Sustainability and Innovation

Achim Lang
Hannah Murphy *Editors*

Business and Sustainability

Between Government Pressure and Self-Regulation

Springer

Sustainability and Innovation

More information about this series at
http://www.springer.com/series/6891

Achim Lang • Hannah Murphy
Editors

Business and Sustainability

Between Government Pressure and Self-Regulation

Springer

Editors
Achim Lang
Department of Politics
and Public Administration
University of Konstanz
Konstanz
Germany

Hannah Murphy
Politics and International Relations Program,
School of Social Sciences
University of Tasmania
Hobart
Australia

ISSN 1860-1030
ISBN 978-3-319-07238-8 ISBN 978-3-319-07239-5 (eBook)
DOI 10.1007/978-3-319-07239-5
Springer Cham Heidelberg New York Dordrecht London

Library of Congress Control Number: 2014947347

Printed on acid-free paper

Springer is part of Springer Science+Business Media (www.springer.com)

Contents

List of Figures

List of Tables

Part I
Introduction

Business and Sustainability: An Introduction

Achim Lang and Hannah Murphy

1 Introduction

Business increasingly participates in co-regulatory and self-regulatory arrangements along national governments, international organizations, civil society and private-public institutions. These co-regulatory and self-regulatory arrangements span multiple political arenas and jurisdictions from the community level to international relations. Fair trade and energy consumption labels, accounting and transparency standards as well as forest certification and emissions trading are well known examples of the increasing role of business in the dynamic regulatory space (Eberlein et al. 2013).

Efforts to set up regulations are widespread in policy-domains that form part of the larger sustainability discourse. Demands to put sustainability and sustainable development onto the political agenda and the occurrence of business co-regulatory and self-regulatory arrangements have evolved in fairly parallel fashion since the 1990s. Business is frequently portrayed as the main (and often the only) source of environmental pollution, of decomposing social relationships and values through the exploitation of workers, of implementing profit and utility-maximization behaviour, of globalizing and homogenizing national cultural traditions, and of creatively destructing industries and national economies. However, most attempts to alleviate the business impact on the sustainable development of our planet involve at least some sort of business participation.

A. Lang (✉)
Department of Politics and Public Administration, University of Konstanz, Universitätsstr. 10, 78464 Konstanz, Germany
e-mail: achim.lang@uni-konstanz.de

H. Murphy
Politics and International Relations Program, School of Social Sciences, University of Tasmania, Sandy Bay Campus, Hobart, Australia
e-mail: Hannah.Murphy@utas.edu.au

A. Lang, H. Murphy (eds.), *Business and Sustainability*,
Sustainability and Innovation, DOI 10.1007/978-3-319-07239-5_1

Business participation in transnational business governance (Eberlein et al. 2013; Muchlinski 2011; Ottaway 2001; Pattberg 2005) and in climate change and environmental policy (Gullberg 2008; Jones and Levy 2007; Kolk and Pinkse 2005; Ronit 2012) has attracted many scholars from numerous scientific disciplines. However, most studies are confined to the environmental and climate change discourse but neglect other dimensions of sustainability. Conceptually, the notion of sustainability includes economic, social, environmental, and cultural dimensions that comprise of different challenges for business processes and activities. As can be seen from the previous examples, demands for sustainability policies have set new challenges for business both on the individual firm level and on the level of organized business interests.

This edited book investigates the intersection between sustainability issues and business participation, while presenting business co-regulatory and self-regulatory arrangements across all dimensions of sustainability. The chapters explore how business is concerned with sustainability in specific policy domains, how collective action problems can be overcome and how business, governments and society interact in setting up sustainability measures in their particular business sector and policy domain. This book provides an initial account of the differences between economic, social, environmental, and cultural dimensions of sustainability and the potential pitfalls of business participation.

In this introduction, we delineate and discern the notions of sustainability and sustainable development (a more elaborate discussion can be found in Kellow in this volume), followed by company and industry-centred approaches to business co- and self-regulation. The final section of the introduction outlines the main research questions and puts the book chapters into perspective.

2 From Sustainable Development to Sustainability

This book centers around the concept of sustainability which emanated from the concept of sustainable development. The notion and concept of sustainable development was first applied in relation to the environment and forestry sectors, where it denotes the principle of ‘only logging as many trees as will grow back’ (Grober 2002). In 1980, sustainability was put onto the agenda by the International Union for Conservation of Nature (IUCN) that focused on the probability of humankind’s survival, given the depletion of natural resources, destruction of the environment and overpopulation. In 1982, the 38th General Assembly of the United Nations (UN) established the World Commission for Environment and Development (WCED), chaired by Gro Harlem Brundtland, in order to develop an agenda for a more durable and efficient handling of natural and other resources (Müller et al. 2007). The notion of “sustainable development” quickly diffused into the main environmental discourses and received widespread attention after the publication of the Brundtland Report in 1987. The report, named “Our Common Future” (World Commission on Environment and Development 1987), states that sustainable development is a “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission on Environment and Development 1987: 24). Following this objective, the international community has had to focus on many agendas instead of relying solely on the environmental agenda.

The term’s breakthrough as a catch word in academia as well as in the media was eventually made at *The World Summit on Sustainable Development* (WSSD), which was held in Johannesburg, South Africa, in 2002. At the WSSD, the application of the sustainability concept was broadened and confined not only to environmental issues but also to social and economic ones. Furthermore, responsibilities for sustainable development were distributed among a vast variety of actors in the political arena. Business and industry were explicitly mentioned here. The Report of the World Summit on Sustainable Development (United Nations 2002) states that:

> [. . .] “we assume a collective responsibility to advance and strengthen the interdependent and mutually reinforcing pillars of sustainable development – economic development, social development and environmental protection – at the local, national, regional and global levels” (United Nations 2002: 1).
> [. . .] “The need to build and strengthen partnerships not only among Governments but also with women, youth, indigenous peoples, nongovernmental organizations, local authorities, workers and trade unions, business and industry, the scientific and technological community and farmers” (United Nations 2002: 86–87).

The establishment of the World Business Council for Sustainable Development (WBCSD) in 1990 provided a focal point for business participation by addressing the expectation of business as a solution source to global problems, but also by tackling the concern that these solutions to sustainable development needed to be profitable. WBCSD assists business to define its new role in order to cope with societal expectations (see also Kellow in this volume). According to the WBCSD, the quest for sustainable development faces a plethora of challenges, including the access and affordability of education, healthcare, mobility, food, water, energy, shelter, and consumer goods as well as the cautious utilization of natural resources without further damage to the climate and ecosystem (World Business Council for Sustainable Development 2010).

Studies on sustainable development and business predominantly focus on changes in business processes and strategic management. In his review on theories of corporate social responsibility, Lee (2008) summarizes that “most of CSR research up to now has examined CSR from the perspective of corporations” (p. 66) and suggests that “the ‘social’ perspective and its effect on corporations” (p. 66) should be featured more prominently. In this volume, we take up Lee’s suggestions and also focus on meso- and macro-level arrangements, without neglecting the motivations and incentives of business to become committed to sustainable development. Furthermore, this edited book discusses the many dimensions pertaining to sustainability – environmental, economic, social and cultural development (Giddings et al. 2002) – and investigates the link between business participation and its impact on efficiency, durability and consistency of proposed policies and instruments (Kellow and Zito 2002).

3 Types of Sustainability

Since the Brundtland Report "Our Common Future", sustainability is differentiated in terms of environmental, economic, social, and cultural sustainability. Each category of sustainability has been conceptualized as a kind of capital that is valuable in fighting underdevelopment. The intention of the Brundtland report was to align and reconcile "capital" investments and (sustainable) development issues. Sustainable development was the objective and preservation and stockpiling of various forms of capital were the means to achieve this. This legacy is still dominant today in that it separates development perspectives from perspectives that focus on the preservation of the current stock and diversity of capitals (Vallance et al. 2011).

3.1 Environmental Sustainability

The concept of sustainability has long been associated with environmental issues and problems such as the depletion of natural resources (Moldan et al.). Most authors argue that environmental sustainability aims at sustaining the source capacities of the global ecosystem and the sink capacities to absorb outputs and wastes (Goodland 1995; Sands and Podmore 2000). The preservation of biodiversity has become the main target for sustainability policies, which primarily deals with reducing and managing waste emissions and harvest rates of renewable sources. Goodland dubs this strategy as the "maintenance of natural capital" (Goodland 1995). Sands and Podmore point out that environmental sustainability is linked to productivity and the production of economic agents as the main extractors and contaminators (Sands and Podmore 2000).

The OECD Environmental Strategy for the First Decade of the 21st Century defines four specific criteria of environmental sustainability that summarize the main points of the debate (Organisation for Economic Co-Operation and Development 2001):

- Regeneration: renewable resources have to be used efficiently and within their rates of natural regeneration.
- Substitutability: non-renewable resources have to be used efficiently and within levels which can be substituted by renewable resources or other forms of capital.
- Assimilation: the release of harmful or polluting substances into the environment has to be kept at the assimilative capacity of the environment.

- Avoiding Irreversibility: Irreversible effects of human activities on ecosystems have to be avoided.

3.2 Economic Sustainability

Economic sustainability has developed into two different strands, sustainable development (Anand and Sen 2000) and sustainable business strategies (Doane and Macgillivray 2001; Dyllick and Hockerts 2002).

The first strand considers the wealth of nations as its starting point (World Bank 2006) and views wealth, human development, and sustainability as closely interlinked (Anand and Sen 2000). Patterns of production and consumption, hence the wealth of nations or human development, are deemed sustainable if utility does not decline at any point along the development path (Pezzey 1989). Economic sustainability focuses on various kinds of "capital" that account for human development and well-being (Moldan et al. 2012). Types of capital include labor, natural resources, financial assets but also industry structure (Copus and Crabtree 1996). As Moldan et al. puts it: "Well-being is understood as any act of consumption which includes the enjoyment of any goods or services. Goods and services can include things freely provided by nature, such as a beautiful sunset. Sustainable development means increasing "consumption", following its broadest economic interpretation, over a very long time" (Moldan et al. 2012: 5). Economic sustainability always means self-sustaining economic growth and development (Copus and Crabtree 1996).

The second strand of economic sustainability is frequently dubbed "the business of staying in business" (Doane and Macgillivray 2001) and concerns viable business strategies. These strategies are ultimately linked to the concepts of efficiency and effectiveness. Found and Rich argue that the economic sustainability rests on profit extraction and successful investments that guarantee the survival of the business firm (Found and Rich 2006). This concept of sustainable business strategy can be defined as "meeting the needs of a firm's direct and indirect stakeholders (such as shareholders, employees, clients, pressure groups, communities etc.) without compromising its ability to meet the needs of future stakeholders as well" (Dyllick and Hockerts 2002: 131). According to Found and Rich, sustainable business strategies are dependent on the management of three types of economic capital (Found and Rich 2006): financial capital, tangible capital (such as machinery), and intangible capital (such as reputation and knowledge). In particular, intangible capital point to the importance of social and cultural capital in sustaining "economic" capital (hence capital and labor).

3.3 Social Sustainability

Social sustainability is concerned with the diversity and maintenance of social values, social identities, social relationships, social equity and social institutions (Dempsey et al. 2011; Moldan et al. 2012). Again, two different strands emerge out of the general discussion on social sustainability (McKenzie 2004; Vallance et al. 2011): social development and social diversity.

According to the development strand, forms of social capital as a means to address the underdevelopment of countries and regions have become the main point of attention. Others view social sustainability as "maintaining or preserving preferred ways of living or protecting particular socio-cultural traditions" (Vallance et al. 2011: 342). Valance and colleagues point out that the maintenance aspect of social sustainability refers to the way in which social preferences and characteristics are sustained over time.

There exist a vast variety of indicators for social sustainability ranging from basic needs to quality of life (including income, income distribution, unemployment, education, etc.), social justice and social coherence (Axelsson et al. 2013; Littig and Griessler 2005; Pullman et al. 2009). However, the link between the different indicators and other dimensions of sustainability has not yet been established.

3.4 Cultural Sustainability

The cultural category of sustainability has long been added to the social dimension but is now increasingly treated as a distinct category. According to UNESCO's Mexico City Declaration on Cultural Policies, culture can be defined as "the whole complex of distinctive spiritual, material, intellectual and emotional features that characterize a society or social group. It includes not only the arts and letters, but also modes of life, the fundamental rights of the human being, value systems, traditions and beliefs" (UNESCO 1982: 1). Cultural sustainability thus means to maintain, enrich and foster cultural identity and diversity. This cultural identity and diversity is frequently termed cultural capital (Duxbury and Gillette 2007; Throsby 2005). According to Axelsson et al., tangible cultural capital includes architectural, sculptural, painted, and archeological monuments and human made landscapes (Axelsson et al. 2013). Intangible cultural capital includes practices, traditions, rituals, expressions and knowledge as well as cultural spaces and heritage.

Throsby notes that "an item of cultural capital can be defined as an asset that embodies or gives rise to cultural value in addition to whatever economic value it might possess" (Throsby 1999). Thus, in order to maintain cultural capital's current value, its ingredients have to be maintained and broadened (Throsby 1999).

4 Business in Sustainability Policy Making

The involvement of business in sustainable development issues intersects with traditional approaches in business interest, corporate governance, and self-regulation (Grote et al. 2008; Lang et al. 2008). In comparative studies on business participation, self-governing arrangements are prevailingly analyzed from an industry and a company perspective.

At the company level, the most prominent approach to providing public goods are related to the *corporate social responsibility (*CSR) approach, which has its starting point in empirically observed or normatively prescribed “actions taken by the firm intended to further social goods beyond the direct interests of the firm and that which is required by law” (Mcwilliams and Siegel 2001). Carroll distinguishes between four kinds of social responsibility that “constitute total CSR: economic, legal, ethical and philanthropic. Furthermore, these four categories or components of CSR might be depicted as a pyramid” (Carroll 1991: 40). Carroll claims that these functions can be depicted as a hierarchy. The economic function build the basic block of CSR since without economic performance, business cannot pursue its other functions. Legal obligations for the next stage of the hierarchy follow ethical responsibilities (Carroll 1991). “At its most fundamental level, this is the obligation to do what is right, just, and fair, and to avoid or minimize harm to stakeholders” (Carroll 1991: 42). The expectation that business should take up philanthropic responsibilities forms the top of the hierarchy. It means that business should contribute to improve the overall quality of life (Carroll 1999).

Garriga and Mele take up the four categories established by Carroll and establish four groups of corporate social responsibility theories – economic, political, social integration, and ethical – that provide different logics of business actions (Garriga and Melé 2004; Melé 2008).

The economic theory of CSR portrays the corporation as an instrument for wealth creation and its activities, either business or social, as means to achieve its economic goals. Business can contribute to CSR if shareholder-value-maximization is long-term rather than short-term, if strategies for comparative advantage include social investments, or if marketing highlights social activities.

The second theory focuses on the political power of corporations and their responsibility in the political arena. In the political context, CSR means supporting and defending democratic institutions as well as to engage in community activities as a corporate citizen. “This leads the corporation to accept social duties and rights or participate in certain social cooperation” (Garriga and Melé 2004: 52).

Social integration theorists argue that business should socially integrate and satisfy social demands. The rationale behind social integration activities lies in the dependence of business on the functioning of society. “Social demands are generally considered to be the way in which society interacts with business and gives it a certain legitimacy and prestige. As a consequence, corporate management should take into account social demands, and integrate them in such a way that the business operates in accordance with social values” (Garriga and Melé 2004: 57). In this context, business is supposed to balance stakeholder interest and to focus and react on issues that are important for the public.

Ethical theories describe the contribution of business to society as a whole. It centres on ethical requirements that constitute business-society relations which includes universal norms such as human and labour rights as well as fostering sustainable development.

More recently, the concept of *corporate norm-entrepreneurship* has been established as a sub-branch of corporate social responsibility approaches, which explicitly deals with the capacity and conditions under which corporate self-commitment takes place (Flohr et al. 2010). Norm-entrepreneurs are said to advocate new norms against the backdrop of existing ones, thereby increasing public attention on social responsibility issues (Flohr et al. 2010). Norm entrepreneurs may participate through lobbying or self-regulation mechanisms in the establishment and institutionalization of new norms. Finnemore and Sikkink argue that they draw the attention to specific issues or even create them. They achieve this by renaming, interpreting and dramatizing these issues (Finnemore and Sikkink 1998).

The literature on corporate norm entrepreneurs has developed two explanatory models on the motivations of corporations to participate in norm-setting activities and if corporations act unilaterally or collectively (Flohr et al. 2010; Wolf 2008). Flohr et al. argue that there are two necessary conditions for corporations to become norm entrepreneurs. First, these corporations face heterogeneous regulatory environments and, as a result, try to minimize the costs of adaptation by leveling the playing field. Second, these corporations receive much attention by transnational civil society and are thus trying to cope with numerous normative expectations. These factors provide the bottom line explanation for corporate norm entrepreneurship. However, Conzelman and Wolf point out that business activities must be aligned with corporate norm entrepreneurship which cannot be equated with altruistic behavior (Conzelmann and Wolf 2007). The prime motivation for norm-setting activities is still the maxim “doing good while doing well” (Conzelmann and Wolf 2007).

While the economic rationale is still omnipresent at the company level, the industry level provides additional factors that help explain why collective self-regulatory arrangements emerge. The industry perspective views self-regulation as a means to increase market growth or to set up new barriers for the entry of newcomers. Most accounts provide details about industry codes of conduct and analyze the strategic choice of companies to join such agreements but fail to consider more systemic factors, in particular political factors, that have a bearing on industry self-regulation (Gupta and Lad 1983; Hemphill 1992).

Andrews provides a typology of business self-regulation that stresses three defining principles (Andrews 1998): self-interest as the guiding principle, the voluntariness, and the involvement of third parties. Each principle provides different explanations for the motivations of business to engage in or to abstain from sustainability policy making. Taken together, the different strands of literature reveal several basic motivations and strategies of business regarding sustainability issues:

- The most prominent business strategy regarding issues of sustainability has long been *non-participation* and *pressure politics* to avoid government actions.
- In case business participates in sustainability policy making and governance, one speaks of company or industry *self-regulation*. Gupta and Lad define industry self-regulation as "a regulatory process whereby an industry-level, as opposed to a governmental- or firm-level, organization (such as a trade association or a professional society) sets and enforces rules and standards relating to the conduct of firms in the industry" (Gupta and Lad 1983). One can distinguish between economic and social self-regulation on the one hand and the extent of government involvement in the regulatory process on the other hand. Economic self-regulation is concerned with the governance of markets and other economic activities while social self-regulation consists of all mechanisms that are proposed by firms or trade associations to "ensure that unacceptable consequences to the environment, the workforce, or consumers and clients, are avoided" (Gunningham and Rees 1997: 365). In most instances, business seeks to avoid government actions and thus engages in lobbying activities. However, in the case that government actions are certain to occur, business might set up voluntary instruments to avoid direct governmental interference (*Avoidance*). This logic of voluntary business self-regulation is frequently dubbed "in the shadow of hierarchy".
- Often, third parties intervene in setting up private self-regulatory schemes by either coercing private actors to take part (*Imposition*), delegating authority to private actors (*Delegation*) or by providing incentives for participation or collective action.

4.1 Pressure Politics

One of the most important strands in the literature on state-business relations are theories related to **influence** aspects of business on politics (Lang et al. 2008). Approaches to corporate direct lobbying (Coen 1998), neo-pluralism (Lowery and Gray 2004; Mcfarland 2004) and rent-seeking (Majumdar and Sen 2007; Svensson 2000) conceptualize aspects of pressure politics and power which are exerted by organized business interests on public authorities. Studies on corporate direct lobbying contend that producer interests are easier to organize collectively than consumer or other societal interests (Kellow 2002). As a result, business can exert a strong influence on government which will formulate and implement regulations that are mostly acceptable to business (Baumgartner 2007; Coen 2007; Eising 2004). Numerous studies have shown the powerful and often destructive influence of business actors on environmental and societal issues (Feil et al. 2008). However, the perspective has recently shifted from business as problem causers to business as problem solvers that wield their influence in the public interest. Flohr et al. state that "the international community appears to view corporations as powerful partners in global governance" (Flohr et al. 2010: 7).

4.2 Avoidance

Business can either decide to lobby against pending regulation or set up its own regulatory instruments as a defensive act to avoid government activity. Some scholars invoke the shadow of hierarchy as the main driving force behind industry participation (Börzel and Risse 2005; Héritier and Eckert 2008). Industry self-regulation as a defensive act is a common phenomenon at the national and international level. Ronit and Schneider provide an example of how the pharmaceutical industry adopted a medical drug promotion code in order to avoid stricter regulations by the World Health Organization (Ronit and Schneider 1999). The shadow of hierarchy provides incentives to negotiate for private actors but at the same time ensures implementation and acceptance through public intervention (Smismans 2008).

4.3 Imposition

Another approach to industry self-regulation is the imposition or coercion of business actors to establish self-regulatory mechanisms. C*ustomer and supplier requirements* are examples of market-driven coercive self-regulatory measures imposed by suppliers on their customers or vice versa (Andrews 1998: 180). One version of this requirement practice highlights product and production requirements set up by suppliers while a second version is directed at increasing the consumer demand for ecologically beneficial products. Government interventions that demand industry self-regulation is discussed as *mandated self-regulation* which is an extension of the voluntary self-regulation mechanism insofar as the voluntary agreements and standards are backed and sanctioned by the government "which monitors the program, and if necessary, will take steps to ensure its effectiveness" (Gunningham and Rees 1997: 365). *Mandated partial self-regulation* involves either rule formulation or rule enforcement but not both. Rees further distinguishes between two basic approaches within the mandated self-regulation type, that is, public enforcement of private standards or recommendations, and enforcement of public rules by private actors (Rees 1988: 10–11).

4.4 Delegation

Delegation of authority in order to set up private regulation schemes is conceptualized by the Private Interest Governments (PIGs) approach and by approaches to self-regulation. PIGs as a source of economic self-regulation are the most highly developed form of a corporatist political configuration, in which private actors are not only incorporated into public policy making but in which the state additionally leaves the political authority exclusively to them (Streeck and Schmitter 1985). Their decisions are authoritative and are binding for members as well as non-members (Wagemann 2005). Streeck and Schmitter label PIGs as "regulated self-regulation" (Streeck and Schmitter 1985: 16). The functioning of PIGs depends on "a limited and fixed set of interest organizations that mutually recognize each other's status and entitlements and are capable of reaching and implementing relatively stable compromises (pacts) in the pursuit of their interests" (Streeck and Schmitter 1985: 10) which rest on a monopoly of representation in their sector or profession (Streeck and Schmitter 1985: 11). PIGs are frequently made up of several organizations which are interrelated with each other (Wagemann 2005).

