

Innovation, Global Change and New Capitalism: A Fuzzy Context for Business and the Environment

Nigel Roome

Erasmus Centre for Sustainable Development and Management
Erasmus University
Netherlands¹

Background

The scholarly contributions in this special issue of Human Ecology Review are set in the context of the shift discerned by many commentators in the relationship between business and the natural environment. Business is seen to move from a reactive response to environmental concerns expressed through regulation, toward a more proactive approach, based on the search for synergies between competitiveness and environmental performance. My intent is to place this shift in a wider context. My argument is in two parts.

First this shift is seen as part of a move toward an increasingly innovative, strategic, socially complex, and inherently risky relationship between business and its environmental context. It is anticipated that business will have to take a lead, yet, will have to work in concert with many other economic and social actors in joint processes of innovation. The second claim is that the innovations provoked by environmental sustainability illustrate the type of response that business will have to develop as it confronts many new forms of global change. There is already evidence that competing models of business rooted in different concepts of the position and responsibilities of business in society are developing. These models demand new managerial skills and organizational capabilities — innovations in their own right.

Innovation, Business and the Natural Environment

The business and environment literature has only recently begun to pay attention to the role of innovation in meeting the challenge of environmental limits and pressures (Roome and Cahill 2001; Hall and Vredenburg 2003) although innovation, as research and development, was identified as a critical part of the business response more than a decade ago (see for example: Elkington, Knight and Hailes 1991, 131-145; Winn and Roome 1993).

Innovation is critical whether business is responding to the controls of regulators over

emissions or undertaking the wholesale redesign of mobility systems in the light of global warming. In this continuum of innovation the points of difference rest on the scale and complexity of the innovation process and its outcomes. Figure 1 sets out the core elements of the innovation process and characterizes this scale and complexity.

The field for Figure 1 is defined by the axes, which relate the strength of environmental management to the characteristics of innovation. These include the scope of the vision of change that drives innovation, the actors involved in the innovation process and the complexity of innovation. A distinction is made within the field between environmental sustainability and improvements in environmental performance. Environmental sustainability is shown in the northeast corner of the field. Environmental sustainability arises when activities take place within the carrying capacity of the planet, at each and every level, from local to global. In contrast, the majority of the field of Figure 1 is the area where it is possible to gain improved environmental performance. The test for environmental sustainability is more demanding than the test for improved environmental performance. While companies often describe their activities in terms of sustainability, most report their performance in terms of environmental improvements. At best companies are involved in transition to-

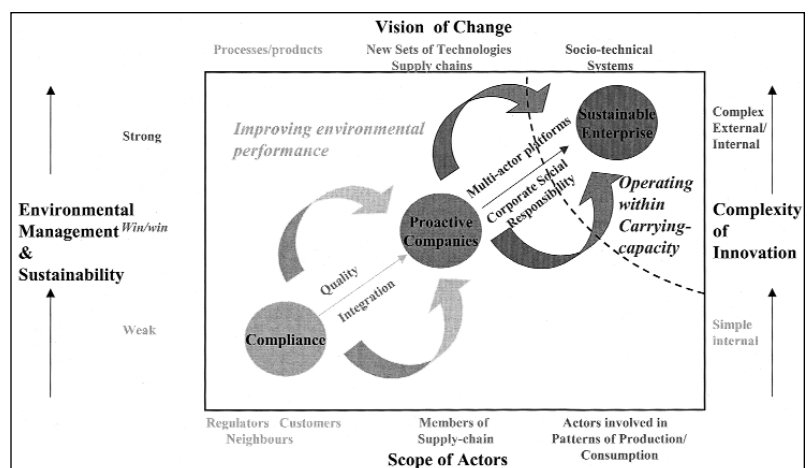


Figure 1. Governance & Innovation for Sustainability

ward environmental sustainability as few, if any, companies would pass the carrying-capacity test for environmental sustainability, if it were applied to their activities.

Three positions are identified within the field of Figure 1. These positions characterize different innovation processes — they are termed compliance, the proactive company and sustainable enterprise. The compliance driven company takes its lead on environmental performance from the regulator. Here the vision for innovation is usually limited to manufacturing processes, products or services and the substances that contribute to products or wastes. These concerns mostly affect relationships with regulators, customers and neighbors of the company. Responding to regulatory demands is a comparatively simple process leading to important but relatively limited environmental improvements in the areas targeted by the regulator.

The second position comes about in companies with quality systems or advance internal management processes. These enable more pro-active approaches because information about environmental performance is integrated into organizational routines. Win/win opportunities are identified, where actions improve environmental performance and contribute to competitiveness. The vision continues to include products and processes, but the proactive company also takes account of the way technologies combine with one another and how companies in their supply-chain can operate together to improve environmental performance, as improvements can be more significant when companies act together. Involving more actors in the process of innovation makes it more complex.

