

The Corporate Citizen – friend or foe of sustainable development?

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“Industry extracts materials from the natural resource base and inserts both products and pollution into the human environment. It has the power to enhance or degrade the environment; it invariably does both.”

(World Commission on Environment and Development 1990, p. 250.)

Abstract

Will corporations help or hinder efforts to achieve sustainable development? This question is addressed by working through the three main kinds of business responses to environmental risks that have been identified by Doyle and McEachern - rejection, accommodation and environmental. This paper links these categories to discursive struggle between neo-liberalism, weak and strong ecological modernisation respectively using examples from the USA, UK and Australia. It is argued that knowledge and discourses have a significant impact on the stance adopted by firms and on their capacity for change. This in turn has a major effect on the ability of the state to implement environmental policies. These observations are related to the broader concept of reflexive modernisation.

Introduction¹

Last year a film entitled *The Corporation* was released that caused something of a stir in several countries around the world (Achbar et al. 2004). A large part of this documentary was dedicated to exploring the negative impacts of corporations on people and the environment. It also, however, spent some time looking at firms that had attempted to be more responsible. In contrast, Lomborg's (2001) book *The Skeptical Environmentalist*, had suggested that environmental damage was not so

severe and that solutions have come largely from the corporate sector. So is business part of the problem or part of the solution?

The significant role assigned to industry by sustainable development policies around the world makes the paradox of good and bad corporate citizenship a significant complication in environmental governance (WCED 1990). A large proportion of environmental interventions by the state have been directed at exerting some influence on corporations to make them more sustainable, but the relationship between business and the state is complex. Various studies over the last four decades have indicated that there are both visible contests and hidden dimensions to the power relations that have supported or challenged these institutions and their responses to environmental risks (see for example: Shah 2005; Dryzek et al. 2003; Beder 2002; Doyle & McEachern 2000; Landy et al. 1994; Hoberg 1992; Rosenbaum 1991; McEachern 1991; Lindblom 1977; Lukes 1974; Crenson 1971). Further, the rise of the environment movement has generated something of a clash of discourses² with neo-liberalism, administrative rationalism, and ecological modernisation in particular exerting varying degrees of influence over public policy (Dryzek 1997). These power struggles have been played out in the history of successes and failures in environmental governance.

While every firm has responded differently to environmental risk and increased government intervention, McEachern (1991) suggests that they can be grouped into three broad categories (see also Doyle & McEachern 2000):

1. Those firms that rejected the seriousness of the risk or the need for change;

2. Those that sought to accommodate the rising tide of concern and regulation with modest reforms, and;
3. Those that attempted to create genuinely sustainable industries independently of the actions taken by the state.

Each type of response is dealt with in turn in the sections that follow. Section one considers the neo-liberal rejection of the seriousness of environmental risk. Section two looks at the way some firms have attempted to accommodate environmental concerns by adopting weaker versions of ecological modernisation. Section three then considers how a few industries have adopted an environmental approach that goes beyond simply responding to the prompts of state intervention or community activism and is built on the stronger version of ecological modernisation. The final section considers whether the changes in corporate behaviour have been enough to provide an adequate basis for responses to environmental risk.

Rejecting environmental risk

In rejecting the need for environmental intervention, corporations may adopt a number of, often inconsistent, strategies. The first is usually to deny the reality of an environmental risk (the 'Promethean response'; Dryzek 1997). When this position becomes difficult to sustain in the face of mounting evidence to the contrary, there is often a switch to more subtle stances of neo-liberalism, particularly in the face of scientific debate regarding the level of risk. The term 'neo-liberalism' is used here to refer to a broad set of discourses that grew out of classical liberal idea of autonomy. On the one hand neo-liberals are distrustful of state intervention and see it as too

authoritarian, except where it pertains to providing basic security, law and order. On the other hand, they are keen to defend private property rights and generally supportive of the market, seeing it as a more efficient way to allocate resources than the state. There are many diverse groups within this set of discourses and four of the more common variants are libertarianism, utilitarianism, economic rationalism, and (in the USA) neo-conservatism. While these variants often disagree on many points, they tend to play down the seriousness of environmental risks, oppose regulation by the state, and assume that market mechanisms will cope with any problems. The influence of neo-liberalism on government can be seen in the shift away from environmental regulations and towards economic prompts in the 1980s (Dryzek 1997; Eckersley 1993; Pusey 1991).