Third-party certification and management systems represent another approach to business self-regulation. This approach relies on third-party certification to verify product and management performance. International standard-setting organizations such as ISO or CEN are examples of third-party certification systems. *Sectoral guidelines* are another approach to third-party intervention in self-regulation. In this arrangement, business associations have an important role in the development and implementation of product and production requirements or on the identification of "best practices" that provide a reference point for member firms (Andrews 1998).

5 Business and Dimensions of Sustainability: New Challenges

The various forms of sustainability have given rise to different challenges on business activity. In general, sustainability demands the preservation of current levels of "capital" as well as the diversity of different forms of "capital":

- Environmental sustainability demands the responsible extraction of natural resources, the preservation of habitats and species as well as the conservation of biodiversity.
- Economic sustainability requires a long-term perspective regarding the handling of financial assets and human resources. It also focuses on the carrying capacity and diversity of industry structure and consumption patterns.
- Social sustainability demands increases (or at least continuing levels) in the quality of life, social justice, and social coherence.
- Cultural sustainability requires the preservation of cultural artefacts (e.g. architecture, paintings) and the recognition and support of traditions and rituals.

The demands for sustainability have set new challenges for business strategies both on the individual firm level and on the level of organized business interests. First of all, the most important aspect is that companies and industries have to widen their perspectives on business activities and have to include numerous parameters in their strategies that are difficult to capitalize on the corporate balance sheet. Second, long-term business prospects that include social and cultural parameters are not necessarily in line with the expectations and demands of shareholders. Managers have to avoid conflicts with their shareholders in order to align company strategy to the wider social and cultural context. Third, often demands for sustainability require collective action and strategies to overcome the free-rider problem. In most instances, third parties have to administer this: governments, international organizations, NGOs or business associations. However, problems of collective action as well as resistance of shareholders should increase with the remoteness of the sustainability issue in relation to the core business activity, as is the case for the social and cultural dimensions of sustainability.

In this book, we compare business self-regulation and corporate commitments geared at more sustainable natural, social, economic, and cultural environments. There are two interlinked analytical dimensions with regard to the ability of business to set up sustainability measures and the extent to which third parties are involved in steering business towards more sustainable business strategies and participation in activities. In order to achieve a comparison of business activities in the various dimensions of sustainability, each chapter will provide answers to four sets of questions:

- What kind of sustainability is the chapter dealing with?
- Why is business concerned with sustainability in the particular policy domain?
- Is there a collective action problem? Can it be overcome by state enforcement or by self-regulatory arrangements?
- What functions or capacities does business have in creating and implementing sustainability measures and instruments?

Contributions are ordered according to the dimensions of sustainability to which they contribute the most. However, most chapters deal with several dimensions of sustainability.

We begin with a chapter on the ontological underpinnings of sustainability. In the chapter entitled "From Sustainable Development to Sustainability: The Response of Business", Aynsley Kellow takes a critical look at the notions of 'sustainable development' and 'sustainability' in order to establish their contested and problematic nature. According to Kellow, it is essential to recognize that 'sustainable development' is both a contested concept and an explicitly political one which mediates the global conflict between the desire of the North for greater environmental protection and the desire of the South for improvements in human welfare. Kellow states that sustainability is ultimately a journey rather than a destination and refers to the quest as a whole. In this respect business has not been a mere passive recipient of the normative implications of these concepts, but has used them in various ways to its own advantage.

"The Politics of Sustainability: Some Principles and Proposals" are provided by Philippe Schmitter. He argues that the Brundtland Report assumed that sustainability would be decided by sovereign national governments. Resolving its problems required global intergovernmental agreements with the United Nations offering a framework for such negotiations. Compliance did not figure as a major problem.

Schmitter argues that these assumptions were insufficient and he advocates a new strategy.

The economic dimension of sustainability is explored in the chapters by Karsten Ronit and Tony Porter. In the chapter on "Global Business Associations, Self-Regulation and Consumer Policy", Karsten Ronit states that despite consumer issues having become a major concern of some bodies, there is a lack of overarching principles as well as a lacking policy framework that is in line with the policies and agendas of consumer policy. In addition to states and intergovernmental organizations, private parties are playing an important role in setting consumer policy initiatives at the global level. Not only consumer organizations, but also business itself establishes and communicates norms and rules that fill a gap where public initiatives are lacking.

In the chapter by Tony Porter, he explores "The Political Economy of Private Management of High Impact Low Probability Risks in Finance and the Environment". He argues that an increasing number of sustainability issues take the form of high impact low probability (HILP) risks. In order to support his argument, the author examines the case of the global financial crisis of 2007/2008, as well as the sustainability of automobiles and other vehicles as modes of transportation.

The Environmental dimension of sustainability is highlighted in the subsequent chapters by Wyn Grant and Achim Lang, Thomas Malang, and Volker Schneider. In the chapter by Wyn Grant, he explores "The Environmental and Regulatory Sustainability of Biopesticides". His chapter combines the environmental dimension of sustainability with economic sustainability regarding viable business strategies in industries that are related to environmental issues. The emerging biopesticide industry is an example of an industry that produces more environmentally-friendly products than established companies in that sector. Due to the fact that conventional plant protection products are becoming less available, less popular and many older products have been withdrawn for regulatory or commercial reasons, there is a need for the use of alternative products as part of a more general Integrated Pest Management (IPM) strategy. Wyn Grant analyzes the regulatory environment of plant protection in the European Union, the role of member state governments, the role of regulatory agencies such as consultants and the representation of the industry in the biopesticide sector.

In the chapter by Achim Lang, Thomas Malang, and Volker Schneider, they analyze "Product Labeling and Standards: Business Participation in Energy-Efficiency Regimes". The authors study in particular the reduction of electricity consumption in private households. Therefore, a set of 30 advanced and emerging economies – including 80 % of the world electricity consumption – is analyzed in order to reveal the degree of business contribution to electricity saving and/or efficiency improvements. Furthermore, the question is raised as to what extent electricity saving/efficiency improvements are caused by business involvement. The authors outline various types of policy measures aiming at electricity saving and depict various ways and forms in which business is involved in policy formulation and implementation. Case studies of the United States, Germany, and China reveal the underlying logics of business participation.

The social and cultural dimension of sustainability is explored in the chapters by Harvey Feigenbaum and by Ana Carolina Gonzalez. In the chapter "Sustaining Cultural Diversity when Faced with Changing Technologies", Harvey Feigenbaum explores the paradox between the fact that on the one hand the digital revolution has increased individualized entertainment options, and on the other hand the fact of the homogenizing of cultures by the forces of the economy that tend to reduce those options. Harvey Feigenbaum postulates that markets do create the incentive to discover and adopt new technologies and that new technologies can, in turn, make markets more efficient. Hence, efficiency is only one value among others and markets are not ends in themselves. However, national governments and audiovisual industry have long favoured quotas and subsidies as remedies to counter cultural homogenization. According to Feigenbaum, these instruments are not longer viable options but in order to preserve cultural diversity, the digital revolution represents both an existential threat and a potential savior.

The final analytical chapter on "The Business Pursuit of Local Governance: Extractive Industry and Civil Society for Public Accountability in Colombia" by Ana Carolina Gonzalez Espinosa explores the elements that induce the private sector to engage in partnerships with social organizations and those that encourage NGOs to cooperate with business, as well as the results of this interface in terms of democratic consolidation. Gonzalez Espinosa looks closely at these "citizens groups," sponsored and led by extractive companies, to understand how they select members, the motivations of participant actors, the dynamics of interactions between actors, and the power and resources distributed among them. She concludes that committees prioritize professional over grassroots organizations and local communities; they aim to reduce any sort of conflict entailing a risk of neutralizing local activists; they focus on access to information over other labour, cultural or environmental issues; and finally, company leadership in committees can also be understood as the domination of citizen space.

Acknowledgments We are very grateful to the *Fritz Thyssen Foundation* (Cologne) for their generous support of the kick-off conference 'Business and Sustainability', 3–4 June 2011, Konstanz, Germany. Their workshop grant enabled us to invite numerous contributors and discussants from North America, Europe and Australia.

Previous versions of many chapters were presented and discussed at panels and sessions organized by the Research Committee 38 "Politics and Business" of the International Political Science Association. We would like to thank the participants of RC 38 panels at the IPSA world conference in Madrid and the ICPP conference in Grenoble for helpful comments on earlier drafts of the chapters.

We would also like to thank the contributors to this volume not only for the quality of their papers but also for their patience during what was a rather extended production period.

The project benefitted from the help of many individuals and we are grateful for their support. We would like to particularly thank Marina Brügel and Stephanie Smith at the University of Konstanz for assistance in formatting and in editing the contributions. We also very much appreciated suggestions and comments from Aynsley Kellow. At Springer, Barbara Fess and Marion Kreisel supported the project and its publication. Mrs. Vinodhini, Project Manager at Content Solutions – SPi Global, did a fantastic job in editing and formatting the book.

References

Anand, S., & Sen, A. (2000). Human development and economic sustainability. *World Development, 28*(12), 2029–2049.

Andrews, R. N. L. (1998). Environmental regulation and business 'self-regulation'. *Policy Sciences, 31*(3), 177–197.

Axelsson, R., Angelstam, P., Degerman, E., Teitelbaum, S., Andersson, K., Elbakidze, M., et al. (2013). Social and cultural sustainability: Criteria, indicators, verifier variables for measurement and maps for visualization to support planning. *Ambio, 42*(2), 215–228.

Baumgartner, F. R. (2007). EU lobbying: A view from the US. *Journal of European Public Policy, 14*(3), 482–488.

Börzel, T. A., & Risse, T. (2005). Public-private partnerships: Effective and legitimate tools of international governance. In E. Grande & L. W. Pauly (Eds.), *Reconstituting political authority. Complex sovereignty and the foundations of global governance* (pp. 195–216). Toronto: University of Toronto Press.

Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons, 34*(4), 39–48.

Carroll, A. B. (1999). Corporate social responsibility evolution of a definitional construct. *Business & Society, 38*(3), 268–295.

Coen, D. (1998). European business interest and the nation state: Large-firm lobbying in the European Union and the member states. *Journal of Public Policy, 18*, 75–100.

Coen, D. (2007). Empirical and theoretical studies in EU lobbying. *Journal of European Public Policy, 14*(3), 333–345.

Conzelmann, T., & Wolf, K. D. (2007). Doing good while doing well? Potenzial und Grenzen grenzüberschreitender privatwirtschaftlicher Selbstregulierung. In A. Hasenclever, K.-D. Wolf, & M. Zürn (Eds.), *Macht und Ohnmacht internationaler Institutionen, Frankfurt/M* (pp. 145–175). Frankfurt: Campus.

Copus, A., & Crabtree, J. (1996). Indicators of socio-economic sustainability: An application to remote rural Scotland. *Journal of Rural Studies, 12*(1), 41–54.

Dempsey, N., Bramley, G., Power, S., & Brown, C. (2011). The social dimension of sustainable development: Defining urban social sustainability. *Sustainable Development, 19*(5), 289–300.

Doane, D., & Macgillivray, A. (2001). *Economic Sustainability: The business of staying in business*. London: The SIGMA Project.

Duxbury, N., & Gillette, E. (2007). *Culture as a key dimension of sustainability: Exploring concepts, themes and models* (Centre of Expertise on Culture and Communities Working paper). Vancouver: Simon Fraser University.

Dyllick, T., & Hockerts, K. (2002). Beyond the business case for corporate sustainability. *Business Strategy and the Environment, 11*(2), 130–141.

Eberlein, B., Abbott, K. W., Black, J., Meidinger, E., & Wood, S. (2013). Transnational business governance interactions: Conceptualization and framework for analysis. *Regulation & Governance, (early view), 8*, 1–21. doi:10.1111/rego.12030.

Eising, R. (2004). Multilevel governance and business interests in the European Union. *Governance, 17*(7), 242–267.

Feil, M., Fischer, S., Haidvogl, A., & Zimmer, M. (2008). *Bad guys, good guys, or something in between. Corporate governance contributions in zones of violent conflict* (PRIF Reports 84). Frankfurt: Peace Research Institute.

Finnemore, M., & Sikkink, K. (1998). International norm dynamics and political change. *International Organization, 52*(4), 887–917.

Flohr, A., Rieth, L., Schwindenhammer, S., & Wolf, K. D. (2010). *The role of business in global governance: Corporations as norm-entrepreneurs*. Basingstoke: Palgrave Macmillan.

Found, P., & Rich, N. (2006). *Making it all 'add up': A systems approach to economic sustainability*. Cardiff: Cardiff Business School.

Garriga, E., & Melé, D. (2004). Corporate social responsibility theories: Mapping the territory. *Journal of Business Ethics, 53*(1–2), 51–71.
Giddings, B., Hopwood, B., & O'Brien, G. (2002). Environment, economy and society: Fitting them together into sustainable development. *Sustainable Development, 10*(4), 187–196.
Goodland, R. (1995). The concept of environmental sustainability. *Annual Review of Ecology and Systematics, 26*, 1–24.
Grober, U. (2002). Modewort mit tiefen Wurzeln – Kleine Begriffsgeschichte von ‚sustainability' und ‚Nachhaltigkeit'. In G. Altner, H. Leitschuh-Fecht, G. Michelsen, U. E. Simonis, & E. U. von Weizsäcker (Eds.), *Jahrbuch Ökologie 2003* (pp.167–175) München: C. H. Beck.
Grote, J., Lang, A., & Schneider, V. (2008). *Organized business interests in changing environments: The complexity of adaptation*. Basingstoke: Palgrave Macmillan.
Gullberg, A. T. (2008). Lobbying friends and foes in climate policy: The case of business and environmental interest groups in the European Union. *Energy Policy, 36*(8), 2964–2972.
Gunningham, N., & Rees, J. (1997). Industry self regulation: An institutional perspective. *Law & Policy, 19*(4), 363–414.
Gupta, A. K., & Lad, L. J. (1983). Industry self-regulation: An economic, organizational, and political analysis. *Academy of Management Review, 8*(3), 416–425.
Hemphill, T. A. (1992). Self-regulating industry behavior: Antitrust limitations and trade association codes of conduct. *Journal of Business Ethics, 11*(12), 915–920.
Héritier, A., & Eckert, S. (2008). New modes of governance in the shadow of hierarchy: Self-regulation by industry in Europe. *Journal of Public Policy, 28*(1), 113.
Jones, C. A., & Levy, D. L. (2007). North American business strategies towards climate change. *European Management Journal, 25*(6), 428–440.
Kellow, A. (2002). Comparing business and public interest associability at the international level. *International Political Science Review, 23*(2), 175.
Kellow, A., & Zito, A. (2002). Steering through complexity: EU environmental regulation in the international context. *Political Studies, 50*(1), 43–60.
Kolk, A., & Pinkse, J. (2005). Business responses to climate change: Identifying emergent strategies. *California Management Review, 47*(3), 6–20.
Lang, A., Ronit, K., & Schneider, V. (2008). From Simple to complex: An evolutionary sketch of theories of business association. In J. R. Grote, A. Lang, & V. Schneider (Eds.), *Organized business interests in changing environments: The complexity of adaptation* (pp. 17–41). New York: Palgrave Macmillan.
Lee, M. D. P. (2008). A review of the theories of corporate social responsibility: Its evolutionary path and the road ahead. *International Journal of Management Reviews, 10*(1), 53–73.
Littig, B., & Griessler, E. (2005). Social sustainability: A catchword between political pragmatism and social theory. *International Journal of Sustainable Development, 8*(1), 65–79.
Lowery, D., & Gray, V. (2004). A neopluralist perspective on research on organized interests. *Political Research Quarterly, 57*(1), 163–175.
Majumdar, S., & Sen, K. (2007). The debt wish: Rent seeking by business groups and the structure of corporate borrowing in India. *Public Choice, 130*(1), 209–223.
Mcfarland, A. S. (2004). *Neopluralism: The evolution of political process theory*. Lawrence: University Press of Kansas.
McKenzie, S. (2004). *Social sustainability: Towards some definitions*. Magill: Hawke Research Institute, University of South Australia.
Mcwilliams, A., & Siegel, D. (2001). Corporate social responsibility: A theory of the firm perspective. *Academy of Management Review, 26*(1), 117–127.
Melé, D. (2008). Corporate social responsibility theories. In A. Crane, D. Matten, A. McWilliams, J. Moon, & D. Siegel (Eds.), *The Oxford handbook of corporate social responsibility* (pp. 48–82). Oxford: Oxford University Press.
Moldan, B., Janouskova, S., & Hak, T. (2012). How to understand and measure environmental sustainability: Indicators and targets. *Ecological Indicators, 17*, 4–13.

Muchlinski, P. (2011). The changing face of transnational business governance: Private corporate law liability and accountability of transnational groups in a post-financial crisis world. *Indiana Journal of Global Legal Studies, 18*(2), 665–705.

Müller, M., Fuentes, U., & Kohl, H. (2007). *Der UN-Weltklimareport, Bericht über eine aufhaltsame Katastrophe*, Köln: KiWi.

Organisation for Economic Co-operation and Development. (2001). *OECD environmental strategy for the first decade of the 21st century*. Paris: OECD.

Ottaway, M. (2001). Corporatism goes global: International organizations, nongovernmental organization networks, and transnational business. *Global Governance, 7*, 265–292.

Pattberg, P. (2005). The institutionalization of private governance: How business and nonprofit organizations agree on transnational rules. *Governance, 18*(4), 589–610.

Pezzey, J. (1989). *Economic analysis of sustainable growth and sustainable development* (Environment Department Working Paper, 15). Washington, DC: World Bank.

Pullman, M. E., Maloni, M. J., & Carter, C. R. (2009). Food for thought: Social versus environmental sustainability practices and performance outcomes. *Journal of Supply Chain Management, 45*(4), 38–54.

Rees, J. (1988). *Reforming the workplace: A study of self-regulation in occupational safety*. Philadelphia: University of Pennsylvania Press.

Ronit, K. (Ed.). (2012). *Business and climate policy: The potentials and pitfalls of private voluntary programs*. New York: United Nations University Press.

Ronit, K., & Schneider, V. (1999). Global governance through private organizations. *Governance, 12*(3), 243–266.

Sands, G. R., & Podmore, T. H. (2000). A generalized environmental sustainability index for agricultural systems. *Agriculture, Ecosystems & Environment, 79*(1), 29–41.

Smismans, S. (2008). The European social dialogue in the shadow of hierarchy. *Journal of Public Policy, 28*(1), 161.

Streeck, W., & Schmitter, P. C. (1985). *Private interest government: Beyond market and state*. Beverly Hills: Sage.

Svensson, J. (2000). Foreign aid and rent-seeking. *Journal of International Economics, 51*(2), 437–461.

Throsby, D. (1999). Cultural capital. *Journal of Cultural Economics, 23*(1–2), 3–12.

Throsby, C. D. (2005). *On the sustainability of cultural capital*. Sydney: Department of Economics, Macquarie University.

UNESCO. (1982). *World conference on cultural policies*. Paris: UNESCO Publishing.

United Nations. (2002). *Report of the World summit on sustainable development*. New York: UN.

Vallance, S., Perkins, H. C., & Dixon, J. E. (2011). What is social sustainability? A clarification of concepts. *Geoforum, 42*(3), 342–348.

Wagemann, C. (2005). Private interest governments are dead. Long live private interest governments? Lessons from Swiss cows. *Schweizerische Zeitschrift für Politikwissenschaft, 11*(3), 1–25.

Wolf, K. D. (2008). Emerging patterns of global governance: The new interplay between the state, business and civil society. In A. G. Scherer & G. Palazzo (Eds.), *Handbook of research on global corporate citizenship* (pp. 225–248). Cheltenham: Edward Elgar.

World Bank. (2006). *Where is the wealth of nations?: Measuring capital for the 21st century*. Washington, DC: World Bank Publications.

World Business Council for Sustainable Development. (2010). *Vision 2050: The new agenda for business*. Geneva: WBCSD.

World Commission on Environment and Development. (1987). *Our common future*. New York: UN.

From Sustainable Development to Sustainability: The Response of Business

Aynsley Kellow

1 Introduction

What is the concept of 'sustainable development'? Why has it recently increasingly morphed into 'sustainability.' What does it mean for business and politics?

The concept 'sustainable development' is a highly contested one; it could be considered what Gallie (1955–1956) once referred to as an 'essentially contested concept' whose application is inherently a matter of dispute. The subtle shift to 'sustainability' is part of that contestation—and should be recognised as such. Failure to recognise this is to seriously diminish the potential of the concept to achieve the hopes held for it.

Some would argue that is no bad thing. I have variously heard sustainable development described as an oxymoron, or as 'just words'. But words and their meanings are important—fundamentally important—to addressing public policy problems. We cannot devise laws or public policies unless we can define what it is we are doing. Yet developing shared understandings of problems, while not all the story of gaining political support, then is at least much of it, and the very vagueness which limits policy effectiveness can help with policy adoption—and therein lies a dilemma.

But even vague concepts can exert a discursive hegemony. One needs only listen to deliberative bodies at the national or international level to realise the discipline which concepts such as 'sustainable development', 'polluter pays' and 'precautionary principle' impose upon the freedom of action of participants. True, many might not be strong adherents to the concept, and some might be attempting to subvert it, but even they must at least neutralise the power or the presence of the concept in the prevailing discourse brings.

A. Kellow (✉)
Faculty of Arts, School of Social Sciences, University of Tasmania, Sandy Bay Campus, Hobart, Australia
e-mail: Aynsley.Kellow@utas.edu.au

A. Lang, H. Murphy (eds.), *Business and Sustainability*,
Sustainability and Innovation, DOI 10.1007/978-3-319-07239-5_2

In this paper I take a critical look at the notions of 'sustainable development', 'sustainability' and some of the related notions, in order to establish their contested and problematic nature. I then examine the challenges for applying these concepts to business politics, and conclude that business has not been a mere passive recipient of the normative implications of these concepts, but has used them in various ways to its own advantage.

2 Balancing Environment and Development

Sustainable development came to prominence with the publication of the Brundtland Report, *Our Common Future*, in 1987. Quite clearly, it has its origins in the conflict between essentially 'Northern' concerns with environmental protection and 'Southern' development aspirations—and fears that the pursuit of the environmental agenda would result in the development 'ladder' being pulled up behind themselves by affluent nations.