The third position centers on sustainable forms of enterprise. Sustainable enterprise is about the activity of enterprise not the enterprise as a legal entity. Companies contribute to sustainable enterprise by adopting practices of corporate responsibility and by working to initiate change with other actors through multi-actor platforms. In contrast pro-active companies do not need to claim that they are [socially and environmentally] responsible because the innovations that provide their win/win positions would be undertaken solely on grounds of economic advantage. Moreover, it is suggested that companies do not become environmentally sustainable rather it is the pattern of production and consumption those companies contribute to that becomes environmentally sustainable. This assumes that companies share responsibility for the sustainability of the socio-technical systems to which their products or service contribute [systems such as mobility, health, communications, nutrition, water, energy and living]. Companies determine visions for the system together with the other actors who contribute to them. Innovation can affect materials, products, processes, technologies and supply-chains, through to managerial and technical competences, or-

ganizational arrangements and institutions. The goal of innovation is to bring about sustainability in environmental, social and economic terms. Within this it is suggested that the environmental sustainability of a company is not a valid construct as the company is not the appropriate unit of analysis to judge environmental sustainability. Environmental sustainability applies to wider systems of production and consumption. The complexity of innovation for environmental sustainability is high as systems include many actors, many interests and many connected products and processes.

To date few, if any companies, have made the strategic commitment to lead systems change of the kind envisioned in this northeast sector of Figure 1. One example is provided by the systems change Ontario Hydro sought to promote in the early and mid-1990s (Roome 2000) when it envisioned the need for a sustainable system of energy development and use in Ontario. Hydro was not successful in establishing the commitment to innovation either internally or with other actors in Ontario. Without their involvement the development of a vision and agreement on a set of actions that would translate this idea into practice was not secured.

Innovation is central to the work of companies, whether to meet the need for improved environmental performance or environmental sustainability. A more important conclusion is that environmental sustainability is based on a strategic connection between innovation and corporate [social] responsibility accomplished in collaboration with a wide range of other actors. The importance of corporate [social] responsibility derives from its capacity to provide the ground for the values and managerial capabilities on which relationships between companies and other economic and social actors that support innovation are built.

Innovation, Global Change and the New Capitalism

The need for business to link innovation and corporate [social] responsibility is provoked by many challenges to business in modern society, not just those arising from environmental change. This leads to the second argument of the paper. The advent of globalization, with new levels of global connection and interdependence, has connected environmental, economic, social and cultural phenomena into fuzzy problem sets. Globalization gave rise to the environmental and social issues that led to calls for more sustainable forms of development at the Earth Summit in Rio de Janeiro in 1992 and beyond. Since then other axes of global interdependence have emerged, deepened and intersected. These changes provoke questions about the adequacy of existing models of business.

For example, globally connected financial and economic systems are inherently susceptible to instabilities. Global production raises issues about labor conditions and standards

in developing countries. Global supply chains raise concerns about the provenance of products — their quality, health or authenticity. Global consumption provokes concerns about the local suitability of products and services. Global markets for goods, capital are not matched by open markets in labor. Consequently, there is pent up demand or illegal movement of people. Moreover, we are part of an economic system from which some sectors of our global society are excluded or alienated. Witness the protest of American workers against the offshore location of their jobs or the growing resistance to the culture and values embedded in products of American or European companies in say the Muslim world. Even those who feel as if they are a part of the system built around capital have concerns about malfeasance and abuse of privilege in business arising from the moral hazard that occurs when rewards are so closely linked to performance, which can be manipulated by those who benefit most.

These factors combine in complex and unpredictable ways provoking business to innovate and to adopt higher levels of responsibility. The responses by business to the demand for environmental sustainability therefore provide a model of the response by business to a whole range of new business risks, from the security of operations and markets, through the protection of image and reputation, to the need to maintain their license to operate. Business is called to innovate with other actors to adopt higher standards of transparency, improve governance, exercise greater community and consumer responsiveness, as well as take responsibility for environmental issues by redesigning products and systems. Curiously, as business becomes more global in reach and technologically driven so the management of relationships with an ever-increasing number of constituencies, some global yet many local, becomes more critical: Relationships that include many new constituencies beyond shareholders, consumers and regulators.

The suggestion is that the experiences and capabilities developed in dealing with environmental issues will become increasingly strategic and important to all areas of business. These include the capability to build relationships for innovation, learning and change with a variety of partners, to create products and operations that are more sensitive to local contexts, together with the ability to judge between the competing interests and needs of a diverse set of actors.

Indeed, it seems that the newly enlarged European Union is positioning corporate [social] responsibility as a cornerstone of European competitiveness and performance (European Commission 2001). In contrast, the pressure in the USA to reform its business system seems weaker, where the push toward high technology in a global market place is stronger than in Europe. This suggests that different models of capi-

talism are beginning to take root. One is a European model of business that is relatively cautious, lower in the pace and rate of change of technological advance, with a strong local focus based on models of governance that include the interests of shareholders and others stakeholders. This stands in contrast to an America model, with its emphasis on the development of technologies, governance structures with a more exclusive focus on the interests of shareholders and shareholder value founded on rewards gained by selling to a global market.

This analysis suggests that as business confronts interconnected environmental social, cultural and economic issues a new dialectic is established around competing models of the role of business in society. A gap is seen to be opening up between European and American models of business. Moreover, in our global economy, the position of other economic blocks has yet to become clear as Japan, China and India define their own perspectives on the relationship between business, society and the environment. In the shadows of this relatively benign dialectic about corporate social responsibility and innovation in the business model there is a more profound schism between those who adhere to the assumptions of global consumer-driven business and those who stand in opposition to its precepts on fundamental ideological grounds. It is anticipated that this emerging context will have a potent influence on the ultimate sustainability of our planet, and provide a supreme challenge to business managers in the years to come.

Endnote

1. Author to whom correspondence should be directed:
E-mail: roome@fsw.eur.nl

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