One neo-liberal argument suggests that no action should be taken until incontrovertible scientific proof is found because otherwise costs might be needlessly imposed on firms, or it might be argued that there is no viable alternative. Another strategy is to admit that a problem exists, but claim it is only minor and that firms need to keep operating to earn the money that could fund remedial action or develop better technology. Some opponents take this one step further and admit that a risk is serious but argue that either the cost of change is far too high and it would be cheaper simply to adapt to the environmental impacts, or that humanity will eventually develop technology that will fix the problem (Beder 2002; Doyle & McEachern 2000; DiLorenzo 1993; Hoberg 1992; McEachern 1991). All these strategies have been deployed with regards to climate change and they appear in various

guises in Lomborg's *Sceptical Environmentalist*. The overall aim is to play down the risks and shore up the power of business over government. In the process, corporations further undermine the faith of the community in the ability of mainstream institutions to address environmental risk.

I would argue that neo-liberal rejection is evidence of reflexive modernisation at work (although some readers may disagree) because it is apparent that these productive institutions find it difficult to acknowledge and respond effectively to the risks they have created as part of their normal operation (Beck 1992). Modernisation is the process of historical institutional change that began with the enlightenment of the 17th-18th centuries. It manifested itself in the industrial revolution, the rise of scientific knowledge, the spread of liberal democracy, and the proliferation of market economies. Beck (1992) argues that while this process of change brought many benefits, by the middle of the 20th century modernisation became reflexive by undermining itself with the negative impacts that it produces as part of its normal operation. As industrial production has spread, for example, it has become the main foundation on which modern society is built. The side effect of this transformation, however, has been to generate environmental risks that seriously threaten the survival of humanity and the planet. This effect has spilled over into politics where the struggle between classes over the distribution of goods has been overlaid by a struggle over the distribution of 'bads', such as pollution and toxic waste. Hence the 'class society' has become the 'risk society' according to Beck. The process encourages community groups to confront industry and the state with demands for

change. Beck referred to this as the rise of a sub-politics that dealt with issues that the main institutions of power were not able or willing to address.

Moving away from rejection

On the bright side, some firms do not remain stuck in rejection and later move on to address environmental concerns despite their initial recalcitrance. One good example is 3M that fought hard to stop the introduction of the US Toxics Release Inventory. Once the firm was forced to conduct an audit of its operations, however, the executive was shocked by how much raw material was being wasted in inefficient plant processes. They began a Pollution Prevention Pays program that continues to this day and has substantially reduced their pollution per tonne of product. Many of the changes implemented were quite simple, such as improving batch monitoring to catch problems before they resulted in spoilage, or switching to water based adhesives to replace petrochemical solvents (Gottlieb, et al. 1995; Porter & van der Linde 1995). But not all changes are so easy to make and in 2002 the company announced that it would stop making Scotchguard because it couldn't change the product formulation or process to make them less environmentally damaging (Fieweger 2002).

Such positive stories are encouraging, but they need to be viewed with some caution (Underwood 1993). Firms may begin a process of improvement but backslide years later. Also, despite reducing its waste per tonne of product, 3M grew so rapidly that it still produced more pollution overall (Athanasίου 1996). If society is to achieve ecological modernisation, the efficiency gains need to outstrip the growth in

production. Finally, even the new 3M is still a long way from being sustainable and relies heavily on non-renewable resources and a greenhouse gas intensive energy supply. The ability of the firm to move away from the position of rejection, however, is still a very positive sign and gives some hope for powerful firms that still remain recalcitrant.

Barriers to change

Several studies of industry in the USA, UK and Australia have touched on the barriers that discourage corporations from taking up cleaner production, pollution prevention programs, best practice, or other initiatives based on the range of ideas from various versions of ecological modernisation (see for example: Eckersley 2004, 1995; Dryzek, et al. 2003; Suzuki & Dressel 2002; Beder 2002; Van Berkel 2000; AtKisson 2000; Clayton, et al. 1999; Goldfarb 1999; Weale 1998; NCEP 1995; Australian Manufacturing Council 1994; Cebon 1993; UK Department of Trade & Industry 1991). Such studies offer some insight into the institutional context that encourages rejection among some corporations that seek to subordinate the environment movement, while shoring up their position of power over government.

Finding the precise reasons for the existence of these barriers to change is a difficult task but there do appear to be at least two significant factors at work. First, there are clearly entrenched political and economic interests that often feel threatened by proposals for change. Second, the state and business institutions that emerged from the 19th century have encouraged development to follow a trajectory of rapidly accelerating resource use and waste. Changing direction towards a low

resource use, low waste trajectory therefore meets with the considerable resistance generated by institutional inertia.