These concerns were not without foundation, and they dated back to the emergence of the modern environmental agenda in the late 1960s and early 1970s. Moreover, sustainable development was merely the latest manifestation of attempts to moderate this conflict, and one which attempted to accommodate adherents to both sets of beliefs, allowing them to worship together in the same church.

As Donald Worster (1993) put it, sustainable development promised an easier path forward. Modern, neo-Malthusian environmentalism seemed to demand an impossible agenda, still cherished by some, of limits to growth in population, technology and appetite and greed—in short, a whole new philosophy which was politically highly problematic. Sustainable development provided a quite functional blurring of the environmentalism of the North and the development needs of the South. In Worster's (1993: 143) words, 'lots of lobbyists coming together, lots of blurring going on—inevitably, lots of shallow thinking resulting.'

It is easy to forget just how frightening the neo-Malthusian spectre must have appeared when viewed from the South. Not only were influential authors such as Ehrlich (1968), Hardin (1972, 1977), and Commoner (1966, 1972) warning that key resources would be depleted within our lifetimes, but their prescriptions included some quite draconian measures, especially with regard to limiting population, which were much more alarming to developing nations than to those which had undergone the demographic transition which has almost universally accompanied industrialization and the state provision of social security for the elderly. We hear much less now of the need for survival, triage, arks and 'lifeboat ethics', all of which rang alarm bells for those who did not have a seat in the lifeboat and whose attempts to get on board were to be thwarted by those who feared the boat thus must be swamped (Pirages and Ehrlich 1973; Lucas and Ogletree 1976). This, of course, echoes the debate which surrounded the first manifestation of Malthusian thinking, which was roundly criticised by Marx and others for underestimating the possibilities of technological change and, most of all, for neglecting the class-based institutional factors which resulted in the axe of subsistence falling on the necks of the poor. It should be noted that Marx's hostility to the environment was much overstated, and he even produced his own principle of population, which (by requiring attention to factors such as the social distribution of scarcity as well as mere numbers of the population) suggested that progress was possible without Malthusian collapse (Harvey 1974).

While the poor within affluent societies were less able to contest the distributive consequences of environmental policies, wide disparities in wealth between nations meant that global responses required the development of some kind of accommodation between rich and poor, because the decision rule in international politics is one of consensus and any single nation-state can thwart consensus. For this reason, right from the United Nations Conference on the Human Environment in 1972 in Stockholm, the international environmental agenda has been politically inseparable from questions of global distributive justice. This was given significant symbolic expression in the location of the headquarters of the UN Environment Program in Nairobi—in a Developing Country. But it was also reflected in the highly circumscribed mandate given to UNEP, which is not en executive agency empowered to carry out its own programs in member states, like UNESCO or FAO. It is a poorly resourced agency which can only seek to influence governments and intergovernmental organisations.

UNEP's lack of resources and consequent dependence on voluntary contributions leave it open to having its agenda shaped by those prepared to support particular programs financially, but restrictions on its mandate plus the usual limitations on its ability to transgress the sovereignty of member states mean that it is caught in a cleft stick between the preferences of affluent nations able to afford to worry more about the global environment and the developing nations fearful of that agenda, and wishing to ensure UNEP had little capacity to force any agenda contrary to their interests.

3 The Origins of Sustainable Development

One can see the obvious appeal to UNEP of a concept that promised that both environmental protection and economic development for poor nations were possible simultaneously.

Early development of the concept of sustainable development took place at a joint UNEP-UNCTAD symposium on patterns of resource use, environment and development at Cocoyoc, Mexico in 1974, but it was not UNEP which made the first substantial step in this direction. Rather, the International Union for the Conservation of Nature produced a World Conservation Strategy (WCS) in 1980. The WCS not only attempted to ensure that the development agenda informed the environmental agenda, but it also attempted the reverse, and drew attention to the need for development efforts to be based upon a respect for ecological processes. After the WCS, the concept appeared in 1981 in the book *Building a Sustainable*

Society, by Lester R. Brown of the Worldwatch Institute and in Norman Myers' *Gaia: An Atlas of Planet Management* in 1984.

One could object that economists such as Herman Daly (1973), in emphasising a 'steady state' economy in which the rate of material throughput was constant, but in which wealth could continue to grow, laid the intellectual foundation in the early 1970s for the later conceptual blurring, but historians of economic thought will remind us that the stationary state featured in the thought of liberal political economists in the nineteenth century, such as John Stuart Mill. The difference, of course, is that Mill saw the stationary state negatively, with economic growth grinding to a halt, while Daly saw regarded it as a positive alternative to the 'zero economic growth' the neo-Malthusians saw as being demanded by the limits of the natural environment.

The origins of the word 'sustainability'—'that magic word of consensus' as Worster (1993: 144) describes it—lie in the concept of 'sustained yield' which emerged first in 'scientific' forestry in Germany in the late eighteenth century. As Robert Lee (cited by Worster 1993: 145) has noted, it came not just as a response to the decline in German forests, but as a response to the uncertainty and social instability which wracked Germany at that time (and which were responsible at least in part for the decline in German forests). It was an instrument of a strong state for ordering social and economic conditions which stood as a 'necessary' counterweight to emergent laissez-faire capitalism.

The publication of the Brundtland Report and the subsequent UN Conference on Environment and Development at Rio de Janeiro in 1992 therefore represented merely the refinement and institutionalisation of the concept of sustainable development which had evolved over the course of two decades, but which has its roots more deeply embedded in apprehensive reactions to the Enlightenment. Such reactions can be utopian—even millenarian—responses to rapid social change.

There have been numerous analyses of environmentalism in millenarian terms. For example, Buell (1995) analysed 'environmental apocalypticism', while Killingsworth and Palmer (1996) and Lee (1997) have described the millenarian aspects of the contemporary environment movement. Stewart and Harding (1999: 289–290) saw environmental concerns as but one of a number of *fin de siecle* concerns:

> "During the 1990s, apocalypticism, and, somewhat less flamboyantly, its millennialist twin, have become a constant and unavoidable presence in everyday life. Idioms of risk, trauma, threat, catastrophe, conspiracy, victimization, surveillance; social, moral, and environmental degradation; recovert, redemption, the New Age, and the New World Order permeate the airways."

This is not to say that sustainability necessarily entails elements these darker strands of thought, but it is (given the widespread tendency not to regard the concept as problematic) necessary to establish that the concept should be regarded uncritically as something to be pursued.

4 From ‘Sustainable Development’ to ‘Sustainability’

Sustainable development represents an attempt to mediate a deeply embedded conflict (Redclift 1987). Not surprisingly, the definition of the term and the manner in which it has been operationalised have exhibited a continuation of that tension in various ways.

At the international level, it is fair to say that the South has sought to exploit the linkage between environment and development to advantage in international negotiations, with insistence on double standards provisions, technology transfer, capacity building, and other means of channelling development assistance as their price of consent to international agreements. At the domestic level in affluent nations we have seen various attempts to tilt the scales of interpretation back in favour of the environment and away from the economy. In Australia, the success of the environment groups in inserting the word ‘ecologically’ into what became known as the Ecologically Sustainable Development Process was something of a coup, but it came at the cost of alienating industry from the process.

Similarly, the focus in this chapter on ‘sustainability’ reflects a subtle shift in environmental circles to drop the word ‘development.’ My analysis suggests caution in taking this too far, lest part of the ‘congregation’ not continue their worship. There is virtue in vagueness in mediating conflict—even if this lack of conceptual clarity is often the source of failed policy ambition.

There is no clear consensus on what sustainability means, but there are some fundamental questions inherent in all this. Sustainable for how long? Are ecosystems to be sustained? Or should the emphasis be on the sustainability of human societies? If so, should it be all humanity? Nation-states? Or subgroups including traditional societies threatened by development activities? (Sneddon 2000).

Many of the conceptualisations which aim to settle this matter rest—as eventually did the ESD process in Australia—on a notion of *ecological* sustainability. But how helpful is this? Ecologists once thought that nature, left free of human interference, would eventually reach a steady state (or climax community), but over the past 30 years ecological disturbance has replaced the climax community as the prevailing theme among most ecological scientists. It is a point of some interest that in the popular imagination, the stability of the climax community is probably still the dominant ‘myth of nature’, sustained by constant repetition by political ecologists, and like sustained yield in Germany, no doubt offering the promise of stability in uncertain and rapidly changing times (Kirkman 1997, White and Pickett 1995).

An ecological science in which perturbation, turbulence, disturbance, succession and flux are the norm creates insurmountable problems for ecocentric philosophical positions. While we are not reduced to seeing nature in purely utilitarian terms, it does place the emphasis back on human choice—in Botkin’s (1990) terms, we must choose among the discordant harmonies of nature those elements we wish to retain. We must reject nature as providing norms which guide how we must live and accept instead that we are part of a living, changing system; we can chose to accept, use, or control elements to make for a habitable existence, both singly and individually.

The very science of ecology reflects certain social and political beliefs. Ecology is full of terms like ‘natural enemies’ which were first used metaphorically, but are now frequently used non-problematically and in different contexts to that of their first usage. Chew and Laubichler (2003) have concluded that many, if not most, ecological concepts reflect familiar cultural experience. They note that the discipline is replete with value-laden terms such as ‘alien’, ‘colonize’, ‘community’, ‘competition’, ‘contest’, ‘disturbance’, ‘efficiency’, ‘enemy’, ‘invasive’, ‘native’, ‘stability’ and ‘territory.’ We can add others to their analysis, including ‘collapse’ and ‘threshold’, a term borrowed from physics and now pervasive in ecology, and while it is sometimes used with justification, it is often invoked as a threat, a point which once crossed, one can never return to. This language reflects emotional connotations which are culturally biased and which draw scientists and the public alike towards views that may be at odds with fundamental biological principles. There are many dangers inherent in words like ‘natural’ and ‘unnatural’ and the danger of teleology is omnipresent, as the notion of a climax community can suggest a purpose, or a natural or divine design at work.

One danger relates to the problem foreshadowed above: the assumption that nature is balanced and harmonious, and that this ‘sacred balance’ (Suzuki and McConnell 1997) depends upon maintaining high levels of biodiversity. Those espousing this view are in contradiction of Lord May’s work (1973), which suggested instability could result even from highly complex systems. Philip Stott (1998) points out that, despite the cogent critique of the idea of stability as the norm in ecology from about 1910, its practitioners continue to speak of climaxes, optima, balance, harmony, equilibria, stability, and so on—and to focus on the ‘exotic other’ of rainforests and the giant panda (noting that WWF eschews the smallpox virus and the rat as symbols of biodiversity in favour of this charismatic megafauna). He argues that the language which depicts fire, drought, seasonality and cold as ‘ecological stresses’ is possible only if we maintain a misplaced norm of stability.

Various theoretical assumptions underpinning modern political ecology relate to the prevailing belief that nature exists in some delicate and harmonious balance, so that any anthropogenic interference such as actions causing species extinction might trigger catastrophic ecological collapse. Stephen Budiansky has pointed out how much of modern ‘political ecology’ (that which forms the discourse of environmental activists) is good poetry, but bad science (Budiansky 1995). An emphasis on disturbance and chaos also suggests we need be cautious about assuming we can manage resources at sustained yield, of course, and this is the basis for the emergence of the ‘precautionary principle’—although this too is frequently little more than a slogan with an infinite number of meanings.

What is telling is that environmental activists, most social scientists writing about environmental issues, and many ‘activist’ environmental scientists still cling to the myth of the ‘balance of nature’ that has long been rejected by ecology (Scoones 1999). By accepting this myth in the face of the scientific evidence, any change in ecosystems or climate can be attributed to human agency, and imparted with deep social meaning—either apocalyptic or (if promising some eventual return to a stable state of grace) millenarian.

While Worster (1993) dismisses sustainability as a sloganeering approach to environmental problems, his solution lies in the direction of another slogan: biodiversity. He argues that we must make our first priority the strict preservation of the billion-year heritage of evolution of plant and animal life, and thus preserve all the species, subspecies, varieties, communities and ecosystems that we possibly can. We cannot stop every extinction, but we should avoid adding to the tally.

But even 'biodiversity' is frequently used as a slogan, and there are dangers in this, especially with the unquestioned belief that one simply cannot have enough of it. You will search long and hard for critical discussion of *how much* biodiversity we should seek (Cherfas 1994). There is an unquestioning belief that more is both always better and never sufficient, despite there being doubts as to whether the supposed benefits of diversity, such as ecosystem stability, are real. This is so not just because of the decline in acceptance of the notion of the climax community, but because there is evidence of resilience in simple systems and fragility in diverse systems (Budiansky 1995: 97–99).

5 Sustainability and Business

Slogans sometimes make for good politics, but they are a dangerous foundation for policy. Nevertheless, business today must engage an agenda that routinely includes 'sustainable development' or 'sustainability'. But what does that entail for business politics? The recent push towards 'sustainability' is clearly more problematic for business, because it is essentially an attempt to 'dehumanise' sustainable development and 'sustainable development' still carries the promise of *some* development. Business has generally sought to engage positively with this agenda, along with numerous associated, often subsidiary concepts, such as 'biodiversity', 'intermediate technology', and so on. But because these parts of the agenda, too, are essentially slogans that can be highly problematic.

For example, a management plan for a national park in Germany was once saved from the efforts of environmental groups to write into it a requirement to 'maximise biodiversity' when ecologists in the parks agency realized the alpine ecosystem had low natural biodiversity (Haber 1993: 39). Similarly, sustainability needs to avoid assumptions that slogans such as 'intermediate technology' will deliver the right results. The tragedy of arsenic poisoning from tube wells in Bangladesh serves as an appropriate warning of basing policy on inadequate science. There, UNICEF and the World Bank encouraged the development of tube wells as a response to the problems of water-borne diseases and succeeded in reducing infant mortality and diarrheal illness by 50 % by the construction of 8 million tube wells, but it has been found that one in five of these wells is now contaminated with carcinogenic arsenic. Water had been tested and found suitable—for irrigation, but had not been tested for human consumption. Similarly, we need to be careful about translating risk management decisions from developed to developing nations: Peru following US EPA assessments in deciding not to chlorinate drinking water caused thousands of deaths in the South American cholera epidemic of the 1990s (Anderson 1991; Lee and Dodgson 2000).

Business has frequently responded positively to the sustainable development agenda, especially (as David Vogel has shown) where regulation might create advantages for it (Vogel 1997).

Let me give two examples. In 1999 John Deere introduced an innovation that reduced emissions from 2-stroke engines on domestic power equipment by 70 % while improving fuel economy 30 %, all with only a minor cost increase. This 'compression wave technology' technology was then presented by John Deere to the US EPA with a push to tighten domestic emission standards. John Deere stood to gain by having standards set to advantage its technology, which it was also prepared to license to its competitors. There was therefore business support for an action that might be considered to be part of the sustainable development agenda, although whether domestic two-stroke pollution was a first-order problem is another matter. In another example, the German company Henkel developed phosphate substitutes—such as zeolites and polycarbonates—and licensed them internationally, but they caused rivers to foam in Switzerland where phosphates had been banned and possibly exacerbated algal blooms because of their toxicity for *Daphnia* (water fleas) which ate algae, and thus helped prevent algal blooms.

Many businesses in some sectors like fishing and forestry have engaged with their critics on sustainable development issues by undertaking product certification, provided by various councils on behalf of NGOs. Hartmut Elsenhans (2005: 21) has likened NGOs—particularly those which appeal to the 'slacktivists'—to being in the business of selling 'certificates of good conscience' to ignorant buyers and claiming 'Potemkin-like successes.' Product certification schemes have the same basic structure as protection rackets: 'pay us to certify, and we will ensure there are no boycotts.' Nor are they necessarily effective in achieving their aims; a recent longitudinal study of 'Fair Trade' organic coffee producers in Nicaragua, for example (Beuchelt and Zeller 2011) found that they were disadvantaged when compared with those who declined to take out fair trade certification.

Some businesses, of course, benefit from policies designed to advance sustainable development: those specializing in pollution control, cleaner production, renewable energy, and other aspects of 'ecological modernisation' or 'Green Keynesianism'. But how have resource extractive industries responded to the sustainable development agenda? How have businesses whose core business is the extraction of non-renewable resources responded to the call for sustainable development or (more problematically) sustainability? Forestry first developed the concept of sustained yield, but how can, mining companies—whose core business is the depletion of non-renewable resources—engage with the sustainable development agenda?

If we accept that sustainable development is about the sustainable development of human society, there is no great challenge. Harold Hotelling (1931) long ago set out the basic issues in considering the optimal rate at which a non-renewable resource should be depleted: too slow a rate and future generations might not appreciate being left a resource that has little use for them (when they might be better off investing and enjoying the wealth created); too rapid a rate and future generations might be deprived of resources they need.

The way in which the mining industry has engaged with the sustainable development agenda has been to interpret it in such a way as to address the key issue that emerged for it over access to land. Whereas intellectual property rights and licences to market (based on efficacy and risk) are of paramount importance for sectors such as pharmaceuticals and synthetic chemicals, the mining sector has undifferentiated products and access to land—rights to prospect and to mine—are central for it. First at the domestic level in Australia and then internationally through the International Council on Mining and Metals (ICMM), the mining industry developed codes of conduct on issues such as treatment of indigenous people, mine site rehabilitation and mining in national parks.

Many NGOs have criticised such activity as 'mere greenwashing', and to some extent they are correct. The development of such proactive measures, described broadly as part of 'corporate social responsibility' have also been criticised by those who see firms as having no greater responsibilities than to obey the law and maximize returns for shareholders (Henderson 2001), but they are essentially defensive measures that might contribute to corporate profitability by staving off unfavourable regulation (as is the intention with much self-regulation) or, perhaps more importantly, litigation. We can demonstrate this by examining the origins (and motivations of the founder) of the business organization that specializes in business engagement with sustainable development, the World Business Council for Sustainable Development (WBCSD). WBCSD was involved in the development of the Global Mining Initiative that lead to the establishment of ICMM and its engagement with sustainable development.

The WBCSD was the brainchild of Stephan Schmidheiny. Maurice Strong was secretary general of the 1992 United Nations Conference on Environment and Development (UNCED) in Rio. In this role he established a forum for leading businessmen from all parts of the world that could develop a business perspective on environment and development challenges. This forum later evolved into the Business Council for Sustainable Development, which merged with the World Industry Council for the Environment in 1995 to form the World Business Council for Sustainable Development (WBCSD). Schmidheiny was also co-chair with Secretary-General of the ICC, Maria Livanos-Cattaui, of a High Level Group within the OECD appointed by Secretary-General Donald Johnston to progress the agendas of corporate social responsibility and sustainable development (Carroll and Kellow 2011).

In its 1997 report, *Guiding the Transition to Sustainable Development*, the High Level Group argued that 'sustainable development reaches into the issues of minority rights, women's rights, and, given the focus on the needs of future generations, children's rights' (Henderson 2001: 50). The group maintained that the OECD was facing a more difficult challenge than at any other time in its history. It argued that major ecosystems were in decline as a result of population and economic growth, but national government policies on the economy, environment and social justice were badly disconnected and often incompatible. The report called on the OECD to take a lead in harmonising government policies, adopting sustainable development as an overarching strategic priority and redefining the mission it was given at its establishment of achieving 'sustainable economic growth' in terms of human and environmental terms, as well as economic. This move to embrace sustainable development and CSR has been severely criticized by a former Chief Economist of the OECD, David Henderson (Henderson 2001).

Schmidheiny's background tells much about engagement with sustainable development as a defensive corporate strategy. Schmidheiny had taken over as CEO of his family company, Eternit AG, in 1978 and embraced the CSR agenda with enthusiasm, and immediately announced that Eternit AG would renounce its core business: the production of asbestos products. By 1984, half of the company's production was asbestos-free, and the last asbestos products left the factory in 1994. The building products subsidiary was spun-off and renamed as Cemroc, so that Eternit AG is no longer a part of Schmidheiny's former Swiss Eternit Group, Eternit (Schweiz) AG. In 2006, Eternit (Schweiz) AG established the foundation Eternit-Werke Schweiz, to provide financial support to actual and former employees and their relatives affected by asbestos-related diseases arising from manufacturing at the plants (Eternit 2011).

Schmidheiny, now a resident of Costa Rica, has removed himself from all formal positions at Eternit. Recognised as a business leader, he was appointed to the boards of several leading companies, including becoming a member of the boards of directors of leading companies such as ABB Asea Brown Boveri, Nestlé, Swatch, and UBS AG. (This last corporation has achieved a degree of notoriety. UBS agreed, on February 18, 2009, to pay a fine of $780 million to the U.S. Government to settle a suit on charges of conspiring to defraud the United States by impeding the Internal Revenue Service). Schmidheiny also gave about half his personal wealth of a little over $2 billion to charity.

As a defensive strategy, sustainable development appears to have been relatively successful. Schmidheiny has been sentenced *in absentia* for negligent behavior in exposing Eternit's workers and citizens to asbestos in legal proceedings initiated in Italy in April 2009, but this legal action came much later than those against other asbestos manufacturers globally. The Eternit-Werke Schweiz foundation was also only established in 2006, much later than those established by similar companies, such as CSR or James Hardie in Australia.

While the question of whether CSR in general, and the sustainable development component of it in particular, will ever rise above the criticism that individual business firms and groups like WBCSD are engaging in mere 'greenwash' (Najam 1999) is unlikely ever to be settled definitively, the sustainability agenda has had an impact. Despite the criticisms by its former Chief Economist of the emergence of CSR as part of the agenda of the OECD, for example, the agenda is well-entrenched (not without controversy) in that organisation, with a current commitment to 'Green Growth' as a response to the exigencies of the Global Financial Crisis and the greening of the electorate in its member states.

6 Conclusions

In summary, it is essential that we recognize that ‘sustainable development’ is both a contested concept and an explicitly political one which mediates the conflict, at the global level, between the desire of the North for greater environmental protection and the desire of the South for increases in human welfare. If the contest over the meaning of the term shifts the language to ‘sustainability’ and squeezes out the social dimension, there is likely to be a backlash in the international political agenda.

Second, it has to be recognized that neither ‘sustainability’ nor ‘sustainable development’ as slogans can deliver much effective policy. As any examination of attempts to operationalise the concept clearly shows (for example: Pearce et al. 1990; Lawn 2000) there is much detail to add to make for effective outcomes. To provide this necessary detail requires the careful, critical and skeptical application of the very best that the natural and social sciences have to offer.

