks. First, we have excessively precautionary regulation, and second, we have excessively precautionary enforcement of otherwise workable regulation.

The answer to these problems could lie in depoliticising the enforcement process and entrusting risk assessment and management to experts – bodies of independent civil servants who are charged with rational decision-making based on sound scientific advice. Committees of experts from different countries who assess the same dossiers may not always agree fully on the amount of data required, but alignment on the scientific facts is common. It is only when the recommendations are passed to politicians that irrational decisions are sometimes made.

All the evidence is that Americans are equally well protected from risk as their European cousins: rational decision making can clearly be effective. However, this is not the full story: US regulations are still made politically and influenced by lobbying, which tends to be in favour of business interests. The US economy and business sector is not disadvantaged by this overall, although the balance favours major business interests and this may not be beneficial for smaller companies. The conclusion is that regulation, however intended, will be a disadvantage to smaller businesses, while favouring larger companies.

Deregulation of risk management

The problem with creating a global framework and targets to address climate change is the same as that which beset the Communist bloc and led to its downfall: central planning and outcome-based approaches do not work. The solutions envisaged by the Kyoto Protocol and beyond comprise enormously complex and interdependent systems to force down emissions of greenhouse gases. Such systems have too much inertia to react quickly to changing circumstances, and are unlikely to achieve anything.

So rather than relying exclusively on government to regulate risk, what framework would encourage businesses to address risks while still maintaining profitability?

Our goal should be to enable ourselves to react to new knowledge and new circumstances. So far, flexible market economies, with regulations based on sound science and rational risk assessment, and a competitive and fair playing field for all actors, have been shown to be

the best system to both generate wealth and protect the environment. In the decades after World War II, it was the free market economies of western Europe which became increasingly prosperous while pollution levels were dramatically reduced. By contrast, the old eastern bloc countries had stagnant economies with appalling levels of pollution.

Many existing factors will continue to make industry more energy-efficient, if only through the competitive impetuses of the market. Equally, there are many good reasons to rethink and improve transport systems to benefit everyone, rather than rely on punitive regulatory measures to reduce CO₂ emissions.

Businesses, particularly small ones, would benefit from this system, because they would be free to do what they do best: provide their customers with products and services they want, at prices they can afford, and to do so profitably. If customers or citizens are dissatisfied with their practices, they can change the company's behaviour by not purchasing their products, that is, by boycotting them.

We are uncertain what will happen to the earth's climate. In fifty years' time, we may or may not be worried about global warming; we may once again be concerned about global cooling. However, it is certain that scientific developments in the energy and transport sectors will have been enormous. In turn, business's application of this science will bring huge benefits to society. These benefits will inevitably present some negative effects. But the appropriate response is to rationally address and manage such problems, rather than attempt to eliminate risk through regulation, or even worse, through prohibiting such innovations altogether.

Conclusions

Present EU energy policy is leading us into possibly the worst of all possible worlds: a strategy which is unnecessary, because the science of climate change is uncertain; ineffective, because the EU's reductions in emissions will not significantly affect climate change; and negative for nearly everyone in society.

Business will carry a large proportion of the burden – their profitability and overall economic growth will suffer. Consumers will suffer because the price of goods will increase, since business will pass on higher costs of compliance with regulation to consumers.

Larger businesses, particularly those able to influence regulation to their own advantage, may increase their competitiveness, but small businesses are likely to be most negatively impacted. Those businesses which have the flexibility to do so will increasingly relocate to developing countries and contribute to the decline of Europe as an economic force.

However, the internal divisions of the European Union make it difficult to pursue policies to which major Member States are not committed. Even then, ensuring compliance is difficult, and few effective sanctions are available against those who fall out of line. As businesses will ultimately pass on the costs of the Kyoto Protocol to consumers, will European citizens tolerate its impact on their lives? If not, public opinion may force a change in policy to allow us to adapt to change.

Companies have already helped us to solve a huge problem during the twentieth century, which was feeding a growing population while maintaining the earth's wild and biodiverse land. Modern agricultural technologies developed and marketed by companies have allowed us to largely achieve that goal, though progress must still be made.

Today, the world's most urgent environmental problems are local – indoor air pollution, dirty water and lack of sanitation, and preventable diseases are the cause of the most problems in the world, and these are found mostly in poor countries. Companies should play an important role in solving these problems.

Global warming may or may not be a reality, but business should be enabled to do what it does best: innovate and produce goods and services in a manner which ensures that humanity's footprint on the earth is ever-lighter. And companies should realise that consumers are also citizens – they care about protecting the environment, and want to feel secure that the activities of business are not undermining that goal. Whether or not global warming presents a real threat, business is an agent of change, and will continue to help humanity to adapt to change.

Notes

- 1 European Commission (1995).
- 2 European Commission (1997).
- 3 Lomborg (2001), pp 258–323.
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