While each study has focussed on different aspects of the issue, there are some common themes that emerge that can be grouped into two categories: factors external to the firm, and factors internal to the firm. External factors include regulation, economics and information (the three modes of intervention adopted by the state), as well as the availability of cleaner technology. Regulatory barriers to change include: regimes that do not encourage firms to go beyond compliance; that do not provide a constant long-term direction for change, or; are not backed up with a consistent political will of enforcement. In short if the state is not persistent, consistent, and committed to change, industry sees no need for investing in new technology. Economics, on the other hand, is a double-edged sword. If a firm is operating in a sector with low profit margins or if the perceived economic gains of change are low, improvement in environmental performance is unlikely. A crisis, however, can provide a catalyst for change if the firm sees its future threatened by a do nothing response. Information plays a role in a number of ways. If there is little awareness of cleaner production options among executives, or if there is no risk to the public reputation of the firm from poor performance, change is unlikely. Finally, change will be impeded if cleaner technology is not readily available, if there are some doubts over its reliability, or if there is a shortage of skilled labour that is able to install, operate and maintain new equipment.

Internal factors include the institutional structure, corporate culture, and capacity for learning that are inherent within a firm. Firms that have a 'top-down' hierarchical decision making structure tend to be more resistant to change than those that adopt some form of industrial democracy. Consulting a workforce with a hands-on knowledge of the production process allows for the harnessing of local knowledge and gives employees some sense of ownership of the change. Overall, the executive corporate culture is of paramount importance. A commitment to consult and innovate is more likely to lead to change than more insular or risk averse attitudes. Finally, a capacity for the institution to learn by investing in research, development and deployment of new technology will increase the uptake of cleaner production.

My experience as an industrial chemist and technical manager in the manufacturing sector bear out the findings of these studies. Time and again I met individuals who were uncomfortable with the behaviour of the firm they were working for, but were forced to over-ride their concerns by the role the institutional structure forced upon them. Some got frustrated at having their proposals for improvement rejected or deferred, while others found ways to make small modifications that led to waste reduction. In another case, I helped to run a one-day professional training seminar on the National Pollutant Inventory and cleaner production in conjunction with the Queensland Environmental Protection Agency and the engineering consulting firm SKM. As with the 3M example, at first the corporate managers and technicians present appeared to be quite hostile to the

imposition of the inventory, but by the end of the day many had warmed to the idea of using it to identify and eliminate waste.

Knowledge is a key resource in the discourses adopted by corporations, government and the community. If industries know that there are alternatives, and that cleaner production can increase profits while reducing waste, they will be more likely to change. If governments know that environmental regulations do not cause job losses, but merely shift resources between different sectors of the economy and may even stimulate the growth of new industries, they will be less reluctant to intervene. (Several studies have supported this position, including: Goodstein 1999; OECD 1996 & 1984; and, NCEP 1995). If the community is aware of the risks to their health and future, they will be more likely to demand improvements. Many of the firms that started by rejecting environmental risks have since moved towards a more accommodating position, but it is clear that a base-line of regulation is necessary to keep the recalcitrant industries from backsliding into a high polluting position.

Accommodating environmental concern

Firms that attempt to accommodate concerns about environmental risks come in a number of different shapes and sizes. What separates them from rejection is that they are more willing to publicly acknowledge that environmental risks exist, although a number of caveats are attached to this admission (Doyle & McEachern 2000; McEachern 1991). First, it is assumed that the seriousness of these risks has been overstated, a point that is in accord with the views of Lomborg (2001). Under accommodation, the risks do not threaten the survival of the planet, but simply pose

another set of issues that can be adequately addressed with minor changes to the normal process of established decision making procedures. Second, it is argued that the most appropriate response is improved management of resources by corporations. If firms are more careful about the way they produce things, it is assumed that the problems will be solved. Third, it is argued that strict government regulation is no longer needed because industry has now recognised the problem and is working on solutions. Further, as the main developer and user of productive technology, it is assumed that the corporate world is in a better position to solve the problems. Finally, the role that governments are allocated is one of facilitation. They are there simply to help clean up past mistakes, assist firms to develop better technology, and explain to the public why there's no need to worry.

Accommodation is underpinned by the weaker version of ecological modernisation that emerged in the 1980s in Western Europe (Mol and Spaargaren 2000; Weale 1998; Dryzek 1997; Christoff 1996). This idea rapidly gained popularity because it appeared to offer both a cleaner environment to the greens and cost reductions to business. Ecological modernisation is a discourse that argues that although they have gone astray, the state, industry, and the market can all be made environmentally friendly if they are redesigned. Fundamentally, it is assumed that environmental risks can be treated as challenges that arise from the inefficient use of resources and that economic growth can be de-linked from raw material use through better technology. It is argued that there are many 'win-win' scenarios where what is good for the environment will also be good for business because cutting waste

should also cut costs. There are many versions of this discourse, ranging from the weak techno-centric view that focuses on technological fixes, to the stronger calls for a restructuring of the market and the state to make them more democratic. The stronger versions have a great deal in common with ecological democracy, calling for institutional restructuring to increase community empowerment in decision making. Mol and Spaargaren (2000) group Beck's risk society theory and the stronger versions of ecological modernisation under the reflexive modernisation umbrella.