Sustainability, I suspect, is ultimately a journey rather than a destination. And it refers to the quest as a whole, rather than to any step along the way, so that it makes little sense to condemn any single step as ‘unsustainable’ or praise another as ‘sustainable’. Thus sustainable development might include depletion of non-renewable resources, though depletion of flow resources might be more problematic. Undertaking the journey requires not just good natural science, but also the development of good policy, and the humanities and social sciences will be indispensible in this process because it will require the application of ethical judgments, concerns with distributive justice, efficient allocation of resources, the legitimacy of decision processes, and many other processes which are the domain of such disciplines.

Sustainability without a social dimension not only excludes the poor from the equation; modern ecological theory suggests that it makes little sense to even try to talk of ‘ecological sustainability’ *except* inasmuch as the concept is concerned with the ability of ecosystems to sustain human development. ‘Nature’ will continue on its chaotic path, sustaining a multitude of changes and indifferent to the fate of humanity. Technocratic institutions not moderated by the inconvenient concerns of the *demos*—seeking equity, demanding justification—are unlikely to be any more proficient at guiding sustainability than technocratic institutions have proved to be at achieving sustainability thus far.

The engagement by business with the sustainability agenda has (unsurprisingly, given the nature of that agenda) been active. Rather than norms of ‘sustainability’ simply constraining business interests, business has sought to define the agenda to suit its interests and to serve in their defence.

References

Anderson, C. (1991). Cholera epidemic traced to risk miscalculation. *Nature, 354*(6351), 255.

Beuchelt, T. D., & Zeller, M. (2011). Profits and poverty: Certifications' troubled link for Nicaragua's organic and fairtrade coffee producers. *Ecological Economics, 70*, 1316–1324.

Botkin, D. B. (1990). *Discordant harmonies: A new ecology for the twenty-first century*. New York: Oxford University Press.

Brown, L. R. (1981). *Building a sustainable society*. New York: Norton.

Budiansky, S. (1995). *Nature's keepers: The new science of nature management*. New York: The Free Press.

Buell, L. (1995). *The environmental imagination: Thoreau, nature writing, and the formation of American culture*. Cambridge, MA: Belknap.

Carroll, P., & Kellow, A. (2011). *The OECD: A study in organisational adaptation*. Cheltenham: Edward Elgar.

Cherfas, J. (1994). How many species do we need? *New Scientist, 1937*, 36–40.

Chew, M. K., & Laubichler, M. D. (2003). Natural enemies—Metaphor or misconception? *Science, 301*, 52–53.

Commoner, B. (1966). *Science and survival*. London: Gollancz.

Commoner, B. (1972). *The closing circle: Confronting the environmental crisis*. London: Cape.

Daly, H. E. (1973). *Toward a steady state economy*. San Francisco: W.H. Freeman.

Ehrlich, P. R. (1968). *The population bomb*. London: Pan Books.

Elsenhans, H. (2005, July 8–9). *Equality, market, profit, growth—Small-scale industry and the expansion of mass markets with reference to an empirical research in Algeria*. Paper presented to the annual conference of Verein für Socialpolitik: Research Committee Development Economics, Kiel Institute for World Economics.

Eternit. (2011). *History*. http://www.eternit.ch/en/about-eternit/history/. Accessed 26 May 2011.

Gallie, W. B. (1955–1956). Essentially contested concepts. *Proceedings of the Aristotelian Society, 56*, 167–198.

Haber, W. (1993). Environmental attitudes in Germany: The transfer of scientific information into political action. In R. J. Berry (Ed.), *Environmental dilemmas: Ethics and decisions* (pp. 33–46). London: Chapman & Hall.

Hardin, G. (1972). *Exploring new ethics for survival: The voyage of the spaceship Beagle*. New York: Viking.

Hardin, G. (1977). *The limits of altruism: An ecologist's view of survival*. Bloomington: Indiana University Press.

Harvey, D. (1974). Population, resources and the ideology of science. *Economic Geography, 50* (3), 256–277.

Henderson, D. (2001). *Misguided virtue: False notions of corporate social responsibility* (Hobart Paper No. 142). London: The Institute of Economic Affairs.

Hotelling, H. (1931). The economics of exhaustible resources. *The Journal of Political Economy, 39*(2), 137–175.

Killingsworth, M. J., & Palmer, J. S. (1996). Millennial ecology: The apocalyptic narrative from Silent Spring to global warming. In C. G. Herndl & S. C. Brown (Eds.), *Green culture: Environmental rhetoric in contemporary America* (pp. 21–45). Madison: University of Wisconsin Press.

Kirkman, R. (1997). Why ecology cannot be all things to all people: The "adaptive radiation" of scientific concepts. *Environmental Ethics, 18*, 375–390.

Lawn, P. A. (2000). *Toward sustainable development: An ecological economics approach*. Boca Raton: Lewis Publishers.

Lee, M. (1997). Environmental apocalypse: The millenarian ideology of "Earth First". In T. Robbins & S. J. Palmer (Eds.), *Millennium, messiahs, and mayhem: Contemporary apocalyptic movements* (pp. 119–137). New York: Routledge.

Lee, K., & Dodgson, R. (2000). Globalization and cholera: Implications for global governance. *Global Governance, 6*(2), 213–236.
Lucas, G. R., Jr., & Ogletree, T. W. (1976). *Lifeboat ethics: The moral dilemmas of world hunger*. New York: Harper & Row.
May, R. M. (1973). *Stability and complexity in model ecosystems*. Princeton: Princeton University Press.
Myers, N. (1984). *Gaia: An atlas of planet management*. New York: Anchor Press/Doubleday.
Najam, A. (1999). World business council for sustainable development: The greening of business or a greenwash? In H. O. Bergesen, G. Parmann, & Ø. B. Thommessen (Eds.), *Yearbook of international co-operation on environment and development 1999/2000* (pp. 65–75). London: Earthscan.
Pearce, D., Barbier, E., & Markandya, A. (1990). *Sustainable development: Economics and environment in the Third World*. Aldershot: Edward Elgar.
Pirages, D., & Ehrlich, P. R. (1973). *Ark II: Social response to environmental imperatives*. San Francisco: W. H. Freeman.
Redclift, M. (1987). *Sustainable development: Exploring the contradictions*. London: Routledge.
Scoones, I. (1999). New ecology and the social sciences: What prospects for a fruitful engagement? *Annual Review of Anthropology, 28*, 479–507.
Sneddon, C. S. (2000). "Sustainability" in ecological economics, ecology and livelihoods: A review. *Progress in Human Geography, 24*(4), 521–549.
Stewart, K., & Harding, S. (1999). Bad endings: American apocalypsis. *Annual Review of Anthropology, 28*, 285–310.
Stott, P. (1998). Language for a non-equilibrium world. *Journal of Biogeography, 25*, 1–2.
Suzuki, D. T., & McConnell, A. (1997). *The sacred balance: Rediscovering our place in nature*. St. Leonards: Allen & Unwin.
Vogel, D. (1997). Trading up and governing across: Transnational governance and environmental protection. *Journal of European Public Policy, 4*(4), 556–571.
White, P. S., & Pickett, S. T. A. (1995). *The ecology of natural disturbance and patch dynamics*. Orlando: Academic.
Worster, D. (1993). *The wealth of nature: Environmental history and the ecological imagination*. New York: Oxford University Press.

The Politics of Sustainability: Some Principles and Proposals

Philippe C. Schmitter

1 Introduction

A quarter of a century has now passed since Gro Harlem Brundtland produced her landmark report on sustainable development, yet little progress has been made towards achieving the kinds of policy reform that might result in sustainable development being realised – especially in the humanistic rather than technocratic manner that she advocated.

The Brundtland Report suggested the only political strategy imaginable given the nature of the international system at the time: the pursuit of sustainability was essentially a matter to be decided by sovereign national governments (World Commission on Environment and Development 1987). Since its problems transcended all national borders, their resolution required intergovernmental agreements that were global in scope and the United Nations offered the only framework for conducting such negotiations. Once member governments had signed the relevant treaties, they would ratify and faithfully execute them – with supplementary assistance from new and/or pre-existing UN specialized agencies. None of these assumptions was completely wrong, but we now know, after two decades of highly visible global conferences, multiple international declarations of good intention, and several intergovernmental treaties, that they collectively turned out to be insufficient. The world is not more sustainable than it was – quite the contrary – and it is hard to discern whether all of these efforts have made any appreciable positive difference. Brundtland was innovative in its analysis of problems, but conventional in its political strategy for solving them.

The failure of Brundtland results from a failure to spell out how sustainable development might be achieved *politically*. Brundtland largely assumed the

P.C. Schmitter (✉)
Department of Political and Social Sciences, European University Institute, Badia Fiesolana, 50016 San Domenico di Fiesole, Italy
e-mail: philippe.schmitter@iue.eu

A. Lang, H. Murphy (eds.), *Business and Sustainability*,
Sustainability and Innovation, DOI 10.1007/978-3-319-07239-5_3

continuation of existing political institutions, but it cannot be assumed that sustainable development – a fundamental reform to economic systems – can be achieved without fundamental reform of *political* institutions. There is, in short, an important lack in the attempts thus far to create a convincing humanistic narrative about sustainability, and it is the aim of this chapter to at least commence the filling of this gap.

To be convincing, a humanistic narrative about sustainability should contain three elements:

(1) It must explain *why* it is necessary to forego (tangible) present satisfactions for (uncertain) future benefits – benefits that will be enjoyed by everyone, even those who did not contribute to producing them;
(2) It has to provide compelling justifications *why* living, adult human beings should be so concerned with the 'life-world' of future generations – not part of their immediate family and even those not yet born – when they almost certainly will no longer be part of that world;
(3) It has to deal with the problem of 'agency', of *how* actors can intervene – some individually but most collectively – to bring about changes in private behaviour or public policy that will effectively produce the desired future effects at an acceptable cost in the present.

Numerous contributions that have addressed the first two of these elements, but our concern here is exclusively with Item (3). Let us just assume that persons and organizations in significant numbers and locations can be convinced *why* they should be more future-regarding and, therefore, desire to act differently. *How* should they accomplish this politically? How can they cooperate to a sufficient degree that they will be able to overcome the resistance of those not so convinced? How can they create institutions that will carry the message and sustain the policies from one generation to another? And, can this be accomplished voluntarily and peacefully? Or, will it be necessary to apply coercion and, even, physical force – hopefully, by legitimate authorities?

There have been many convincing 'humanist narratives' concerning sustainability. Perhaps, the most ambitious and comprehensive work with this intent is that of Jeffrey D. Sachs, *Common Wealth: Economics for a Crowded Planet* (2008). Despite its sub-title, this is not a technocratic manual for developmental or ecological economists. It is eloquent about the failings of orthodox liberal economics and about the need for a 'new economics' with humanistic foundations and a 'deeper social understanding.' It addresses a wide range of issues related to sustainable development and does so in a way that should be accessible to a wider range of readers. In other words, it comes as close as one can imagine to fulfilling the *desiderata* in Items (1) and (2).

Unfortunately, it contributes virtually nothing to Item (3). Sachs' assumption seems to be that existing political institutions – presumably democratic (although the word 'democracy' does not figure at all in the index) – are adequate. The only specific 'reform' measure in the book was the suggestion that governments should create a 'Department of International Sustainable Development', hardly, an inspiring or promising idea. His section on "New Forms of Governance" is only two pages long (Sachs 2008: 332–334). In it, he exhorts other world regions to follow the example of the European Union – without a single word on how they might do this. He also notes with approval the process of devolution of authority to regions within many 'Real Existing Democracies' or REDs (he calls it 'localization') and believes these sub-units have been 'the most dynamic in architectural(!) and cultural pursuits in recent years' (ibid.: 334). The reader is left to infer that this 'power to the regions' is good for sustainable development. If there is any strategic message in all this, it is that the necessary improvement in policies is 'the sum of many acts' (ibid.: 314) by individuals who will understand the message of the book, vote for correctly motivated political parties, participate in right-thinking social movements and, thereby, become 'the stakeholders of change' (ibid.: 314).[1]

It will take more than the rational enlightenment of individuals and their voluntary collective action to make 'sustainable development' politically sustainable. Sachs has no viable and enduring conception of agency to offer his reader. It is time to try *a new strategy*. Fortunately, world politics have changed dramatically in the 20 years since Brundtland. Features that were barely discernible in the mid-1980s have become major trends. A large number of autocratic governments have collapsed and been replaced by democratic ones. Non-state actors have grown in importance and now routinely transcend national confines; domestic publics have become aware of and are being mobilized around foreign issues as never before; large corporations have acquired resources superior to all but a few sovereign states and are operating simultaneously and autonomously in many of them; transnational scientific communities have formed around a multitude of specialized issues and are exerting more influence on policy-making at all levels of territory; the cost of international communication and transportation has fallen precipitously; massive flows of persons across national and continental boundaries have revealed how difficult it has become for governments to control even the most significant element of their sovereignty; an ideology of permissive *laissez-faire* and *laissez-passer* in goods and services (but not people) has proliferated far beyond its previous Anglo-American liberal heartland. Finally, the multiple and complex issues involving sustainable development have become more salient to mass publics – and better supported within and across scientific communities.

[1] If it is any comfort, Sachs at least makes an effort at dealing with the agency problem. The much publicized, *Growth Report. Strategies for Sustained Growth and Inclusive Development* (Center for Global Development 2008) makes none at all – despite its sub-title. The *Report* is utterly technocratic and seems to presume that, if politicians just accept the expert advice it contains, the politics involved in its implementation will take care of the rest. Moreover, the economic wisdom it proffers is amazingly 'pusillanimous.' Consider just the two following conclusions: 'Our model of developing economies is too primitive at this stage to make it wise to pre-define what governments should do' (Center for Global Development 2008: 30); 'Nonetheless, the commissioners have a keen sense of the policies that **probably** matter' (ibid.: 33, my emphasis). The reader will be pleased to learn that 'An international economy in a world of nation-states has no natural guardians. That is **perhaps** the biggest risk of all' (ibid.: 103 – again my emphasis).

In other words, the argument in Brundtland that sustainability should be considered an urgent concern that transcends existing national borders and overwhelms present state capacities has been won. What is needed is a common strategy that takes into account the complexity of the problem *and* the momentous political changes of the past 25 years. When proposing such a strategy, we should not be under the illusion that all will agree with it just because, ultimately, all will benefit from it. Achieving sustainable development in the future will be a struggle, if only because existing unsustainable development generates very unequal costs and benefits in the present and will continue to do so during any foreseeable transition period. And those who benefit the most are frequently those who are best entrenched in national and sub-national political units.

This paper sets out below some relatively modest institutional reforms and it is at least conceivable that existing institutions and configurations of power in REDs might adopt some of them, although not always for the ostensible purpose of sustainability. They will undoubtedly have other agendas and objectives in mind – getting themselves re-elected and their associates benefited – but if they were to implement them the effect would be to make both politicians and citizens more ‘future-regarding’ in their preferences, more involved in communicating with future generations and, just maybe, more likely to forego present satisfactions in favour of future benefits.

Our proposed strategy is composed of four principal dimensions. None of those listed below would suffice – not even all of them together – to guarantee sustainable development. They are ‘points of departure’, rather than ‘points of arrival.’ Given the manifest urgency, we have concentrated our attention on what can be accomplished within a predictable timeframe. We are convinced that policies based on the following strategies will produce some positive results by themselves, but more importantly they will set in motion processes of innovation and experimentation that will become increasingly encompassing and consequential in the future.

What is proposed is *not* an official, comprehensive, global and technically superior solution, but *just the opposite*. Without completely discarding the possibility that governments – driven by dire necessity – might at some time in the future agree on such a solution and endow a ‘global governing instrument’ with the powers to implement it, in the present – when the solutions to un-sustainability are largely in the hands of private producers, unevenly distributed across political units, variable according to industry and sector, and still in dispute between different technologies – the only viable political strategy is to proceed incrementally according to relatively simple principles. And, even then, this may require reforming political practices before and in order to choose and implement the necessary substantive policies.

2 Four Principles of Political Action

2.1 Governance Rather than Government

Governance works not through formal monopolistic institutions exercising ultimate authority over a specified territory, i.e. *states*, but through informal arrangements of actors exercising some degree of control over diverse functions, i.e. *networks*. Such arrangements are open to participation by different types of actors – public and private, profit and non-profit, national and trans-national, expert and amateur, producer and consumer, large and small – who have been identified and accepted each other as 'stakeholders.' What these actors have in common is an enhanced awareness of interdependence. They have conflicting objectives, but depend sufficiently upon each other so that no one can simply impose a solution on the other and all would lose if no solution were found. They know that their respective contributions are needed to varying degrees if some problem is to be solved or some public good is to be produced. Moreover, they also know that the solution cannot simply be bought in the market or commanded by the government. These other two mechanisms of distribution would normally be preferred on practical or ideological grounds, but thanks to either market failure or state failure (or both), the 'second best' governance solution becomes the best one.

It is precisely their informality in both composition and operation that makes them so much more appropriate as a starting point for tackling sustainability issues. They can be 'chartered' initially by virtually any level of government or even private institutions, but what is especially important is that membership in them is not contingent on the formal (and illusory) equality of inter-governmental organizations and decision-making proceeds by consensus – not by unanimity or voting. Moreover, actors in such arrangements can collectively set standards and set up monitoring systems without having to go through formal processes of ratification. Ideally, such arrangements should be 'self-enforcing', but in the real world their role is always circumscribed by both market and state mechanisms. In order to reach consensus in the first place, 'stakeholders' often depend on their mutual fear that, if markets were to distribute goods or states were to impose solutions, they would all be worse off. The implementation of choices made by governance may be even more problematic. Markets can offer powerful incentives to defect from them and, thereby, gain short-run competitive advantage. Lack of official support from governments can mean that monitoring devices will be weak and sanctions impossible to apply.

In other words, governance arrangements may fit better the political conditions of a world 'Post-Brundtland' that has lost its clear demarcations of national sovereignty, that has to cope with problems cutting across entrenched functional specializations, that has generated a wide variety of actors insisting on their right to participate and that has not yet produced a global system of government. They are not, however, the definitive response to the challenge of sustainable development. For the foreseeable future, such arrangements will still ultimately have to face the test of market competition and rely on the legitimate coercion of state authorities. They cannot stand alone.

2.2 Partial Rather than Comprehensive

Sustainable development demands nothing if not comprehensiveness. It requires that multiple and relatively autonomous domains of human endeavour be coordinated. The problem is that governance arrangements work best when they are partial, i.e. when the stakeholders involved are relatively few in number and highly dependent upon each other. These arrangements may be useful in overcoming the 'intergovernmental' limits imposed by national sovereignty, but how effective can they be in bridging the differences in knowledge and interest embedded in distinct functional domains?

The simple answer is that we do not know. Only innovation and experimentation will inform us. Can stakeholders in one domain – owners, employees, experts, interest representatives and civil servants – learn from what others have accomplished? Will participants engaged in solving their problems of sustainability even perceive the positive and negative effects their efforts have upon others? Will entirely new scientific specialties emerge to deal with the interstices between different governance arrangements? Can one even imagine something like 'mergers and acquisitions' in the future in which initially separate governance arrangements combine to deal with more comprehensive issues?

History at the national level in most developed societies suggests this was possible. 'Spill-overs' routinely occurred across scientific specialities and administrative functions. Some policy arenas proved more strategically important than others and incorporated less innovative or weaker ones. What made an especially significant contribution to these processes of diffusion and expansion was the existence within each national state of something called 'civil society.' The participants in most governance arrangements have not been individuals but organizations. And these scientific societies, business and professional associations, trade unions, social movements, community organizations, and so forth have to relate to each other across levels and arenas. They often compete for member affiliation and financial support, and form alliances for broader purposes. One special peculiarity of this process at the national level, however, is virtually absent at the trans-national level – the existence of a system of competing political parties. With their ideological appeals, electoral campaigns and comprehensive role in forming governments, parties provided a powerful incentive for connecting the 'partialities' embedded in separate policy domains. Only in a very few trans-national regions does anything equivalent yet exist.

Our strategy of relying on governance to accomplish sustainable development is paradoxical: it proposes a partial instrument to reach a comprehensive objective. At best, it offers the promise that dispersed efforts at functional problem-solving by isolated groups of stakeholders will not interfere with each other, and will eventually lead to a more encompassing approach. However, un-sustainability is increasing at rapid pace and something has to be done sooner rather than later. Of course, a more comprehensive system for assessing risks and allocating responses would be preferably. Alas, it will not be available in the foreseeable future.

2.3 Regional Rather than Global

Not only should sustainable development be comprehensive in functional substance, it should be global in territorial scope. Its most basic principle is that the world has become one. There exists only one ecosystem and an increasingly integrated economy. Awareness of this has grown, but the world is no closer to possessing a global political mechanism for identifying policy priorities, setting relevant standards, raising necessary resources, supporting collective efforts and, when all else fails, punishing defections from the common good. National states still try to do this and necessarily do so in a highly unequal and self-regarding way.

But they are no longer alone. One of the most significant changes since Brundtland has been the emergence of 'trans-national regions.' Between the global and the local in some parts of the world – and nowhere more so than in Europe – are complex 'multi-layered' political systems in which responsibility for using public authority is shared across different territorial levels and implementation of policies requires constant cooperation among them. Given the disappointing results of trying to reach global agreements and empower global intergovernmental organizations, this intermediate 'regional' level provides us with another 'second-best' strategic alternative.

The fact that the European Union is in the vanguard of such developments is especially encouraging. This region has the collective resources – material and human – to make a highly significant contribution on its own. The existence of a supra-national organization with a proven capacity to generate benefits for all of its members and a population more aware than most of the costs involved in 'un-sustainable development' are more than coincidental. The citizens of the EU uniquely expect their regional organization to address these risks. Another significant factor is that Europe – within and beyond the EU – already possesses the key elements of a continent-wide civil society that can play a crucial role in identifying priorities, diffusing best practices and pressuring for 'spill-overs' from one domain to another. Europe does not yet have a distinctive supra-national party system, but it could emerge in the near future and sustainability issues could well determine its configuration.

And Europe is not alone. Other regions have been making more timid efforts at cooperation and integration: NAFTA, MERCOSUR, APEC, ASEAN, AU, SADC, and so forth. Virtually all these look to the EU for inspiration and the EU has responded with various cooperation programs and some trade agreements. For decades now, the EU has been pursuing a very ambitious policy of political conditionality with regard to democracy, human rights and the rule of law in the countries bordering or trying to join it. It could very creatively extend its influence to other world regions by insisting on respect for common principles of sustainable development as a condition for concluding further agreements – and by offering its own directives and regulations as models for such an effort. No doubt, this will be called 'European Imperialism' by some, but it is much less coercive and malevolent than the original version.

Students of international relations have long recognized that voluntary and peaceful change at this macro-level requires leadership. Someone has to take the initially greater risks and pay originally higher costs. Regional organizations are in a unique position to play this role constructively, precisely when they are not simply a façade covering domination by the most powerful national state, the largest private firm, the momentarily hegemonic political party or the best funded NGO. The EU has repeatedly demonstrated its independence from the hegemony of its largest member states and its capacity to exert influence outside its territorial sphere. No other trans-national regional organization can (yet) make that claim, which is why at this point the EU offers the world its best strategic alternative for advancing sustainable development.

2.4 Humanist Rather than Technocratic

Coping with threats to sustainability has been a perpetual and even a desirable feature of human existence. We have always wanted more than we have and, hence, been threatened with the prospect that we will outrun the 'carrying capacity' of the world that sustains us. Countless times in the past, profound thinkers have announced that these limits had been reached – only to be proven wrong.

The usual explanation for this error has been *innovation*. Humans constantly 'tinker' with the conditions surrounding them, but not all this tinkering has involved material technologies. Perhaps, even more important, have been the cultural and social innovations that have led to major transformations in the norms that give meaning to what we want and in the collective arrangements that we apply to get what we want.

Without denying the potential for technological innovation in production and distribution – especially when driven by competition within increasingly interdependent economic systems and diffusion among more open and interpenetrated communication systems – enduring sustainability will require major innovations in the norms and objectives of human beings and that can only be achieved by providing a narrative that offers them a more credible and desirable 'alternative life world.' As the slogan goes: 'Another World is Possible.'

A key element in such a scenario should be an attempt to shift the time-horizon for individual satisfaction and collective attainment such that human beings in the present come to attach greater value to future states of being and, therefore, be willing to forego immediate returns. Focusing on communication between 'generations' is an important place to start, especially with regard to political identities and expectations.

To put it more concretely, a set of reforms in the practice of 'real existing democracy' should be designed to: (1) Ensure the representation of future generations in decision-making by contemporary politicians; (2) Provide incentives to decision-makers so that they will be encouraged to take longer term effects of their actions into account; (3) Improve the scope and depth of accounting systems to include inter-generational and inter-level effects; (4) Provide for mechanisms of representation that transcend national borders in order to monitor for externalities produced by one system upon another; and (5) Impose obligatory contributions or compensatory actions on all unsustainable, resource depleting exchanges affecting future generations.

This goes against the contemporary emphasis upon injecting liberal models of economic rationality into the analysis of politics. In a world of 'Non-Tu-ism' where all actors are presumed to be strangers not caring about the welfare of each other and certainly not caring about the welfare of world as a whole after they have left it, it would seem utterly irrational to base one's actions in the present upon their projected impact upon future generations – even to persons in such generations to whom one is directly related by family, community or friendship. Nevertheless, if one's conception of human society is less strictly self-regarding and embraces notions of collective identification and solidarity, then, it becomes possible to imagine a rational and humanistic narrative that can make 'the anticipation of the future a motive for present concern.'[2]

3 From Four Principles to Many Practices

So much for the guiding *principles* of a revised approach to political sustainability. What specific reforms in political *practices* might serve to bring about this desirable goal? Can we identify concrete changes in how actors – individual and collective – conceive of their interests and interact to resolve the inevitable conflicts that emerge from pursing them that will enhance sustainability?

First, some 'realistic caveats'. We have to recognize the constraint that it will not be possible in the foreseeable future to convince all relevant actors to adopt a common 'other-regarding' and 'over-reaching' passion for sustainability. They will continue to define their objectives in a 'self-regarding' fashion and strive to satisfy them within 'real existing' political units – mostly formally sovereign and nominally national states. Reforms in practices may make these actors more sensitive to

[2] The political thinker who was most obsessed with the problem of the uncertainty of the future was Thomas Hobbes. Human beings, he observed, were the only animals capable of imagining different futures and acting rationally in anticipation in order to alter them. One does not have to accept his solution, devolution of absolute authority to a single sovereign, to appreciate the relevance of his thought.

the needs and preferences of others and more willing to compromise in pursuing their own needs and preferences, but it would be unrealistic to presume that they will be powerful enough to bring about a convergence of interests and to give everyone the same passion for a sustainable future. In short, the shift toward political sustainability will not be 'revolutionary.' Nor will it be 'revelatory.' To use the 'narrative' metaphor, the reforms discussed below will hopefully change the script and, maybe, some of the actors, but the underlying plot will remain the same – namely, that we will continue to live in a world populated by human beings that form their preferences in relatively autonomous social and political units and compete with each other under conditions of scarcity in order to satisfy these preferences with only a limited – 'momentary' or 'strategic' – capacity for altruism.

We will also have to accept the existing distribution of 'regime types.' No program for greater political sustainability will be compelling enough or backed by sufficient clout to ensure that all the units involved will be (or become) democratic – even in the restricted sense that is usually attached to those REDs that have reached a successful and lasting compromise between liberal-constitutional norms, representative institutions, and a capitalist economy. The number of these regimes has increased dramatically over the last 30 years or more, so that entire world regions are almost completely populated with them. This has opened up many new possibilities for reform since REDs are not only less likely to threaten each other with violence or subordination and to respect the maxim of *pacta sunt servanda*, but are much more likely to tolerate freedoms that allow their citizens to speak out, travel, collect funds, send and receive messages, and even to organize collectively across their borders. The presence of both a 'security community' among polities and an 'open society' within them are certainly pre-requisites for most sustainability enhancing improvements. No doubt, agreements between democracies and the remaining autocracies can be reached. Indeed, the latter are often better at ratifying international conventions than the former, but they are much less reliable when it comes to implementing them. Economists such as Mancur Olson have 'proven' axiomatically that only a dictator with indefinite tenure of office can be reliably expected to make credible 'future-regarding' commitments (see Olson 2000), but the proof of historical experience demonstrates precisely the contrary. Only REDs have had the capacity to reform their practices and policies in ways capable of legitimately binding future generations to follow sustainable policies. That these policies have often been difficult to adopt in the first place, excessively short-sighted in their objectives and subject to distortion by 'special interests' has no doubt been true, but when compared to the egregious failures of all types of autocratic regimes, these are but minor imperfections.

Fortunately (and certainly not accidentally), a substantial proportion of old (and some new) democracies are more economically developed than the remaining autocracies. This means they have a greater surplus of human and material resources and, hence, the capacity to pay a greater proportion of the 'first-mover' costs of establishing a better equilibrium. They also tend to dominate the intergovernmental global and regional institutions that should prove crucial in the dissemination of more sustainable norms and practices.

4 The 'Governance Rather than Government' Principle

Here, the most obvious implication is to shift from an exclusive focus upon national states and public institutions, and the formal agreements (laws and treaties) that they produce toward a more comprehensive view of relevant actors that embraces a wide variety of private or semi-public institutions and the informal arrangements (networks) they are constantly creating and revising. In other words, political sustainability will also (and, in some cases, only) depend on civil society organizations (CSOs) and their interactions with each other and existing state agencies. Particularly relevant (where they exist) will be those networks that cut across formal lines of political authority, either from one level to another within a national polity, or across national boundaries. Most issues involving sustainability – whether environmental, social or cultural – do not coincide with existing jurisdictions. They involve 'externalities' where costs or benefits transcend them or 'internalities' where their effect is concentrated upon specific constituencies.

But what can be done to enhance the probability that governance arrangements will emerge and transcend internal and external boundaries? The simple answer is to promote CSOs.[3] The problem with this solution is not just that we do not know how to promote organizations of such a variety, but also that deliberate attempts to do so can become counter-productive. Associations and movements that are subsidized, recognized and/or granted privileged status by public agencies or political officials have an embarrassing tendency to lose their most important property from the perspective of governance – their capacity to mobilize members and commit them to an agreed-upon course of action. Inversely, if CSOs are merely allowed to emerge spontaneously and on the basis of voluntary membership and contributions, their distribution will unavoidably be skewed to favor certain interests and passions. Moreover, their sheer multiplicity and specificity will make it difficult to negotiate the sort of comprehensive agreements across sectors, issues and countries that sustainability requires.

The orthodox answer from democratic theory would be to supplement CSOs with vigorous and disciplined political parties (PPs). The latter would have the responsibility to aggregate the biased and highly specialized demands generated by CSOs into comprehensive programs and then to compete among themselves to discover which program is preferred by the citizenry. On the one hand, since they are compelled by the competitive process to appeal to voters as citizens with equal rights and weights, this should – at least in principle – serve to even out the biases and influence differentials that are bound to exist in a purely voluntary civil society.

[3] In addition to the usual reference to 'advocacy groups' and 'new social movements,' I would stress the role of interest associations and private foundations. The civil society literature focuses much too much on such 'single issue groups,' at the expense of more permanent organizations representing class, sectoral and professional interests. The latter have a great deal to contribute to raising consciousness and reaching agreements with regard to matters of sustainability. And foundations have very often been at the origin of support for a wide range of CSOs.

On the other hand, PPs, given the territorial nature of their constituencies and elections, should be more limited in terms of their capacity to form trans-national relations than CSOs, but this may be compensated for by an internal articulation that should ensure some degree of coordination between different levels of authoritative decision-making within the national state.

If biased representation and issue fragmentation are the main weaknesses of CSOs from the perspective of sustainable decision-making, PPs are most likely to suffer from two quite different deficiencies: (1) they compete within constituencies that may not coincide with scope and scale of the problems to be addressed; and (2) they have emerged historically around patterns of cleavage that bear little or no relationship to the alternatives involved in issues of sustainable development. Indeed, the safest thing one can say about the party systems of well-established REDs in Europe and North America is that their members/followers/voters are bound to be internally divided on such issues due to their classic Left-Right configuration. There seems to be no *a priori* reason why citizens in either dominant or subordinate social classes will be especially sensitive to these issues. Age cohorts, ethical considerations and locational factors seem much more salient, but these are not the cleavages that are reflected in their party systems. The obvious response should be the formation of new political parties offering competing programs with regard to issues surrounding sustainable development, but thus far is that – with very few exceptions – this has proven difficult to accomplish. Either electoral laws are sufficiently well-designed to preserve the status of existing PPs or citizens have found it difficult to change their prevailing partisan identifications.

All of which implies that the best one can hope for in the immediate future will be 'transversal' alliances between factions within existing PPs, driven by issue specific mobilizations in civil society. These may also be accompanied by recourse to referendums or popular initiatives when party politicians unable to resolve disputes along lines of entrenched cleavage decide to throw the issue to the general public. Several European democracies witnessed this in the struggle over atomic energy during the 1980s and 1990s. The downside of this style of politics is its inability to cope with more comprehensive 'packages' of issues and, therefore, the inevitably episodic and probably incoherent nature of the policy responses.

Let us consider four reform proposals that might affect the probability and viability of governance arrangements, by empowering either actors that are most likely to engage in them or wider publics that might be expected to pressure for reaching and coordinating such agreements.

4.1 Reform Proposal #1: Vouchers for Funding CSOs

All liberal democracies in which membership and financial support of associations and movements is voluntary suffer from systematic under- and over-representation. Putting it bluntly, those small, compact and privileged groups with less need for collective representation get the most of it. Those large, diffuse and underprivileged groups that most need public goods that only strong and well-funded collective action can ensure get much less of it. As E. E. Schattschneider, put it, the trouble with the interest group chorus is that it sings in an upper-class accent (Schattschneider 1960), and Europe is no exception – regardless of level or location. And issues of sustainability inevitably face a very loud 'upper-class chorus,' composed largely of major manufacturing and energy producing corporations.

One proposal is to provide an alternative source of funding for CSOs. This could be accomplished in a democratic manner through three, closely related, measures: first, the establishment of a *semi-public status* for interest associations and social movements; second, the financing of these associations through compulsory contributions; and third, the distribution of these funds by means of citizen vouchers.

This reform in the way CSOs are funded would deliberately avoid specification by political authorities of any fixed category of representation based on class, status, sector, profession or cause – unlike contemporary chamber or corporatist systems. It would leave the task of determining the organizations to be funded to the competition for vouchers from individual citizens. In many cases, the reform would be costless – provided governments could be persuaded to eliminate all existing subsidies distributed by administrative agencies and allow citizens to choose which associations and movements deserve financial support.

The central purpose behind the development of a semi-public status for associations and movements is to encourage them to become better 'citizens', that is to treat each other on the basis of greater equality and mutual respect, and to dedicate greater attention to the interests and passions of the public as a whole. Among the provision of public goods, aspects of sustainable development would occupy a prominent place. It would be naive to suppose that merely imposing certain rules would *eo ipso* make interest associations and social movements into more 'fact-regarding, other-regarding and future-regarding' actors. The legislation of most national democracies is strewn with unsuccessful attempts to regulate lobbies and pressure groups. What is distinctive about this approach is the coupling of respect for certain conditions of self-organization and management with quite concrete incentives for support and a competitive process of allocation.

This reform recommendation rests squarely on the need to develop a new method for financing civil society independent of the ability and willingness of individual citizens to pay – which means extracting resources involuntarily from all those who ultimately will benefit. The contribution should be collected equally from all persons resident in a given territory. Persons could also give voluntarily to various causes, but this would not exempt them from the general 'representative donation'. Note that, by tolerating such a freedom, small and compact 'privileged groups' would still be more likely to attract disproportionate resources, since their members would continue to have greater incentives to give voluntarily in addition to the general levy. Nevertheless, given the large numbers involved, a very considerable harmonization of resources across interest categories and passionate causes would be likely.

The most feasible manner for doing this would be to attach this obligation (and the voucher system) to the annual filing of the personal income tax – at least in those countries where virtually all adult residents are required to file, if not to pay such taxes. Indeed, in the interest of equity, those who are tax exempt because of low revenue should be exempted from the representation levy, but they would still be empowered to distribute vouchers which would count towards determining which specific associations received money from the common fund. What is important is to retain the low level of individual payments in order not to scare away potential supporters of the reform, but to make the aggregate level of resources provided sufficient to compensate for persistent inequalities between interests. It would also be essential to convince the public that such an arrangement would constitute an important extension of democratic rights – analogous to the previous extension of the franchise.

Vouchers would, therefore, become a powerful mechanism for enforcing the accountability of existing associations and movements since if the behaviour of their leaders differs too remarkably from the preferences of those who spent their vouchers on them, citizens could presumably transfer their vouchers elsewhere. They would also make it relatively easy to bring forth previously latent groups unable to make it over the initial organizational threshold, instead of using vouchers to switch back and forth among existing rival conceptions of one's interests. And finally, vouchers offer a means of extending the principle of citizenship and the competitive core of democracy in a way that neither makes immediate and strong demands on individuals, nor directly threatens the entrenched position of elites.

4.2 Reform Proposal #2: A Foundation for the Future

'Foundations' have come to represent an increasingly important component among the various types of institutions in Western (and some Eastern) societies and they bear a particular responsibility for sustainability. The endowment principle upon which they are founded, plus the regulatory restrictions imposed by the national state in which they are registered, usually are enough to ensure that their resources will not be immediately dispersed for self-serving purposes. They are compelled to be 'future-regarding' institutions.

A Foundation for the Future would be analogous to the many 'Sovereign Funds' created in recent years in the generic sense that it would set aside funds that would otherwise be used for immediate personal consumption or productive investment and devote them to an accumulating, rotating fund that would be earmarked for the support of projects designed to improve future sustainability. Ideally, its funds should come from levies on persons or enterprises that contribute to unsustainable consumption or production in the present (e.g. 'Carbon Taxes') and its expenditures would not be used simply to compensate consumers for rising costs due to the exhaustion of natural resources or the deterioration of environmental conditions. Investments from the Fund hopefully will generate a return that will further expand its resources, but most of all they should be devoted to the research and development of more sustainable sources of energy, waste control, water management, etc.

4.3 Reform Proposal #3: Civic Service

Many countries have been gradually phasing out their systems of military conscription and some have provisions for an alternative civic service. There are good 'democratic' reasons why an alternative civic service would be a desirable replacement. It would provide a common experience for all young people regardless of social distinctions in the larger national community, introducing them to the value of working in political and community organizations and offering a unique period of exposure to civic practice and democratic equality. It would quickly become a major source of support for the organizations of civil society involved in the production and distribution of public goods.

Such a service would be compulsory for all citizens and all denizens (who have lived in the country for more than 3 years) between the ages of 17 and 23. It would last for a short period, to be followed by the possibility of a voluntary extension. Exceptions could be permitted for health- or family-related reasons, but the obligation should be as general and non-discriminatory as possible. The experience should, however, be as flexible and accommodating to individual needs as possible.

5 The 'Partial Rather than Comprehensive' Principle

Here we are faced with an unavoidable tradeoff. Sustainable development demands comprehensiveness; governance arrangements work best when they are partial, when the participants are relatively few in number and highly dependent upon each other. We are also aware that these arrangements have rarely been 'designed'. They have usually just 'emerged' pragmatically as actors – public and private – become aware that the usual hierarchical system of government has failed to provide accurate information for making decisions and sufficient commitment to ensure that these decisions will be implemented.

The participants in such arrangements are often referred to as '*stakeholders*,' i.e. some subset of actors who are supposed to be specially affected by some issue and can make a particular contribution to its resolution. In most contemporary settings, they are not individual persons, but spokespersons for non-profit, semi-public and, at least, semi-voluntary *organizations*, as well as relevant officials from public agencies and technical experts from appropriate disciplines. They interact not just once to solve a single common problem, but repeatedly and predictably over a period of time so that they learn more about each other's preferences, exchange favors, experience successive compromises, widen the range of their mutual concerns and develop a commitment to the process of governance itself. Such governance arrangements are supposed to contribute in three distinctive ways to improving the quality of decision-making: (1) they enhance the opportunities for *mutual accommodation* through exchanges of reasoned arguments; (2) they serve to generate higher levels of *trust* among those who participate and this, in turn,

(3) allows them to introduce a *longer time-horizon* into their calculations since sacrifices and losses in the present can be more reliably recuperated in future decisions. All of these are, putatively, of major importance in making innovation and sustainability compatible with each other.

If, in the preceding section, our reform objectives were to distribute more equitably the capacity for self-organization and to bring more effectively to bear the pressure of mass publics upon professional politicians, here they are to ensure that the decision-making process is not dominated by officials and experts and that some degree of accountability to the citizenry as a whole is maintained. Presumably, if REDs can be reformed through modest measures, their ability to coordinate different policy arenas and to ensure that aggregate costs do not exceed the public's willingness to pay will be improved.

The main political problem with our 'strategy of partiality' is the tendency for the formation of so-called 'guardian institutions' around functionally differentiated problem areas. These are composed of selective groups of stakeholders dominated by technical experts and specialized public officials ('epistemic communities' is the polite term), each with its surrounding clientele of organized interests dominated by private business associations or firms. Such 'Guardians' are much more effective at reaching consensus and at ensuring implementation on many issues surrounding sustainable development, but they can do so by passing on the costs to others and/or by distorting priorities simply because some epistemic communities are better organized and more in agreement than others. Unfortunately, these are not necessarily those that deserve the most attention or funds.

Formerly it was the function of political parties with their competing ideologies and platforms to set priorities, and the legislature was the site where resources were allocated according to the priorities set by the electoral winners. Parties' platforms have converged in most REDs and no longer offer distinctive alternatives to electors; with declining membership and voter volatility this 'cross-issue' aggregation function has lapsed. And, given the complexity of the issues at stake, legislatures have increasingly deferred to executive agencies in designing measures to deal with them.

The purpose of the following reform proposals is to compensate for the weakened mechanism of partisan competition and expose the work of guardian institutions to wider scrutiny, both by the legislature and by the public at large. Note that not all guardian institutions are directly concerned with issues of sustainable development (Central Banks are among the most prominent in contemporary REDs); not all advisory councils deal with environmental and related issues; and not all pieces of controversial legislation involve them. The practices sketched below are intended to improve the quality of REDs in general, although, since sustainability has become such a salient and growing concern of citizens, these reforms could have an especially significant impact on programs and projects related to it.

5.1 Reform Proposal #4: Guardians to Watch the Guardians

The purpose of establishing 'guardian' agencies is precisely to remove them from 'politics' and insure their specialized expertise can be brought to bear to solve problems without the 'costly' interference of partisan disputes. Unfortunately, this also serves to disconnect them from the circuits of democratic accountability. Elected representatives may have some say in their initial nomination, but little control beyond erratic legislative hearings once in office. All guardian institutions – central banks, general staffs of the military, regulatory agencies for a wide range of purposes, all sorts of autonomous boards and managerial public commissions – could be recognized as such and each be assigned a 'guardian' chosen by the parliamentary committee most relevant in their field of activity. This person would be a member of the permanent staff, paid by and responsible only to the parliament, and would have the same right to information and presence as a member of the directorate of the guardian institution. Their primary responsibility would be to report regularly on the performance of the respective agency or board and evaluate its compatibility with democratic principles – that is to say, a sort of permanent whistleblower with privileged access to internal documents and discussions. This should serve to strengthen the general role of parliament within the usual system of inter-agency checks and balances.

A potentially significant secondary responsibility would be to serve as a specialized ombudsman *vis-à-vis* the public at large and its exchanges with the guardian institution to which they are attached. General ombudsmen are frequently over-burdened and having a number of specialized ombudspersons covering the guardian institutions would diminish the burden on general ombudspersons and bring more specialized knowledge to bear.

5.2 Reform Proposal #5: Specialized Elected Councils

Modern European democracies are already surrounded by a multiplicity of advisory committees, 'functional assemblies' and consultative councils – many of which are intended to provide guaranteed access for organizations of civil society to state agencies and decision-making bodies. The expertise and information that they provide are an important complement to the deliberations of legislative assemblies, and essential for coping with the increasing complexities of public policy. Their democratic status, however, has often been questioned since they provide privileged access to those interests and passions that are best organized and not necessarily to those that are most concerned with the public interest. Usually, the participants in these councils are selected either by politicians or civil servants according to some principle such as 'the most representative association' or 'the most insistent movement'.