The discourse of ecological modernisation manifests itself in institutional reforms such as the adoption of environmental management systems. Many European firms, for example, have adopted the Eco-Management and Audit Scheme (EMAS), some Australian industries took up Best Practice Environmental Management (BPEM), and firms in the USA have created Pollution Prevention Pays (PPP) programs. Internationally, a new environmental management regime has emerged from the International Standards Organisation 14 000 series (ISO14 000) that enable firms to gain accreditation for their commitment to monitor and continuously improve their environmental performance.

On the positive side, accommodation and the change of management practices that it entails can lead to significant improvements in environmental quality. (See, for example, the historical improvements in environmental quality registered by many on-line pollution inventories: US EPA 2005; UK EA 2005; DEH 2005a). Some agencies have released positive case studies on their websites where they have used their expertise to help individual firms adopt cleaner production practices (see, for

example: DEH 2005b). Economic incentives have also been created in the form of grants, tax breaks and pollution charges to induce such changes in corporate behaviour (Eckersley 1995).

On the negative side, some firms have adopted the rhetoric of accommodation, but done little to change their actual practices or impacts. Shell, for example, was praised for adopting sustainable development as a key goal in the mid-1990s and a senior executive even went so far as to say that in the long term the firm would have to get out of fossil fuels and into renewable energy (Callenbach, et al. 1993). At the same time, however, their operations in Nigeria were being heavily criticised for their impacts on the ecology and communities of the Niger delta. The situation was so bad that the company's senior environmental engineer resigned and blew the whistle on what was happening. This apparent contradiction has led to the questioning of the company's commitment to sustainable development (Yearley & Forrester 2000; Howes 1997; Catma Films 1994).

'Greenwashing'

Similar cases where a firm's actions don't meet its rhetoric have led critics to coin the term 'greenwashing' (Beder 2002; Athanasiou 1996). This is where firms see an opportunity to use environmental concern as a marketing tool but fail to make substantial changes to their operations to meet their market claims. A classic example is a firm in Australia that released a new range of cleaning products under an environmentally friendly name, in green bottles, and with silhouettes of dolphins on the label. The products were in fact the same as they had always made, only the

packaging and marketing had changed. One claim, for example, was that the dishwashing liquid was environmentally friendly because it contained no phosphate. Phosphates can wash into waterways, act as a fertiliser, and lead to algal blooms that reduce the oxygen content of the water and kill other aquatic life (a process called eutrophication). This issue had been widely publicised at the time, hence the marketing strategy. The problem is that phosphates are not normally used in dishwashing liquids, so this was no better than any other product. (The strategy failed and the brand name was taken over by a different firm in the 1990s that actually did improve their formulation.) Such actions, however, are often exposed and lead to a general cynicism amongst consumers, even those who want to adopt green purchasing strategies to encourage firms to change.

Accommodation is therefore a double-edged sword. While it can lead to improvements, the risk of greenwashing is high. When dubious practices are exposed, both the individual firm and general reputation of corporations suffer, adding to the reflexive sub-politics of groups that are disaffected with the mainstream institutions of power. Firms that might adopt improvements, however, would be more likely to respond to economic prompts provided by governments, but is it possible for industry to be sustainable?

Environmental corporations as an agent of change

When McEachern (1991) first proposed the three types of corporate responses he noted that the environmental category was almost empty. More than a decade on, the number of firms in this group remains very small. Environmental industries accept

that environmental risks are serious and include social responsibility as a core principle. This means that they go beyond a narrow focus on technical solutions at the weaker end of the ecological modernisation spectrum (Mol & Spargaaren 2000; Dryzek 1997; Christoff 1996) to incorporate wider internal institutional change. Such firms:

- ◆ Are committed to the sustainable use of renewable resources, so that the firm can continue to operate in the long term.
- ◆ Avoid hazardous chemicals or animal testing.
- ◆ Seek to eliminate, reduce, reuse or recycle waste.
- ◆ Attempt to design genuinely green products and processes.
- ◆ Undertake to be honest in the way they advertise their products and practices.
- ◆ Aim to treat their employees fairly in terms of working conditions, health and safety, and remuneration.
- ◆ Establish a less hierarchical decision making structure to provide a higher level of internal industrial democracy.
- ◆ Adopt a partnership approach to local communities and their organisations.