Governments at various levels – local, regional and national – could consider holding periodic, specialized elections for membership in councils that provide them with advice on matters affecting such social groups as young people, the elderly, the unemployed, ethnic or religious minorities, people with disabilities, or foreign residents, with the winners of these elections could be paid a modest sum for their participation. In all likelihood, pre-existing associations, movements and parties will be more successful in these contests than newly created ones, but their legitimacy as representatives will be enhanced and they will be more inclined to develop broader programmes in order to attract wider support. Control over specific budgetary assets could be delegated to such councils. A compelling case can be made for the creation of a Council of Denizens, but the practice could be extended to cover other social groups – such as young people and the elderly – where appropriate conditions exist.

5.3 *Reform Proposal #6: A Citizens' Assembly*

This assembly would be composed of a randomly selected sample of the entire age-eligible citizenry – both registered and unregistered voters. Its number (initially) should be twice that of the present lower chamber of the legislature. The selection of 'Citizens' Deputies' (CDs) would be in accordance with the existing system of constituencies in the lower house (double the number of CDs as current representatives). The Citizens' Assembly should be considered as a 'committee of the whole' empowered by the normally elected assembly to assist it with legislative review – in other words, it should be regarded as a measure to strengthen not weaken the legitimacy of the regular parliament.

Each CD would be paid and assigned a legislative assistant responsible for ensuring that they receive all relevant documentation, respond to requests for further information and help in their interactions with the public. Adequate means for communication, for example online computers, photocopying facilities, franking privileges and so forth, should be put at the disposal of all CDs and special arrangements, such as setting-up websites, should be made to make it easy to contact them and protect their privacy. This assembly would meet once a year for 1 month to review and vote on one or at most two bills passed by the regular parliament during the previous year for which at least one-third of the deputies in the lower house have explicitly requested a stay of implementation. Only those drafts receiving a simple majority of the votes would be passed. No legislation rejected by the assembly could become the law of the land. If the regular legislature failed to assign any bills to the assembly, it would nevertheless meet to review the year's production of laws and issue a statement on their quality by majority vote with minorities expressing their dissent if necessary.

6 The 'Regional Rather than Global' Principle

Authority for dealing with sustainable development should be comprehensive in functional substance and global in territorial scope, but the center of contemporary political gravity rests firmly upon the 'sovereign national state' (SNS) – even if most SNSs are neither sovereign in their capacity for action nor national in their identity. Unfortunately, the venerable SNS is too small for many problems and too big for others – and this is especially the case for those related to sustainability.

One favourable feature of political evolution since Brundtland has been the gradual, largely peaceful shift in authority from national to sub-national units. Almost every RED has experienced some devolution of powers to component provinces, regions, districts, *Länder*, or municipalities during the last 30 years. Also, the break-up of the former Soviet Union and the Yugoslav Federation produced a large number of new and relatively small SNSs. To the extent that many of the negative effects of un-sustainability are due to particular combinations of local conditions and more directly experienced by the inhabitants of such units, there is some reason to expect that policy-makers will be more responsive to such threats and more effective in implementing their decisions. Inversely, one might think that smaller political units would be tempted to calculate that their size precludes taking independent action given the externalities produced by larger neighbours and, therefore, should wait until they could 'free-ride' on these presumably more resourceful actors. At least within Western Europe, the evidence seems that the former proposition prevails. Small countries have often been in the vanguard of adopting policies of sustainability – although not without exception.

The second political development of this period has been in the opposite direction – the gradual (if often fitful) expansion of the EU as an over-arching regional organization. It has taken on additional policy responsibilities and it has admitted new members. Even before it was formally granted *compétence* in matters related to sustainability, the EU drafted, agreed upon and ratified numerous decisions related to it, especially with regard to environmental issues. And, as these 'directives' were handed down to member states to be 'transposed' into national law, they also sensitized governments and political parties that had previously paid little attention to such subjects. In some cases, they were even coupled with national legislation that set even higher standards – something permitted by the Rome and other EU treaties. And, by the time it came to the most recent Eastern Enlargement, these regulations were already built into the *acquis communautaire* and, therefore, had to be accepted by all applicants – regardless of how well-equipped or financed they were. Admittedly, no one expects quick and thorough implementation, but at the very least precise, region-wide standards have been set – something no other supra-national arrangement can claim. Another encouraging development at the regional level has been the involvement of the European Parliament (EP). It has 'co-decision' responsibility for approving most of these directives, but it has gone far beyond this in providing a target and for a wide range of NGOs pressuring for higher and more comprehensive standards.

The recent experience of Europe is perhaps unique and, therefore, not reproducible. There have been devolutions and decentralizations elsewhere – for example, in South America during its democratization processes of the 1980s and 1990s. And some of these newly empowered *municípios* and *províncias* have taken innovative measures, especially with regard to pollution. Nevertheless, there and in the rest of the world, the authoritative capacity for dealing with sustainability issues still remains firmly at national level. The sheer number of trans-national regional organizations has exploded during the past three decades, but virtually all of them have no effective *compétences* to do anything without the unanimous approval of their members – much less take decisive measures with regard to sustainable development. It is by no means obvious why the amazingly complex 'multi-layered and polycentric' Euro-polity in which the responsibility for using public authority is shared across different territorial levels and the implementation of policies requires constant cooperation among them has played such a pioneering role in facing up to sustainability issues. Perhaps, it is because accountability to special interests and particular publics is diluted by exchanges between the various levels, or because politicians can avoid blame for unpopular decisions by placing it elsewhere, or because the abstruse practice of 'comitology' that is used to draft EU directives enhances the influence of independent experts and public officials and frees them to come up with longer-range solutions, or because the interaction between representatives of member states, professions and organized interests is genuinely 'deliberative' and encourages the emergence of rules of "best practice" that do not reflect the relative power of the participants.

Whatever, the European Union – now expanded to include 28 SNSs – has placed itself in the vanguard. And since so many neighbouring countries aspire to join it (and reluctantly accept its *acquis*) and so many further removed countries have or wish to have negotiated preferential trade treaties with it, the EU's role in the future is bound to increase. One potentially significant reform that it might ponder imposing would be to add a commitment to 'Sustainable Development' to the present list of basic requirements that all potential associate members have to fill: 'Democracy,' 'Rule of Law,' 'Respect for Human Rights.'

6.1 Reform Proposal #7: Reciprocal Representation

Under its auspices, SNSs would accord each other seats in their respective national legislatures. The number of seats – perhaps, two or three – could vary, depending on mutual perceptions of the degree of interdependence, as well as the total number of deputies in each legislature. Normally, these would be seats in the upper house, where it exists and especially where it has special responsibilities for foreign affairs as in the United States.

Under all circumstances, the reciprocal representatives would have the right to speak on the floor and insert material in the official record. They would have the same salaries, services and perquisites, serve on committees (except for those dealing with sensitive security matters), and receive information on drafts and hearings just like any member of the legislature. It seems very unlikely that they would initially be permitted to vote, particularly in situations where the vote would be the decisive one. However, if the experience were to prove successful, eventual voting rights should not be excluded – again, on a reciprocal basis.

6.2 Reform Proposal #8: A 'Yellow Card' for National and Sub-national Legislatures

Representative bodies at the municipal, local and regional levels should be granted the power to issue 'yellow cards' – explicit warning notices – when they judge their formal rights or informal prerogatives are being infringed upon by drafts of prospective legislation coming from a higher level body. This would allow them to question such infringements without taking the more legalistic (and lengthy and uncertain) step of appealing to a higher court for a judgment on the matter after a decision has been made. Moreover, since in many cases the legal status of such an action is unclear, it would emphasize the strictly 'political' nature of many of these inter-level infringements. When given a yellow card, the alleged offending body would have to suspend further action on its initiative until it had provided additional justifications for its action, including a formal declaration of subsidiarity, that is why its objectives could not be better accomplished at a lower level of aggregation.

6.3 Reform Proposal #9: Framework Legislation

Where multiple levels of decision making exist and where each level has substantial autonomy within its own sphere, it is nonetheless common that more encompassing governments – national and supranational – pass laws requiring the active compliance of less encompassing ones. Moreover, as noted above, there been a drift in this direction due to the alleged necessity for comprehensive and unified responses to such challenges as globalization and insecurity. Historically, it was the imperative of national defence or offence in inter-state war that justified most of this impetus towards centralization.

Whatever the ostensible justification for centralized action, the principle of subsidiarity would require that any such legislation be of a 'framework' nature, that is to respect as much as possible the existing autonomy of lower-level units and leave to them the choice of methods and solutions adapted to their specific circumstances. At most, the central decision should fix the generic goals to be accomplished and the general guidelines for action, leaving the rest of the implementation process to existing local and regional authorities.

Especially destructive of more dispersed forms of state authority are so-called 'unfunded mandates', or requirements by central governments not only that lower level governments conform to invariant norms, but also that they fund this compliance themselves without any downward transfer of financial support. No democracy based on multi-level government should tolerate such mandates and, as far as is possible and compatible with the general objective of providing uniform access to public goods, each level should be empowered to raise sufficient "own" resources to produce the public goods that its citizens and their representatives deem adequate.

7 The 'Humanistic Rather than Technocratic' Principle

We now conclude with three reform proposals that should help ensure that the need we identified for the pursuit of sustainable development to be humanistic rather than technocratic in character.

7.1 Reform Proposal #10: Ecological or Environmental Citizenship

When T. H. Marshall outlined his history of the practice of citizenship in contemporary democracies, he stopped at the 'social', after passing through the stages of having attained 'legal' and 'political' equality. Presumably, once the basic principles of social equality had been institutionalized via the welfare state, Western societies reached the end of their evolutionary potential. Subsequent efforts to extend equal rights and entitlements into the realm of the firm, so-called 'industrial democracy,' were vigorously opposed by capitalists and only mildly supported by workers (Marshall 1964).

Perhaps, it is time to re-think this evolutionary perspective and introduce into the public sphere the notion that, in order to attain full citizenship, all persons living within a given territory (which today does not have to be 'national,' but could be 'trans-national') should enjoy equal rights and meet equal obligations with regard to their ecological setting. In principle, they should all contribute equally to sustaining that environment and, in so doing, should have the same 'imprint' upon it. Presumably, were this to be the case, they would all derive equal satisfaction from the resulting increase in quality of life.

The long-term objective of ecological citizenship should be to make it a transnational and, even a global condition, i.e. to move toward reducing the present variation in the net ecological imprint of persons and organizations not just within national states but across them and, at the same time, lowering negative contributions on a global scale.

7.2 Reform Proposal # 11: Universal Citizenship

This proposal would grant full rights of membership in the political community from the moment of birth to all persons born within its territory or all of its citizens living abroad, as well as to those children who are subsequently naturalised. Recognizing the manifest incapacity of children to exercise their formal rights directly and independently, this reform further proposes that the parents of each child be empowered to exercise the right to vote until such time as the child reaches the age of maturity established by national law. Each child would be issued a voting registration card or whatever device is already in use to identify legitimate voters and would be informed of his or her (deferred) right to vote. The decision as to exactly which parent would actually exercise this right for their children, prior to their reaching the age of 16 or 18, would be determined by agreement between the eligible parents. In the case of one parent or a guardian, that person would vote.

This reform should make the local, regional or national democracy more 'future-oriented'. Not only would allowing children the vote constitute a symbolic recognition that the polity has a responsibility for its future generations, but it should also provide a real incentive for the young to develop an early interest in politics and to do so through an awareness of the importance of whatever level of political aggregation granted them this right. Precisely because of this incentive, it is to be expected that children – once they become aware of the right that their parents are exercising in their name in parliamentary or presidential elections – will increasingly hold their parents accountable for the way in which they distribute their electoral preferences. This also suggests that the reform measure should increase various forms of inter-generational discussion about political issues and partisan orientations in general – strengthening channels of political socialization and improving the elements of citizen training within the family that seem to have considerably diminished in recent decades. It may even compensate for the prodigious decline in a sense of party identification and probably would exert pressure on politicians to lower the age of political maturity from 18 to 16, if not even younger.

7.3 Reform Proposal #12: An Ombudsman for Future Generations

The institution of ombudsman has proliferated across SNSs and even reached the level of the European Union. Moreover, there has been a recent tendency to establish ombudsmen to deal with specialized policy arenas: women, youth, the handicapped, foreign residents, medical patients, victims of police brutality, and so forth. An ombudsman should be assigned to the future, with the power to compel legislators, 'guardians' and administrators to specify the eventual consequences – material, cultural, financial – of all laws and regulations. This person would have access to all decision-making processes in these areas and, hence, to identify before they became valid any ones that might involve a burden or commitment to be paid for by future generations. They could then require that agency formally to calculate these costs and their distribution across time and social groups, and provide an explicit justification for their existence. If the ombudsman so determined, the proposed measure would be suspended until a satisfactory compromise was reached, although the parliament through its regular procedures would always have the last word concerning ratification.

8 Conclusion

These 12 proposals for reform are intended to address a major deficiency of much of the literature on sustainable development, namely, its failure to consider how it might be attained within current political arrangements or (given that this seems unlikely) what reforms might be necessary if it is ever to be achieved.

The reforms presented here also hint at the extent of changes that will be needed. Achieving sustainable development demands that we rethink many of our political institutions and practices, and the effort will have to be not just substantial but also imaginative.

References

Center for Global Development. (2008). *Growth report. Strategies for sustained growth and inclusive development*. Washington, DC: IBRD.

Marshall, T. H. (1964). *Class, citizenship and social development*. Garden City: Doubleday & Company.

Olson, M. (2000). *Power and prosperity: Outgrowing communist and capitalist dictatorships*. Oxford: Oxford University Press.

Sachs, J. D. (2008). *Common wealth: Economics for a crowded planet*. New York: The Penguin Press.

Schattschneider, E. E. (1960). *The semisovereign people*. New York: Holt, Rinehart and Winston.

World Commission on Environment and Development. (1987). *Our common future*. New York: UN.

Part II
Economic Dimension of Sustainability

Global Business Associations, Self-Regulation and Consumer Policy

Karsten Ronit

1 Introduction

In recent decades new interesting efforts have been made in global consumer policy, and certain advances have been made to endow the consumers with more rights and provide better information. This should give the consumers a stronger position and thus sustain key functions of markets. According to the United Nations Guidelines for Consumer Protection (United Nations 2003), governments are attributed a crucial responsibility, but in addition, "all enterprises should obey the relevant laws and regulations of the countries in which they do business. They should also conform to the appropriate provisions of international standards for consumer protection to which the competent authorities of the country in question have agreed" (United Nations 2003).

Consumer issues have become an important concern, and today a number of intergovernmental organizations have added this field to their overall policy portfolio. Although cooperation has been achieved between these various agencies, no single center is actively coordinating these efforts in or beyond the UN system. Some overarching principles attending to the consumer cause have been formulated in diverse organizational contexts, but these principles entail struggles with other views and agendas. Indeed, many developments are unfolding not within consumer policy but within other and more institutionalized policy fields, such as competition policy or trade policy, and these have consequences for the shaping of norms and rules in global consumer policy.

Consumer policy is linked with many other issues and, in some cases, travels faster and more reliably when combined with other goals, as for instance, achieving environmental, humanitarian and social values. In terms of sustainability, a range of

K. Ronit (✉)
Department of Political Science, University of Copenhagen, Øster Farimagsgade 5, 1353 Copenhagen, Denmark
e-mail: KR@ifs.ku.dk

A. Lang, H. Murphy (eds.), *Business and Sustainability*,
Sustainability and Innovation, DOI 10.1007/978-3-319-07239-5_4

dimensions can be built into consumer policy, but it is far from certain that consumers, when equipped with more rights and better information, will ultimately make choices that, for instance, halt climate change, reduce child labor or preserve cultural diversity. Such spill-over effects may definitely occur. But excessive consumerism may jeopardize these other goals of sustainability, so there can be significant conflicts between the different dimensions of sustainability, and, as discussed in the introductory chapter to this book, many dilemmas arise in the management of sustainability politics. Indeed, it may even be argued that the unfolding of markets alone is a potential threat to other dimensions of sustainability in society and nature. This chapter is focused on the more limited but still highly complex task of sustaining markets as an important societal system to distribute resources, and thus avoiding the disruptive forces that create monopolies or manipulate information that undermines the position of consumers, classically depicted as forming a "countervailing power" in the market (Galbraith 1952). In this sense, regulation seeks to correct situations in markets where the seller is structurally privileged in relation to the buyer (Stigler 1961; Arrow 1963; Akerlof 1970).

Interestingly, initiatives in global consumer policy are not taken by states and intergovernmental organizations only; significant initiatives are also fostered by private parties. It is obvious that consumer organizations seek to influence the conditions of consumers, strive to play a strategic role in setting relevant consumer agendas, and influence various norms and rules that govern consumer policy. It is perhaps less evident that business plays a role in the development of consumer policy. As the key authority holder in the market place, however, business has many opportunities to contribute to the development of consumer policy at the global level, create a level playing field, and improve the reputation of firms. Alone, the contributions of business are too few and unreliable to give a stronger position to consumers and help sustain important mechanisms in the market, but it would be a great mistake to ignore these efforts.

This chapter proceeds in three steps. In the following section we provide theoretical insights from relevant literature on the role of global associations and other collective formats that are able to adopt rules for wider group of firms, and we adapt these insights to study efforts taken by three different groups of actors. First, we examine global industry associations which organize members within rather special segments of business activity (beverages and airlines) and which can adopt industry initiatives within a rather narrow field that is of particular interest to this group of firms. Second, we study multi-sectoral associations (advertising and environment) which organize large sections of global business, and which engage profoundly in a number of issues that are relevant to several industries in their relations with consumers, but without having the same broad membership base and coverage as the peak associations usually have. Third, we analyze global peak associations (commerce and economic issues) which are entities that organize business on a grand scale and which are active in encompassing initiatives. Finally, we compare the findings and present our conclusions.

2 Business, Self-Regulation and Consumer Policy: Theoretical Reflections

Different business actors have the potential to establish norms and rules that are accepted in the business community and in society more broadly; and to provide a brief review of relevant research, we need to distinguish between various modes of individual and collective action in business.

In economics, business administration and management studies, the favored point of departure is the firm and its role in the market. Indeed, the stronger social and environmental orientations of many corporations in recent years have operated under the flag of corporate social responsibility, business ethics and other labels (May et al. 2007). These approaches accommodate different areas of research but also develop as practical programs guiding corporate governance and decision making.

Undoubtedly, firms have much to gain through enhancing the social dimension of corporate performance, and their various orientations are seen as an essential element of their self-interest rather than as a social concern per se: To excel in competition, new strategies that respond to demands from a variety of stakeholders are needed. In other words, it is possible to distinguish leaders from laggards because the former raise standards and, consequently, get the competitive edge (Gunningham et al. 2003), while the latter are in danger of being driven out of the market.

In this firm-centered perspective, an effort must be made on behalf of firms to reach "beyond compliance" (Potoski and Prakash 2005) and comply with standards that are higher than prescribed by law. The goal is not merely to establish higher standards than those of other firms but also to achieve outcomes not already demanded by public regulation. In the context of emerging global consumer policy, there is much that firms can do in terms of their global operations. There is an enormous variation at regional and domestic levels, and in some jurisdictions with miniscule regulation, almost any initiative with a social aspect can, in principle, be of benefit to consumers. It should be borne in mind, however, that most studies on the social and environmental behavior of firms in national domains focus on areas where more advanced public regulation is already in place, making comparison of private and public efforts more meaningful.

Although some initiatives adopted on a global scale by leading transnational corporations can be helpful from a consumer point of view, these efforts are qualitatively different from public regulation, which establishes rules to be complied with by all firms in a given industry or in business as a whole and that have a public-good character. Therefore, private entities which create norms and even adopt and police more advanced rule-systems that benefit all consumers, and not just those consumers exchanging with a limited number of the pioneering firm, have much more to offer and can be conceived of as a specific governance system (Streeck and Schmitter 1985).

Also at the global level, a huge variety of business actors have the potential to adopt norms and rules addressing relations with consumers (Braithwaite and Drahos 2000). If sufficiently recognized as representing business and capable of coordinating interests effectively, associations can in some cases also share responsibility for public policy, a perspective that can be extended to understand efforts at the global level, a level also combining different forms of governance (Koppell 2009). Thus, business associations are able to provide an important governance element in society.

This view of business associations as important intermediaries in society is ignored in many studies on state and market (Underhill 2000), but, in other literatures business associations are recognized as important vehicles to influence public regulation. Firms have many common interests, a basic requirement for joining an association, and the global business community displays a significant complexity in the organization of interests. A basic assumption, though, is that the organization of interests is more difficult in larger groups (Olson 1965), and this is also likely to characterize the global situation where large-scale collective action is required. Challenges are therefore particularly strong for the very large business associations, and business is also better organized at the industry level than at the peak level (Porter and Ronit 2010), where collective action also has been less required.

Large-scale collective action is complicated but is nevertheless of particular value. Those business initiatives that regulate the behavior of firms in their relations with consumers – they are more important when they embrace large section of business – gain wider currency and move toward becoming global public goods (Sandler 2004). If a large group of firms establishes rules and norms and the number of free-riding firms is reduced, then business self-regulation can in some cases and to some extent become alternatives to traditional public regulation.

Business associations can establish and communicate norms and rules that fill a void where public initiatives are missing, sometimes also with a deliberate ambition to forestall public interventions, or to follow up on public interventions that encourage private action. Admittedly, some of these initiatives are not very advanced, containing mainly broad mission statements and signaling no more than a general will to incorporate consumer concerns and having no real measures to implement them. Other initiatives, however, have a quite different character. When business associations establish various solid forms of self-regulation and formulate ways to implement them, they can play a significant role, although such codified forms of private regulation do not necessarily have the same quality as public regulation. Such efforts, however, are today a factor in global consumer policy and must be seen as potential contributions to sustain vital functions in the market.

The efforts of business must also be seen in the context of consumer pressures (Hilton 2009). Consumers are an important countervailing force in the market but they form a very fragmented group and, hence, organized consumers have not exhausted their full potential to enhance the institutionalization and coordination of consumer policy as a specific policy field (Ronit 2007). In turn, the lack of challenges and institutional frameworks may result in a lower and discrete pressure on business and result in less demand for coordinated business efforts in the global context. Accordingly, there are reasons to believe that the business provision of private governance in the area of consumer policy will be impeded in various ways. Under these circumstances, a diversity of initiatives uniting groups of firms in and beyond formal associations may emerge.

However, not only does business respond to external impulses, but also a variety of internal factors in business generate and shape the concrete forms of collective action – and as pointed out, certain measures can be of great benefit to business – so the strength on behalf of consumers is only one of several factors that have an impact on the behavior of business associations.