These features (that have been distilled from a range of case studies in the literature so far cited) break down some of the barriers to change that are prevalent in firms that reject environmental risk. Unlike accommodation, they adopt a new institutional structure rather than attempting to adopt slightly different management practices within a pre-set hierarchy. Increasing democratic decision making by empowering the workforce and local community are particularly important because they hard-

wire into the system a feedback loop that should help to correct problems in future. It also makes the adoption of greenwashing strategies less likely.

Case study: The Body Shop

One of the best examples of an business of this kind to date has been The Body Shop that was started by Anita Roddick in the 1970s as a single shop selling toiletries.

Products were made from plant extracts, they were not tested on animals, and they were sold in plastic bottles that were refilled or recycled. The business expanded rapidly and by the end of the 1980s the company had been floated on the stock exchange with a franchise network of stores that extended around the world.

Suppliers of raw materials were often community cooperatives in developing countries that were paid a fair return and controlled their own production.

Advertising was kept to a minimum and the company supported campaigns for human rights and the environment (Suzuki & Dressel 2002; Roddick 2000, 1991; Doyle & McEachern 2000; McEachern 1991). Although the products were more expensive, the growth in environmental concern and green consumerism enabled the business to thrive.

It was not all plain sailing and some problems did emerge (Beder 2002).

Roddick (2000) herself admits that there was at least one situation where one of the indigenous South American communities that agreed to supply the company suffered some serious negative social impacts. The firm also had difficulty in breaking into the US market and suffered significant economic losses during the 1990s. In recent years Roddick lost control of the company and has criticised it for

moving away from her original principles (Suzuki & Dressel 2002; Cropley 2001). Further, there is some question as to whether all the products are really necessary, whether the use of packaging like disposable shrink-wrap is sustainable, and whether transporting the products and ingredients over long distances around the world is a good idea. With these provisos in mind, over the last three decades The Body Shop has still provided one of the best examples of an environmental corporation, although many other firms have also transformed themselves (see, for example: Hargroves & Smith 2005; AtKisson 1999; Hawken et al. 1999). Suzuki & Dressel (2002) run through a range of firms around the world, such as the White Dog café in Philadelphia that uses organic foods and works with disadvantaged children.

Examples such as these are the embodiment of the stronger version of ecological modernisation and fit the broader notion of sustainable development that includes technical, economic, social, political and ecological dimensions. They also suggest that it is possible for corporations to move beyond the first phase of reflexive modernisation (i.e. the initial inability to address environmental risk) and move towards some of the prescriptions for transforming society outlined by Beck (1992) and Giddens (1998). If all industries operated like The Body Shop, the environmental risks generated and the need for regulation would be greatly reduced. The free flow of knowledge about the impacts of decisions and alternative technologies, however, will remain something that governments could certainly assist. Perhaps, just as many firms have moved from rejection to accommodation over the last two decades, the

transition may continue and the number of environmental firms may eventually become the largest group.

From reflexive to ecological modernisation

These three responses of industry demonstrate the power of discourse in environmental governance and the difficulty that institutions of power established in the 19th century have in addressing risks when modernisation becomes reflexive (Beck 1992). Neo-liberal resistance to change and the inability of the institutions of business and government to respond to environmental risks are a manifestation of reflexive modernisation. The stance of rejection not only puts the entire planet at risk, it is actually bad for the firms that are operating under its influence. Industries of rejection construct environmental risk as a threat to profitability, whereas the alternative of ecological modernisation would allow them to see it as an opportunity for increased efficiency. As a result the firm misses opportunities to cut costs, fails to improve its public relations, and stays with older, more polluting practices that are in decline instead of diversifying its investments into new growth areas. If rejection prevails amongst a senior executive their decisions will work against the material interests of the firm in the global market place.

Firms that have moved to the position of accommodation, apart from those that have simply adopted a strategy of 'greenwashing', have generally adopted weaker versions of ecological modernisation via some environmental management system. Environmental risk and increased governance are constructed as a business opportunity to capture a new market, or a challenge to find improvements in

production efficiency. There is a strong focus on the development of better technology and the economic benefits of efficiency gain (Dryzek 1997; Christoff 1996). This approach clearly has benefits for the environment, in terms of reduced pollution, and the firm, by lowering production costs. It tends, however, to work within established business practices, taking a technocratic and managerial approach, rather than opening up the firm to more flexible or democratic control.