In this chapter we analyze business associations whose members have relations with the end consumers and whose activities in globalized markets relate also to other firms in earlier stages of the production and value chain. Therefore the industries represented by these associations should be sensitive to the expectations and demands of consumers, and, consequently, be motivated to develop norms and rules that in one way or another guide their members.

Furthermore, these associations represent conventional producers and service providers, but not in areas dominated by corporations that began life by profiling themselves as alternatives to established business such as organic producers, which have an explicit strategy to cater to consumer concerns. Conventional business is more challenged, must reform, and must adopt new norms and rules. There is, however, a strong structural variation between business associations, and to achieve a better understanding of the efforts of business we need to analyze different organizational formats without attempting to establish, discuss or depart from a full taxonomy of business associations (Schwarz 1979; Schmitter and Streeck 1981; Blümle and Schwarz 1985; Lang et al. 2008). However, we are able to find some pieces of the puzzle of how associations engage in consumer policy. This ability can guide further research and at a later stage assist us in establishing a pattern of the norm and rule-building initiatives of business associations in global consumer policy.

In this chapter we distinguish between industry associations, multi-sectoral issue-specific associations and encompassing peak associations, between which there is also a certain division of labor. Firms can join global industry associations which in some cases are members of larger global peak associations, but they can also join these entities directly. The multi-sector organizations are generally separate entities often not stringly linked to these encompassing associations (see Fig. 1).

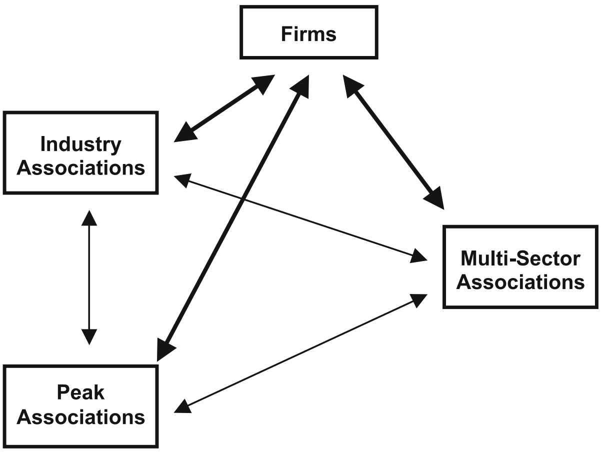

Fig. 1 Global Business Associations in Consumer Policy

It is no simple task to distinguish between the three different formats of organizations, but there is also variation within them because the different industry, multi-sectoral and encompassing peak associations may also vary in their engagement. Indeed, some multi-sectoral associations are in some ways akin to the industry associations, while other multi-sectoral entities are similar to the peak associations, which allows us to posit the efforts of associations in consumer policy along a continuum rather than seeing them as three separate and sharply demarcated formats. Nevertheless, we should expect associations with a more narrow scope to find collective action easier, be able to more easily develop initiatives that address "their" group of consumers, and find it harder for larger associations to formulate norms and adopt self-regulation addressing consumer issues. This pattern, however, can be modified by many other factors, an issue discussed in the next sections.

3 Industry Initiatives

There are many industry associations at the global level. They are based on different principles of affiliation, but, depending on the structure of the industry, they include national associations or corporations or a combination of both. Although not all countries and regions in the world are necessarily represented in these global associations, the associations are still open to all these sections of business. Global associations have a stock of institutional capital and have fostered a tradition of cooperation among firms from around the world. This element of trust is a critical component, helping to bridge cleavages in the membership. Although challenges are perceived in different ways by firms depending on their situation in the market, they have in common some key interests related to particular products and their regulation. Moreover, firms in the same industry face relatively similar challenges in relation to a diverse group of stakeholders, and they also enjoy, or suffer from, some of the same reputational features that characterize an industry. All these factors shape collective action in general, but specifically, they also provide a basis for formulating norms and designing and running self-regulation in consumer policy.

3.1 Beverages: International Council of Beverages Association

"Food" is more than an industry. In fact, food is a basic, yet highly diverse, commodity that is represented by several industry associations in global contexts, which are tied together by encompassing regional entities for food and drinks, primarily in the EU and the US. Global action in the food business is complicated because separate regional entities exist, but these intermediaries are also in a position to assist in global coordination.

In the case of beverages, key action occurs through the International Council of Beverages Associations (ICBA), founded in 1995, which includes producers of non-alcoholic beverages represented through associations in the US, the EU and Japan, and more recently Canada, Mexico, Australia, Brazil, China Hong Kong, India, Taiwan, South Africa, plus a few firms which have joined on a direct-firm-membership basis.

Interestingly, as an international peak association for business, the International Chamber of Commerce (ICC) is involved in the shaping of rules in this industry, which are of significant relevance to consumers. In other words, there is a complex division of labor in the elaboration of private rules. In general, the large and encompassing organizations make norms and create rules for business as a whole, while specific industry associations adopt their own rules. However, the ICC, a highly experienced organization in self-regulation, also plays a role in relation to specific industries. Building on the *Consolidated ICC Code on Advertising and Marketing Communications Practice* (2011a), the ICC has also created the *ICC Framework for Responsible Food and Beverage Market Communication* (2012) and assisted these industries in developing and implementing their own codes of conduct.

In accordance with the broader rules of the ICC, steps have been taken in the beverage industry to change some of the more contested marketing practices of firms. As a large organization for beverages, the ICBA has adopted rules pertaining only to the consumer segments of soft drink producers, and in 2008 it issued the *International Council of Beverages Associations Guidelines on Marketing to Children*, an initiative very much focused on obesity. It prohibits members from placing advertisements in different media aimed at children under age 12. Members are to implement these guidelines at the company level, and some of the large companies in the industry have issued their own evaluation reports. Furthermore, the ICBA has installed various mechanisms to oversee compliance with these guidelines. The ICBA itself is not the primary monitor of compliance, however; this task is delegated to a third party, the consultancy firm Accenture, making self-regulation more than purely industry-self-regulation by extending participation to other parties and drawing on expertise from beyond the immediate and relatively narrow industry community.

The ICBA is also engaged in further norm and rule building initiatives where guidance is provided to members to implement strategies relevant to consumers. This capacity does not suggest that self-regulation is the only regulatory strategy, and the organization is also involved in formulating and implementing public policy. The association participates in the standard-setting work of the Codex Alimentarius Commission of the FAO, a vital entity in global food regulation and labelling.

3.2 Airlines: International Aviation Transport Association

Transport embraces several industries, and each industry, including air transportation, has its own agendas, norms and rules. Airlines provide international transportation and are today the primary means of transportation that connects the world, constituting a global industry with the International Aviation Transport Association (IATA) as its unchallenged representative. The IATA, founded in 1945, is a strong advocate of competition, sees competition as the primary tool that benefits air passengers, and holds that the industry is over regulated.

For airlines to operate, however, a global regulatory framework is needed, part of which is actually provided by the industry itself and which is recognized by other intergovernmental bodies. Some of these norms and rules pertain to consumers either directly or indirectly, and it is sometimes difficult to draw a sharp and clear line between those measures that are targeted at consumers and those that are side effects of other strategies. Thus, a major concern of airlines is safety, expressed in the association's *Six-Point Safety Program* (IATA, n.d.) – not just for aircrafts but also for passengers – and different audit standards are developed, as for instance the *IATA Safety Operational Audit (IOSA)* (2003) and the *IATA Safety Audit for Ground Operations (ISAGO*) (2010). These measures, however, are not in each and every aspect formulated in terms of a consumer strategy, and in areas other than safety, the passenger dimension is sometimes made more explicit.

In some areas governments and intergovernmental bodies are improving consumer protection, to which the IATA makes significant input. Consumer rights have been expanded and new regulation has been adopted, for instance with regard to cancelled flights and related compensations, but in these cases different national and regional arrangements prevail. While the IATA is a proponent of competition, it also places a strong emphasis on competition as a factor impeding cooperation among airlines in some areas, and "the ability for the industry to voluntarily develop common standards and procedures has been lessened significantly over the past few years" (IATA 2009: 1). In spite of these limitations, key measures with a focus on some of the services provided to passengers are introduced.

The IATA is also engaged in consumer policy through its own programs. Its measures and recommended practices facilitate interline standards as well as standards between airlines and surface transportation, limit costs and improve the conditions of passengers in many ways, and include issues such as tariffs, reservations, ticketing and baggage. These recommendations are often based on specific programs, such as the *IATA Baggage Improvement Program* (2011) in which monitoring through the association and through site visits is included to implement standards. Accordingly, a number of industry committees, specialized working groups and task forces have been created to assist in developing and overseeing these standards. Several entities cater to passenger issues, but the key unit is the Industry Committee, which is tasked with "all industry affairs and aeropolitical matters connected with international passenger air transport" (IATA, Rules and Regulations of the Industry Committees, n.d.), but many efforts are also coordinated at a technical level through the different working groups to make travelling easier for passengers.

4 Multi-sectoral Initiatives

Industry-specific associations form promising platforms as traditional institutions of cooperation at the global level, but business action is not exhausted by associations at this level, In other words, the integration of consumer affairs into established organizations responsible for a large portfolio of issues is not the only feasible strategy. Indeed, some issues cut across the business community in ways that make industry associations less suitable.

Furthermore, industry associations typically embrace multiple issues, and it is not possible for firms to freely pick and choose, because they have to accept the whole "package" – although they may give priority to only certain issues. Under these circumstances firms have incentives to join multi-sectoral organizations committed to certain aspects of cooperation, such as consumer issues, not necessarily in competition with the other associations but as a useful complement.

Indeed, such demands can, for instance, also be triggered by stronger endeavours on the side of business to address certain consumer issues and link these with social and environmental concerns. When established associations are too inflexible to face these dynamic developments and cannot embrace these challenges, new entities can pursue such tasks.

4.1 Advertising: International Advertising Association and World Advertisers Federation

Some associations engage in multi-sectoral activities that affect a multitude of industries, and advertising is such an activity. But setting norms and rules for advertising is also an activity carried out by very specialized entities in the business community. These associations formulate guidelines for the advertising and media industry specifically and for all other industries where firms are engaged in advertising. Advertising can therefore be considered both an industry unto itself and an activity or function carried out by virtually all firms, and in our case in relation to consumers.

One of the leading international associations in advertising is the International Advertising Association (IAA), established in 1938, with chapters in many countries. A number of firms are direct members (as diverse as Unilever and Boeing) of the IAA, including, interestingly, several types of firms in marketing communication.

Apart from assisting the local activities of advertising firms, the association also engages in international activities and has issued the *Guide to Advertising Self-Regulation* (IATA, n.d.). If regulations vary considerably across countries and if the advertising industry must adapt to different conditions, then the management of advertising poses additional costs for business. Accordingly, the industry seeks to standardize rules and is a strong proponent of self-regulatory schemes: "We are a leader in advertising self-regulation by supporting existing structures; encouraging the establishment of new mechanisms; providing for an exchange of information and best practices; promoting self regulatory structures to governments" (IAA 2013b).

The organization emphasizes both responsible behavior on the part of business and the importance of consumer choice, and, underscoring freedom of advertising, it opposes, for instance, a ban on tobacco advertising. One of its specific concerns, however, and an area where restrictions are demanded, relates to children as consumers. This is an issue that has attracted attention in different industries in recent decades, and as we shall see later, is an area where the ICC plays a significant role.

Proceeding from the approach that children form a specifically vulnerable segment of consumers, it is appropriate to adopt rules in the industry to protect children, especially in the area of food and drinks to help prevent life-style diseases: "IAA recognizes the need to change advertising codes to answer public policy concerns, but that a total ban would be disproportionate. Advertising in the context of children needs to be both responsible and sensitive to children and families" (IAA 2013a). It therefore seeks to balance different concerns and has adopted a flexible approach.

Another key organization in advertising is the World Federation of Advertisers; established in 1953 and representing firms that market their own products and services, it includes national associations and many renowned firms. It adopted the *Media Charter* in 2008, which formulates the WFA's general strategies: how relations between advertisers and agencies should be structured, and how advertisers should act responsibly and attend to consumers' concerns.

Accordingly, the organization sees itself as "the standard bearer for effective advertising self-regulation worldwide, developing industry standards which respond to societal concerns and putting in place effective enforcement processes and recognizes the importance of building consumer confidence and credibility in marketing communications in digital/interactive media, through responsible and respectful communication" (WFA 2008). Moreover, it supports the *Responsible Advertising and Children Program (RAC)* (2009) and, in this area, coordinates with the ICC; the initiative involves advertisers, agencies and media, and therefore goes beyond the organization's own membership.

4.2 Environment: World Business Council for Sustainable Development

Environmental concerns are found in many areas of business activity, particularly in the extracting and manufacturing industries, but today a wider range of industries, including services and finances, address environmental sustainability issues. Indeed, environmental performance is today an important parameter in competition, and pioneering firms will often be credited for their achievements, at least by some groups of consumers who have a preference for sustainable consumption. Unlike advertising, which is a traditional activity for all firms, sustainability is a relatively new dimension of corporate behavior dating back to the early 1990s. The organization of this concern follows different pathways.

Existing industry associations attend to a variety of environmental issues, but also new and encompassing entities are created. One such entity is the World Business Council for Sustainable Development (WBCSD), formed in 1990 just before the Rio Summit (UNCED) (as the Business Council for Sustainable Development) to create a unified business voice. It is organized in a direct-membership format, and its member firms – many of them transnational corporations – want to demonstrate a strong commitment to the environment. Membership is a kind of certification of companies making a serious contribution to environmental dimensions of sustainability and sharing important experiences with other firms. Firms also use the WBSCD platform to present their initiatives and use the different tools in the form of various WBCSD guidelines, guides and protocols to implement their business strategies.

How does consumer policy come into the picture? In the early days, environment policy and consumer policy were not strongly integrated, and the consumer dimension was less articulated than today, but new strategies were soon elaborated through WBCSD reports, such as *Sustainable Production and Consumption. A Business Perspective,* issued in 1996. It is increasingly recognized that all parts of the production and value chain must be attended to in a sustainability perspective. This reality also reflects the development of consumer policy as not only focusing on consumption in a narrow sense but as embracing many steps in the production stream and giving more weight to a range of environmental issues. Accordingly, the WBCSD has expanded and refined its strategy over the years. It also points to some alarming trends in unsustainable consumption through its report *Sustainable Consumption: Facts and Trends from a Business Perspective,* issued in 2008, which notes that consumers are demanding more sustainable consumption and that business must catch up. Also *A Vision for Sustainable Consumption* (2011) has been elaborated.

Today the WBCSD plays an important role as an agenda-setter and influences consumer policy in soft ways. It provides analyses of sustainable management and demonstrates to different stakeholders how business is adapting to growing concerns, and it encourages business to adopt new practices. In principle, the WBCSD does not oppose or seek to curtail public regulation, and its activities are geared rather towards solving problems through business action at the level of individual firms or industries. A typical method is to provide examples of the effective management of resources. Rather than establish rules to be followed, this information strategy seeks to build norms and communicate examples to business as well as to critical stakeholders, and use the market as a driver for sustainability. It is believed that consumers will eventually reward those firms that meet consumer demands and expectations.

5 Encompassing Initiatives

Whereas industry associations are historically well-established and plentiful in global contexts, trans-industry peak associations are few. Encompassing organizations spanning several industries organize a broad variety of firms, and these usually have difficulty defining some common interests. Bonds between members are usually weak and firms find themselves in many different institutional environments that impose different and sometimes even contradictory demands on the associations. Nevertheless, business has managed to launch activities on this grand scale and produced norms and rules that cannot be adopted in the context of individual industries but need a much broader field of application. It is therefore more relevant to see encompassing initiatives as something that complements rather than competes with industry-specific and multi-sectoral initiatives without there being any smooth division of labor between these associational layers in global business. The encompassing associations have many tasks, and, as with industry associations, only some entities are tasked with consumer affairs, and only some activities lead to self-regulation.

5.1 Commerce: International Chamber of Commerce

Without doubt, the International Chamber of Commerce (ICC) (established 1919) is the largest and most encompassing international business association, embracing many sectors and countries. Accordingly, it must adopt strategies that also benefit very large sections of the business community rather than privilege specific subsets of firms. Thanks to its representativeness, it is in a position to speak for the business community, and this broad obligation and recognition provides an interesting background for self-regulation in a number of areas, including consumer affairs. These rules apply to large sections of business, either by addressing the same functions in many industries, such as advertising, or by dealing with the same general challenges, such as environmental performance, and, hence, pertain to considerable segments of consumers.

Accordingly, the ICC accommodates several bodies and working groups, such as the Commission on Marketing and Advertising that is active in consumer policy and related policy areas. Some of these activities, such as the Business Action for Responsible Marketing and Advertising (BARMA), also go beyond the ICC and include a further group of media and advertisers. In this regard, a special focus is on children as a particularly vulnerable group, with guidelines hammered out in the *Compendium of ICC Rules on Children and Young People and Marketing* (2003).

Responsible business has more recently responded to demands and expectations among consumers, but ICC rule-making dates to an earlier time. An important piece of private regulation, the *ICC Code on Advertising Practice*, had already been issued by 1937 and has been revised several times, most recently in 2011 as the

Consolidated ICC Code on Advertising and Marketing Communications Practice. Linked to this is the more specific *ICC International Code of Direct Selling,* first adopted in 1978 and updated in 2013. New challenges inform revisions of these codes: Today, the organization's Working Group on Digital Media gives advice to the special body tasked with revising the advertising code and marketing code.

Relations with and information to consumers are also regulated through the *ICC/ESOMAR International Code on Market and Social Research*. This is also an old piece of regulation, first adopted by ESOMAR in 1948 and joined by the ICC in the 1970s; it has been revised several times, most recently in 2007 (ICC 2008a). Creating a knowledge base through market and social research is essential to develop appropriate ethical strategies and communicate to consumers, and given these regulations, both the study of consumer behavior and hence the dissemination of information to consumers, must follow certain standards of honesty to gain public confidence.

The *ICC Business Charter for Sustainable Development*, a piece of soft regulation, brings us to another area. Adopted in 1991 at the eve of the Rio Summit, it outlines key principles for environmental management. It is a voluntary framework open to member firms and it sets important benchmarks, but firms must establish their own mechanisms to comply with these standards. Closely linked to this charter, and also to the general advertising and marketing code, is another soft kind of regulation, the *ICC Framework for Environmental Marketing Communication* (2011b). These environmental efforts can be seen as relating to environmental and consumer policy in the public realm, and they increase the standards of environmental performance by focusing on sustainable consumption.

In fact, this work is also closely related to the ICC's efforts in the context of the UN Global Compact, which are directed by the organization's Commission on Business in Society. However, the ICC goes beyond delivering inputs into this process and has issued a detailed set of recommendations in the form of the *ICC Guide to Responsible Sourcing* (2008b)*,* which establishes practices in relation to such goods as clothes, footwear, electronics, and food. Still, it is a soft instrument, but can eventually be developed into a supplier code.

5.2 Economic Issues: World Economic Forum

The World Economic Forum (WEF) is very different from the ICC. It is of more recent origin, dating back to 1987 and with some roots going back to 1971, but as the name indicates, it is a "forum" – a meeting place for international business, but also a place where business leaders and government representatives connect. It is not an association that can impose binding decisions on its members, or which can effectively monitor corporate behavior and participate in the implementation of rules. The strength of the WEF lies rather in its informal character and its ability to address problems in an open and timely manner and set new agendas. These activities can be important in their own right, but experiences won in this forum are also valuable when filtered into other parts of the business community. Although the WEC is involved in core areas, such as competition and trade policy, and turns attention to some aspects of consumer affairs, a hallmark of the WEF is its ability to address new questions neglected by other organizations.

Given the global character of the WEF, is it only natural that the forum should discuss the complex roles of transnational corporations, the role of brands, and the responsibility conferred on corporations. It is also a forum that discusses how to respond to consumer empowerment. Some forum activities relate either directly or indirectly to consumer affairs. They all have the character of being soft tools and take the form of policy statements or panel summaries from the WEF annual meetings and its various Global Agenda Councils.

A current and hotly debated issue is nutrition and life-style diseases, such as obesity, and it is noted that "consumers are increasingly expressing preferences for environmentally-friendly, sustainable agricultural practices" (WEF 2008). This interest is already recognized in the business community and in many parts of the food industry, but the WEF pushes further in this direction by linking food, health environmental and climate policies. In some cases, strategies are further developed, an example being *The New Vision for Agriculture Initiative,* hosted by the WEF's Global Agenda Council on Food Security (WEF 2011). Also a *Vision Document* and a *Roadmap for Achievement of the Vision* were prepared, showing that initiatives can be taken further down the road of policy implementation.

Food has been a central concern in the encompassing WEF, but other issues of consumption are also discussed. With globalization, the tourism and travel industry has expanded considerably, and new consumer demands arise. Again, consumer policy links up with environmental policy in terms of sustainable corporate practices in these growing industries. The WEF is a broader forum, but it has done various investigations into the conditions of this particular industry. One goal is to inform the strategies of corporations and integrate new consumer concerns; this is seen as one of the ways to enhance the industry's competiveness. Again, no rules are adopted but discussions and analyses help to shape norms, a key task of the WEF.

6 Comparisons Within and Across Associational Formats

It is important to emphasize that the findings show interesting variation both within and between the three formats of business associability and the related initiatives. This table shows the approximated position of the six organizations with regard to their general patterns of activity in global consumer policy and their efforts to develop norms and various forms of self-regulation to make market functions sustainable. Although it is possible to distinguish between the three formats, we also see that there is a great variation within them. Industry associations are very specialized with regard to their membership, and they also display activities relevant to only particular groups of firms. Multi-sectoral organizations, drawing

Table 1 Global business associations and patterns of activity in consumer policy

		Scope of organization	
		Narrow	**Broad**
Scope of consumer issues	**Narrow**	*ICBA* *IATA*	*WBCSD*
	Broad	*IAA/WAF*	*WEF* *ICC*

on broader parts of the business community, address broad questions (environment) but also relatively specific ones (advertising). The relatively broad associations engage in a wide field of activities, but still strong variation exists among them, including the profoundness of their engagement (Table 1).

When comparing the activities of the narrow industry associations in beverages (ICBA) and airlines (IATA), certain similarities emerge in addressing consumer issues. Industry initiatives can provide the consumers with better opportunities and thereby assist in sustaining markets through self-regulation, because industry associations have adopted formal rules to guide their member firms. But there is also significant variation in the scope of issues they cover and the bindingness of adopted rules, showing stronger engagement and commitment on behalf of the airline companies. In both cases the narrow scope of the two industries is a factor facilitating collective action, but the pressures on the airlines are significant and involve basic safety matters of vital importance to the consumers but also to the reputation of the airlines themselves.