The example of 3M previously cited is a case in point. There are also many other examples, such as Interface carpet manufacturers in the USA that eliminated all toxic chemicals, redesigned their product to enable recycling, and offered a floor covering service where they would supply, maintain, replace and recycle carpet squares for their customers (AtKisson 1999). Another example is Collins Pine that has sustainably harvested timber from the same tract of forest for 150 years by using sound land management techniques (Suzuki & Dressel 2002). The key to all three of these cases is the mind-set of the executives that control the firm.

Environmental firms take one step further and move into the strong version of ecological modernisation. They move beyond the focus on technology and simple economics, to apply the principles of ecology to their institutional structure and operating routines. This gives them a more democratic and deliberative structure, where workers, suppliers, customers, and the broader community are treated as partners to be consulted in the venture (Dryzek 1997; Christoff 1996). Again, The Body Shop is one of the best examples and it has been dealt with in some detail previously.

Both the strong and weak versions of ecological modernisation are certainly an improvement on neo-liberal rejection in terms of the risk management strategy. They still, however, leave the main institutions of reflexive modernisation largely intact, although they do encourage them along a more sustainable development trajectory. They do not, for example, address the issue of mass poverty nor do they seek to challenge the power of corporations over government and its ability to create a bounded democracy.

Is it enough?

Overall it does appear that some corporations have been improving their environmental performance, although improvements are patchy and have been due in large part to the prompting of the environment movement and state intervention. The question still remains as to whether this is enough to adequately address environmental risks. Will it allow society to avoid incidents like Bhopal or ongoing problems like climate change? Will it prevent unexpected risks like the depletion of the ozone layer due to seemingly innocuous products like CFCs? The answer will depend on which of the three discourses prevail.

If the majority of firms stick with neo-liberal rejection, humanity faces a problematic future given the seriousness of environmental risks that have been generated by their past practices. This would lock society into using up non-renewable resources at an ever-increasing rate, increasing levels of pollution, higher risks from the use and release of hazardous chemicals, and continued high levels of resource waste in disposable products and packaging. It would also entail a risk

management strategy that refuses to take action until there is unequivocal scientific certainty about the seriousness of ongoing environmental risks like climate change, land and water degradation, and the loss of biodiversity. Such a scenario is likely if business is able to dominate the state and neo-liberal discourses continue to prevail public policy making.

If most firms move to accommodate environmental concerns, there should be at least a patchy improvement in environmental quality. This would attenuate, but not solve, the risks outlined above. The result would be a reduction in the number of incidents and more time to develop better responses. This outcome would be a real possibility if NGOs and community groups are able to act as a counterbalancing power to business in influencing the state and if they succeed in promoting the weak version of ecological modernisation in popular policy debates.

If most corporations become environmental firms society might actually get industry onto a sustainable development trajectory. This would be modelled on a 'closed loop' production model and would give rise to the kinds of industries discussed in the previous section. But the state will have to continue to enforce regulations to bring rejecting industries up to an acceptable standard, create economic prompts to encourage accommodating firms to do better, and provide essential knowledge to both firms and the community. It will also be necessary for community groups to continue to act as watchdogs to prevent firms backsliding. A reinvigorated civil society coupled with the mass conversion of political and business leaders to strong ecological modernisation would facilitate this outcome.

A note of caution, however, should be sounded at this point. Making production sustainable does not necessarily improve the distribution of goods or services and humans may still face the risks posed by poverty, the threat of violence, discrimination, restricted access to health care, stunted educational opportunities, and a failing social infrastructure. In the past the market has failed to provide these things so the state and community groups have had to step in to provide such public goods. This will continue to be the case even under the strong version of ecological modernisation and the environmental firms it would create.

Conclusions

Corporations are the main productive interface between society and the environment, they are the immediate point where many of the risks are generated, and they have the potential to play a major role in their solution. Up to the end of the 1970s most firms adopted a neo-liberal stance of rejection that denied or played down the significance of environmental risks. Since then, many have moved into accommodation that has encouraged some to make improvements while others have done little more than change their public relations and marketing strategies. A few firms, some independently of government interventions, have adopted a stronger version of ecological modernisation that has taken them close to the idea of a sustainable industry. The battle between these discourses and the power struggle between business and civil society will shape the collective ability to respond to environmental risks. Even if society achieves the most positive outcome, however,

people will still need the state to provide public goods and community groups to act as watchdogs.

Notes

* The research leading to this publication was undertaken in Michael Howes' capacity as a senior lecturer in policy with the Australian School of Environmental Studies at Griffith University.

¹ This paper is an edited extract of a forthcoming book: Howes, M. 2005. *Politics and the Environment: Risk and the role of government and industry*. Allen & Unwin: Sydney/ Earthscan: London. Chapter 9.

² A discourse is the link between power and knowledge. It is a kind of localised ideology that influences how people interpret the world, justifies the set of power relations in which they find themselves, and provides strategic information to those in a position of dominance (Foucault 1990, pp. 92-102). According to Dryzek (1997, p.8) a discourse 'is a shared way of apprehending the world. Embedded in language, it enables those who subscribe to it to interpret bits of information and put them together into coherent stories or accounts.' He suggests that discourses influence:

1. 'Basic Entities Whose Existence is Recognised or Constructed'
2. 'Assumptions about Natural Relationships'
3. 'Agents and their Motives'
4. 'Key Metaphors and other Rhetorical Devices' (Dryzek 1997, pp. 16-18).

There are many different types of discourses that are constantly changing, clashing or reinforcing the network of power relations that makes up society.

Bibliography

- Achbar, M., J. Abbott & J. Bakan. 2004. *The Corporation*. Gil Scribe Films, USA.
- AMC [Australian Manufacturing Council]. 1994. *Leading the Way: A Study of Best Manufacturing Practices in Australia and New Zealand*. AMC: Melbourne.
- Athanasίου, T. 1996. "The Age of Greenwashing." *Capitalism, Nature, Socialism*. 7(1). March: 1-36.
- AtKisson, A. 1999. *Believing Cassandra: An Optimist Looks at a Pessimist's World*. Scribe: Melbourne.
- Beck, U. 1992. *Risk Society: Towards a New Modernity*. Sage: London.
- Beder, S. 2002. *Global Spin: The Corporate Assault on Environmentalism*. Green Books, London.
- Callenbach, E. et al. 1993. *EcoManagement: The Elmwood Guide to Ecological Auditing and Sustainable Business*. Berrett-Koehler: San Francisco.
- Catma Films. 1994. *The Drilling Fields*. BBC Channel 4: London.
- Cebon, P. 1993. "Corporate Obstacles to Pollution Prevention." *EPA Journal*. 19(3): 20.
- Christoff, P. 1996. "Ecological Modernisation, Ecological Modernities." *Environmental Politics*. 5(3). pp. 476-500.
- Clayton, A., Klemmensen, B. and Williams, R. 1999. *Policies for Cleaner Technology: A New Agenda for Government and Industry*. Earthscan: London.
- Crenson, M. 1971. *The Un-Politics of Air Pollution*. John Hopkins Press: Baltimore.
- Cropley, E. 2001. "Body Shop has lost its soul – Founder Roddick." *Planet Ark*
<<http://www.planetark.org/dailynewsstory.cfm/newsid/12155/story.htm>> [27 August 2001]
- DEH [Department of Environment and Heritage, Australia] 2005a. *National Pollutant Inventory*.
<<http://www.npi.gov.au/>>
- DEH. 2005b. *Eco-efficiency and Cleaner Production Case Studies*.
<<http://www.deh.gov.au/industry/corporate/eecp/case-studies/index.html>>
- DiLorenzo, T. 1993. "The Mirage of Sustainable Development." *The Futurist*. September-October: 14-19.
- Doyle, T. and McEachern, D. 2001. *Environment and Politics*. 2nd edition. Routledge: London.
- Dryzek, J. 1997. *The Politics of the Earth: Environmental Discourses*. Oxford: Oxford University Press.
- Dryzek, J., D. Downes, C. Hunold, D. Schlosberg, H-K. Hernes. 2003. *Green States and Social Movements: Environmentalism in the United States, United Kingdom, Germany, & Norway*. Oxford University Press: Oxford.
- Eckersley, R. 2004. *The Green State: Rethinking Democracy and Sovereignty*. MIT Press, London.
- Eckersley, R. ed. 1995. *Markets, the State and the Environment*. Macmillan: Melbourne.
- Eckersley, R. 1993. "Free Market Environmentalism: Friend or Foe?" *Environmental Politics*. 2(1): 1-19
- Fieweger, K. 2000. "Update – 3M to Stop Making Many Scotchgard Products." *Planet Ark*,
<<http://www.planetark.org/dailynewsstory.cfm?newsid=6706>> [17 May 2000]
- Foucault, M. 1990. *The History of Sexuality Volume 1: An Introduction*. Penguin: London.

- Giddens, A. 1998. *The Third Way: The Renewal of Social Democracy*. Cambridge: Polity Press, Cambridge.
- Goldfarb, T. ed. 1999. *Taking Sides: Clashing Views on Controversial Environmental Issues*. 8th edn. Dushkin/McGraw-Hill: USA.
- Goodstein, E. 1999. *The Trade-Off Myth: Fact and Fiction About Jobs and the Environment*. Island Press: Washington DC.
- Gottlieb, R., Smith, M., Roque, J. and Yates, P. 1995. "New Approach to Toxics: Production Design, Right to Know, and Definition Debates." In R. Gottlieb (ed). *Reducing Toxics: A New Approach to Policy and Industrial Decision Making*. Island Press: Washington DC.
- Hargroves, K. & M. Smith (eds). 2005. *The Natural Advantage of Nations: Business Opportunities, Innovation and Governance in the 21st Century*. Earthscan: London.
- Hawken, P., A. Lovins & H. Lovins. 1999. *Natural Capitalism: Creating the Next Industrial Revolution*. Boston, Little Brown & Co.
- Hoberg, G. 1992. *Pluralism by Design: Environmental Policy and the American Regulatory State*. Praeger: New York.
- Howes, M. 1997. "Shell's Corporate Citizenship in Nigeria." *Environment SA*. 6(3): 37.
- Howes, M. 2005. *Politics and the Environment: Risk and the role of government and industry*. Allen & Unwin: Sydney/Earthscan: London.
- Landy, M., Roberts, M., and Thomas, S. 1994. *The Environment Protection Agency – Asking the Wrong Questions: from Nixon to Clinton*. 2nd edn. Oxford University Press: New York.
- Lindblom, C. 1977. *Politics and Markets*. Basic Books: New York.
- Lomborg, B. 2001. *The Skeptical Environmentalist: Measuring the Real State of the World*. Cambridge: Cambridge University Press.
- Lukes, S. 1974. *Power: A Radical View*. Macmillan: London.
- McEachern, D. 1991. *Business Mates: The Power and Politics of the Hawke Era*. Prentice Hall: Sydney. Chapter 6.
- Mol, A. & G Spaargaren. 2000. "Ecological Modernisation Theory in Debate: A Review." *Environmental Politics*. 9(1) Spring: 17-49.
- NCEP [National Commission for Employment Policy] 1995. *Environment and Jobs: The Employment Impact of Federal Environmental Investments*. NCEP Research Report No. 95-02. U.S. Government Printing Office: Washington D.C.
- OECD [Organisation for Economic Co-operation and Development] 1984. *Environment and Economics. Results of the International Conference on Environment and Economics*. OECD: Paris.
- OECD. 1996. "Environmental Policies and Employment." In *Report to the Meeting of OECD Environment Policy Committee at Ministerial Level*, Paris February 19-20, <http://www.oecd.org/news_and_events/reference/nw96-15a.htm> [1997]
- Porter, M. and van der Linde, C. 1995. "Green and Competitive: Ending the Stalemate." *Harvard Business Review*. September-October:120-34.
- Pusey, M. 1991. *Economic Rationalism in Canberra: A Nation Building State Changes its Mind*. Cambridge University Press: Sydney.
- Roddick, A. 1991. *Body and Soul*. Ebury Press: London.
- Roddick, A. 2000. *Business as Unusual*. Thorsons: London.
- Rosenbaum, W. 1991. *Environmental Politics and Policy*. Washington DC: Congressional Quarterly Inc.
- Shah, S. 2005. *Crude: The story of oil*. Allen & Unwin: Sydney.
- Suzuki, D. and Dressel, H. 2002, *Good News for a Change: Hope for a Troubled Planet*, Allen and Unwin, Sydney.
- UK Department of Trade and Industry. 1991. *Cleaner Technology in the UK: Final Report by PA Consulting Group*. HMSO: London.
- UK EA [UK Environment Agency]. 2005. *Pollution Inventory*. <<http://www.environment-agency.gov.uk/business/444255/446867/255244/>>
- Underwood, J. 1993. "Going Green for Profit." *EPA Journal*. 19(3): 9-13.
- US EPA [US Environmental Protection Agency. 2005. *Toxics Release Inventory*. <<http://www.epa.gov/tri/index.htm>>
- Van Berkel, R. 2000. "Cleaner Production in Australia: Revolutionary Strategy or Incremental Tool?" *Australian Journal of Environmental Management*. 7(3). September:132-46.
- WCED [World Commission on Environment and Development.] 1990. *Our Common Future*. Australian Edition. Oxford University Press: Melbourne.
- Weale, A. 1998. "The Politics of Ecological Modernization." In J. Dryzek and D. Schlosberg (eds). *Debating the Earth*. Oxford University Press: Oxford: 301-318.
- Yearley, S. and Forrester, J. 2000. "Shell, a Sure Target for Global Environmental Campaigning?" In R. Cohen and S. Rai (eds). *Global Social Movements*. The Athlone Press: London: 134-145.