We have noticed greater variation between the two multi-sectoral entities relating to advertising and environment than between the comparatively narrow industry associations. While advertising is a function managed by virtually all corporations with customer relations, and thus can be seen as an activity connected to multiple industries, it is also an industry that in many ways can be distinguished from other industries, and advertising can therefore benefit from some of the advantages of collective action in small groups. Advertising is broadly covered by the IAA and WAF, which are prolific associations in this area of consumer affairs, and we have seen examples of self-regulation not found in the WBCSD. The WBCSD is a broader organization with a broad engagement in environment and climate policy, but its activities in relation to consumer affairs are few. It must further be taken into account that the WBCSD is an organization that is involved primarily in raising environmental awareness rather than in developing and implementing self-regulation.

Finally, it is interesting to note that also peak associations in global business can be active in global consumer policy and offer some contributions to the sustaining of markets. Again, however, strong variation prevails between these broad organizations. Although relevant activities in the ICC unfold within a few areas, the self-regulatory schemes are elaborated, date back several decades, and have a strong authority within the global business community. The WEF, on the other hand, is an important actor in building agendas, which is a key purpose of the organization, and several issues in relation to consumer policy are addressed. However, stronger forms of collective action, leading to self-regulation initiatives in consumer policy, are clearly non-existent. This is beyond the remit and the capacity of the WEF, and this also illustrates the barriers to collective action in very broad global business associations.

Comparing across the three formats, the industry associations reviewed are particularly adept in developing certain forms of self-regulation, and they can benefit from organizing a comparatively small group of companies in a narrow field of business. Indeed, some of these features also seem to characterize advertising. Our comparison shows, however, that self-regulation is even possible in the broad peak associations, and in the case of the ICC, significant activities are found in relation to global consumer policy. Large-scale collective action is even possible at this level, and to analyze this pattern, we have to understand the place of the ICC in the general division of labor within organized business and its role as a catalyst in formulating and implementing strategies. Other associations have been concerned with their own particular issues and consumer relations and have not been able to overcome this fragmentation, allowing room for active associations such as the ICC to take a lead role in at least some areas of consumer policy and develop rules for broad segments of global business.

7 Conclusions

Elements of global consumer policy are not shaped by intergovernmental organizations and the consumer movement only; business also makes interesting contributions to the global development of this policy field. Although efforts to install public regulation are sometimes thwarted by business, certain contributions to regulate and also improve the conditions of consumers in the marketplace are made by representative business associations that organize large sections of business, set new agendas, and adopt norms and rules that encourage and even compel firms to introduce new practices. These efforts take a variety of forms and go in many directions; and although consumer issues are just one of many concerns in business, some interesting initiatives can be identified. Many contributions are integrated with and linked to other issues, such as the environmental, social or humanitarian dimensions of policy; however, some initiatives are framed explicitly to target consumers.

The self-regulatory rules come in different versions. In consumer policy, they often take the form of recommendations and standards that are advisable or even essential for doing business rather than being mandatory rules that are strictly policed. Indeed, most of the rules are not as comprehensive as traditional public regulation and therefore cannot contribute to the sustainability of markets in the same sense as public regulation, but they still have a role to play. Some rules are much elaborated and outline both procedures and goals in great detail, although the consequences of non-compliance are rarely spelled out.

Different types of bodies are mobilized to that end. The international business community abounds with industry associations, and a small number of multi-sector and encompassing trans-industry peak associations are represented. New entities have also emerged that organize business on the basis of a number of other principles and bring together firms across many industries.

Industry associations make norms and rules that pertain to particular sectors and to particular groups of consumers, such as airlines and beverages, while other entities also take on wider responsibilities – they being multi-sectoral organizations that focus on specific functions such as advertising, specific challenges such as the environment, and encompassing bodies such as the ICC and the WEF. Industry associations can benefit from fostering collective action among a relatively small group of firms, and therefore size matters. Group size however is not the only factor of importance to collective action and to developing rules and norms to sustain the functioning of markets.

Interestingly, the ICC is the international business association most actively engaged in general consumer affairs with a dedicated effort to promote self-regulation as an alternative to, but without excluding, traditional public regulation. Even though the ICC represents a very large and heterogeneous community, broad self-regulatory schemes in consumer policy – a concern for all its members – are adopted. Moreover, the ICC plays an important role in disseminating knowledge and encouraging rules in consumer policy, and it assists many industry associations and coordinates certain efforts.

The initiatives of formal and established associations have their limitations, however, and also new types of new organizations need to be examined. Therefore, new organizations, such as the WBCSD and the WEF, spring into existence and add to the organizational complexity of business. These entities embrace a range of different issues, such as environmental or economic or social problems, and are not related primarily to consumer issues, but consumer affairs is one of their fields of activity.

Self-regulation is introduced in and across many industries, but also other initiatives show the engagement of business in consumer policy. Many initiatives cannot be understood as self-regulation, but rather, they have the character of mission statements. Here, consumer-related activities are meant mostly to shape norms and influence agenda-setting, raise awareness in the business community, and demonstrate to various stakeholders that business behaves in a responsible manner and does not engage merely in apologetic forms of white-washing. It can be difficult to evaluate the value of these initiatives for market sustainability, but even broad ambitions and intentions expressed by business associations should not be underestimated, given that business can be held accountable for even softer corporate commitments.

Although business has contributed to the further development of consumer policy along with consumer movements and intergovernmental agencies, the many associations have different perspectives on consumer policy and are characterized by many dilemmas. Carving out rules and norms also produces conflicts in business: Some firms stand to gain because they are able to implement rules and meet consumer demands, whereas others have difficulty adopting new practices and lose market share to the pioneers. Although preferences and perceptions vary significantly across business, business self-regulation and softer forms of norm building have become some of the mechanisms in the otherwise slow and tardy development of global consumer policy.

References

Akerlof, G. A. (1970). The market for 'lemons': Quality uncertainty and the market mechanism. *Quarterly Journal of Economics, 84*(3), 488–500.

Arrow, K. J. (1963). Uncertainty and the welfare economics of medical care. *American Economic Review, 53*(5), 941–973.

Blümle, E., & Schwarz, P. (1985). Einleitung. Verbandswissenschaft – eine Interdisziplin zur Erforschung der komplexen Verbandswirklichkeit. In E. Blümle & P. Schwarz (Eds.), *Wirtschaftsverbände und ihre Funktion* (pp. 1–15). Darmstadt: Wissenschaftliche Buchgesellschaft.

Braithwaite, J., & Drahos, P. (2000). *Global business regulation*. Cambridge: Cambridge University Press.

Galbraith, J. K. (1952). *American capitalism. The concept of countervailing power*. Boston: Houghton Mifflin.

Gunningham, N., Kagan, R. A., & Thornton, D. (2003). *Shades of green. Business, regulation and environment*. Stanford: Stanford University Press.

Hilton, M. (2009). *Prosperity for all. Consumer activism in an era of globalization*. Ithaca: Cornell University Press.

IAA. (n.d.). *Guide to advertising self-regulation*. http://www.iaaglobal.net/default.aspx?id=2ef78321-3118-4d32-808b-4ce8caea90e9&print=true. Accessed 21 Jan 2014.

IAA. (2013a). *Responsible advertising*. http://www.iaauae.org/en/resource-library/position-statements/responsible-advertising.html. Accessed 21 Jan 2014.

IAA. (2013b). *The IAA – An introduction*. http://www.iaauae.org/en/about-iaa/iaa-individuals.html. Accessed 21 Jan 2014.

IATA. (n.d.). *Six-point safety program*. http://www.iata.org/whatwedo/safety_security/safety/pages/6-point.aspx. Accessed 21 Jan 2014.

IATA. (n.d.). *Rules and regulations of the industry committees*. http://www.iata.org/SiteCollectionDocuments/Documents/rules_regulations_industry_committees.pdf. Accessed 21 Jan 2014.

IATA. (2003). *IATA safety operational audit (IOSA)*. Montreal: IATA.

IATA. (2009). *European Commission's public consultation on air passengers' rights*. Additional information submitted by the IATA. http://www.iata.org/worldwide/europe/Documents/Govaf_1107ec_passenger_rights.pdf. Accessed 21 Jan 2014.

IATA. (2010). *IATA safety audit for ground operations (ISAGO)* (2nd ed.). Montreal: IATA.

IATA. (2011). *Baggage improvement program*. Montreal: IATA.

ICBA. (2008). *International council of beverages associations guidelines on marketing to children*. Washington: ICBA.

ICC. (2003). *Compendium of ICC rules on children and young people and marketing*. Paris: ICC.

ICC. (2008a). *ICC/ESOMAR International code on market and social research*. Paris: ICC.

ICC. (2008b). *ICC guide to responsible sourcing*. Paris: ICC.

ICC. (2011a). *Consolidated ICC code on advertising and marketing communications practice*. Paris: ICC.

ICC. (2011b). *ICC framework for environmental marketing communication*. Paris: ICC.

ICC. (2012). *ICC framework for responsible food and beverage market communication*. Paris: ICC.

ICC. (2013). *ICC International code of direct selling*. Paris: ICC.

Koppell, J. G. S. (2009). *World rule: Accountability, legitimacy, and the design of global governance*. Chicago: University of Chicago Press.

Lang, A., Ronit, K., & Schneider, V. (2008). From simple to complex: An evolutionary sketch of theories of business association. In J. R. Grote, A. Lang, & V. Schneider (Eds.), *Organized business interests in changing environments* (pp. 17–41). Houndmills: Palgrave.

May, S., Cheney, G., & Roper, J. (2007). *The debate over corporate social responsibility*. Oxford: Oxford University Press.

Olson, M. (1965). *The logic of collective action. Public goods and the theory of groups*. Cambridge: Harvard University Press.

Porter, T., & Ronit, K. (2010). *The challenges of global business authority. Democratic renewal, stalemate or decay?* Albany: State University of New York Press.

Potoski, M., & Prakash, A. (2005). Green clubs and voluntary governance: ISO 14001 and firms' regulatory compliance. *American Journal of Political Science, 49*(2), 235–248.

Ronit, K. (2007). Modes of consumer participation and engagement in the making of global consumer policy. In K. Ronit (Ed.), *Global public policy – Business and the countervailing powers of civil society* (pp. 65–88). London/New York: Routledge.

Sandler, T. (2004). *Global collective action*. Cambridge: Cambridge University Press.

Schmitter, P. C., & Streeck, W. (1981). *The organization of business interests*. Berlin: Wissenschaftszentrum.

Schwarz, P. (1979). *Morphologie von Kooperationen und Verbänden*. Tübingen: J.C.B. Mohr, P. Siebeck.

Stigler, J. G. (1961). The economics of information. *The Journal of Political Economy, 69*(3), 213–225.

Streeck, W., & Schmitter, P. C. (1985). Community, market, state – And associations? The prospective contribution of interest governance to social order. In W. Streeck & P. C. Schmitter (Eds.), *Private interest government. Beyond market and state* (pp. 1–29). London: Sage.

Underhill, G. R. D. (2000). From Ships Passing in the Night to a Dialogue of the Deaf: The Contribution of International Relations Theory to Understanding Organized Business. In J. Greenwood & H. Jacek (Eds.), *Organized business and the new global order* (pp. 20–38). London: Macmillan.

United Nations. (2003). *United Nations guidelines for consumer protection (as expanded in 1999)*. New York: UN Department of Economic and Social Affairs.

WBCSD. (1996). *Sustainable production and consumption. A business perspective*. Washington/Geneva: WBCSD.

WBCSD. (2008). *Sustainable consumption: Facts and trends from a business perspective*. Washington/Geneva: WBCSD.

WBCSD. (2011). *A vision for sustainable consumption*. Washington/Geneva: WBCSD.

WEF. (2008). *Rethinking the food chain*. http://www.democraticunderground.com/discuss/duboard.php?az = view_all&address = 115x131991. Accessed 21 Jan 2014.

WEF. (2011). *The new vision for agriculture initiative*. Davos: WEF.

WFA. (2008). *World federation of advertisers' media charter*. Brussels: WFA.

WFA. (2009). *Responsible advertising and children program (RAC)*. http://www.responsible-advertising.org/media/data/RAC_OnePageSummary_final.pdf and http://www.responsible-advertising.org/effective_selfregulation.asp. Accessed 21 Jan 2014.

The Political Economy of Private Management of High Impact Low Probability Risks in Finance and the Environment

Tony Porter

1 Introduction

An increasing number of sustainability problems involve the risks of transnational High Impact Low Probability (HILP) events. The Centre for Risk Studies at the University of Cambridge has usefully identified 12 categories of HILP events, which they label "macro-threats": financial shock, trade disputes, geopolitical conflict, political violence, natural catastrophe, climatic catastrophe, environmental catastrophe, technological catastrophe, disease outbreak, humanitarian crisis, externality (such as an asteroid hitting earth) and an "other" category (Coburn et al. 2013). These risks are especially difficult to measure since the HILP events may have occurred very rarely, if at all. They are very difficult to manage since there is a tendency to postpone making costly investments now when these are intended to address uncertain future events, even if these future events will be catastrophic if they occur. All these profoundly involve sustainability, and in a distinctively challenging manner, since ongoing or frequently occurring reminders of threats to sustainability may not be sufficiently present to motivate responses. The severity and complexity of HILP events mean they usually affect all four types of sustainability discussed in the introduction to this volume: environmental, economic, social and cultural. HILP events are typically not restricted to any particular country, and thus have a transnational character (Lee et al. 2012).

In an era where the vast majority of our productive and technical capacity is in the private sector, and where large scale government initiatives have been tarnished by spectacular failures (Scott 1998), there are few who would disagree with the idea that business will need to play a key role in addressing HILP risks. However there are sharp disagreements about the suitability of business for this role. For critics,

T. Porter (✉)
Department of Political Science, McMaster University, Kenneth Taylor Hall 527, L8S 4M4 Hamilton, ON, Canada
e-mail: tporter@mcmaster.ca

A. Lang, H. Murphy (eds.), *Business and Sustainability*,
Sustainability and Innovation, DOI 10.1007/978-3-319-07239-5_5

business is entirely unsuited to this task because of its short-term profit-oriented perspective, and we should rely on strong independent government intervention. For more ardent supporters, business should always be able to address such problems efficiently, for instance through the use of financial markets and insurance, which bring calculations about the future into the present and attach material consequences to these.

In this chapter I argue that these more extreme views are harmful for addressing sustainability and HILP risks, and that it is more important to identify the optimal distinctive and interacting roles of public and private-sector actors that are best able to address these risks. I support this argument with an examination of two cases: global financial crisis and the sustainability of automobiles and other vehicles as modes of transportation, which is threatened by the exhaustion of oil reserves, climate change, and road congestion. The first is a catastrophe that has already occurred many times, including most recently in 2007/8. As such it offers valuable lessons that extend from before the risk event materializes through the catastrophe. The end of oil and irreversible climate change have not yet occurred, and indeed they may not, even though there are good reasons to expect that they are likely to occur for the first time in the next few decades. Preparations for the transition to a new sustainable mode of transportation are well underway, offering a history of practices that provide useful empirical information about what works and what doesn't in addressing HILP risks. At the same time the two cases differ, and a comparison between them is useful in identifying variation across types of HILP risks.

The chapter proceeds in three steps. First, the distinctive properties of HILP risks will be identified, drawing on a variety of literatures and risk areas. Second, the strengths and weaknesses of business and the optimal relationship of the public authorities to business will be conceptualized. The third section examines the cases of global financial instability and the sustainability of road vehicles.

2 Conceptualizing HILP Risks

In recent years attention has been increasingly devoted to analyzing the social aspects of risk, including questions such as their macro-historical properties and the practical organizational difficulties of managing HILP risks, and it is useful build on these insights while also advancing our understanding of the distinctive roles of business and public authorities in these.

One well-known relevant development in social theory is Beck (1992), who famously argued that that we are now living in risk societies, where the distribution of risks has become more important than the distribution of wealth.[1] He argues that today risks are increasingly an unintended manufactured by-product of our complex

[1] This section draws on Porter (2005) and (2009a, b).

scientific and economic systems, a sharp contrast to earlier periods in which the negative effects of natural phenomena posed a greater danger to humanity. Moreover, incalculable socially-constructed dangers increasingly are displacing risks, which are calculable. The governance of these uncertainties and risks is exacerbated by willful “unawareness”, “organized irresponsibility”, and the connections of risk management with power.

A contrary view is provided by theorists who emphasize the ways in which risks inspire efforts to mitigate them. Douglas (1992) who notes that our current risk-focused “blaming system” is “almost ready to treat every death as chargeable to someone’s account, every accident as caused by someone’s criminal negligence, every sickness a threatened prosecution. Whose fault? Is the first question.” Risk implies choice, and includes the decision not to act. Thus authorities can no longer excuse their conduct with reference to tradition or natural factors beyond their control.

This view is very evident as well in the literature on disaster management, which has increasingly recognized the social and political dimensions of all disasters (Rosenthal et al. 2001). Initially the literature focused on delivery of emergency services and the study of individual behaviour in disaster events, but there has been a shift, at the UN and elsewhere, towards focusing on broader social mechanisms for managing risks in advance of HILP events (UN ISDR 2004: 8). The attribution of disasters to “acts of God” has lost credibility. As Rosenthal et al. (2001: 8) note, in their review of the disaster literatures, “most crises are preceded by what are often labelled in hindsight as instances of failed judgment, negligence, blunders or sabotage.” Moreover larger social forces expose humans to both technological and natural disasters, for instance in the way that new human settlement can change the landscape and trigger floods or move people into earthquake zones.

Michael Power (2007) similarly analyzes the way in which particular organizations are increasingly configured to transform uncertainty into calculable and manageable risk. This has involved an increasing reliance on law relative to mathematics. In business the perception of a firm’s reputation for managing risk (i.e. a second order reputational risk) can be as important and demanding for the firm as its management of less relational first order material risks. Particular actors within and outside the firm market themselves for their risk management capacities, thereby expanding risk practices.

As awareness of the numbers, variety, and commonalities of HILP risks have increased, heightened attention has been devoted by public authorities and business to them. One useful conceptual effort has been to disaggregate the elements and dimensions of these risks to help with planning. For instance he trajectory of change over time for particular HILP risks can be displayed visually on graphics with one axis for impact and one for probability (World Economic Forum 2013: 4; UK Government Office for Science 2011: 5). In some cases “near misses” can be recorded and analyzed (UK Government Office for Science 2011: 23). In other cases the unknown unknowns can only be addressed by creating generalized resiliencies and redundancies, such as strategic reserves of critical resources, rather than planning for specific events (OECD 2011: 14, 97). Resilience can be disaggregated into its components (such as robustness and redundancy) and countries' performance on this can be measured and compared (World Economic Forum 2013: 40). Likely pathways for the onset of a HILP event can be diagrammed along with the nodes and hubs that can provoke contagion (OECD 2011: 26) or "chain of events" effects (Hiroki 2012: 8). The North American Electric Reliability Corporation (NERC) followed such a procedure for its report on the risk of cyber attacks on the power grid, working from the perspective of an attacker who might wish to create a HILP event (NERC 2012). Efforts can be made to modify incentives in markets which may undermine HILP risk management, for instance where firms have incentives to rush poorly tested products to market or to not invest sufficiently in costly new antibiotics (OECD 2011: 91–92).

An important tool in managing HILP risks can involve mechanisms that extend the collection, analysis, and mitigation of emerging threats beyond particular expert communities which may be hesitant, for intellectual or self-interested reasons, to take non-routine risks seriously (UK Government Office for Science 2011: 31–36). Every year the World Economic Forum asks over 1,000 experts from industry, government, academic and civil society to "review a landscape of 50 global risks" (World Economic Forum 2013: 10). In the UK the government's National Risk Register provides data on HILP risks in order to complement business continuity planning and help families and communities prepare (UK Government Cabinet Office 2008: 6). Business continuity and security consultants also provide analysis of HILP risks. For instance PriceWaterhouseCoopers (2013) notes that "Recent experience with disruptive events such as natural disasters, pandemics, and terrorist attacks has shown that some companies did not have adequate crisis management capabilities, and as a result did not survive", and it offers its "risk and resilience methodology" to address this. Civil society organizations have begun to devote attention to HILP risk as well, as for instance with the Stockholm 2013 Global Risk Declaration coordinated by the Global Challenges Foundation (2013).

The insurance industry is particularly involved in working to understand HILP risks. Lloyd's produces yearly detailed "Realistic Disaster Scenarios" (RDS), which its insurers use to anticipate exposures and losses. For instance the January 2013 RDS include scenarios for a typhoon in Japan and an earthquake in Los Angeles (Lloyd's 2013). Lloyd's notes that "careful management of catastrophe risk is a business imperative at Lloyd's. Recent experience has confirmed that the market needs to be able to withstand multiple catastrophe events in any given year". Actuaries have struggled with how to quantify HILP events (Society of Actuaries 2000). In 2013, in response to G20 concerns, the public sector Financial Stability Board designated nine large insurance companies as Globally Systemically Important Insurers using criteria developed by the International Association of Insurance Supervisors. This will result in these companies being subject to increased supervision, as well as to alter their capital structures, to ensure they can withstand the new risks they may be exposed to, including HILP risks (DuaneMorris 2013).

The conceptual work that has been discussed in this section confirms the interest in HILP risks among both scholars and practitioners, the progress that has been made in understanding these at both more general macro-historical levels and in more specific cases, and the involvement of both public authorities and businesses in attempting to measure and manage HILP risks. However more work is needed to conceptualize the role in HILP risk of business, and its relationship to public authorities.

2.1 Conceptualizing and Specifying the Role of Business in Managing HILP Risks

A first step in being more specific about the role of business in managing HILP risks is to differentiate between risks on the basis of the location of their sources and effects relative to the firm. For instance, the cause of a nuclear meltdown is closely tied to the internal operations of the firm that operates the reactor, while an asteroid striking the planet is not influenced by firms. This differentiation applies to all risks and not just HILP risks, but it is important as a starting point for analyzing HILP risks. It is illustrated in Table 1. Most risks will not be entirely confined to one or another quadrant, but to the extent that they are, the optimal role of public and private actors in managing the risk will differ.

The interests of business in mitigating HILP will vary depending on the location of the risk and its effects, and public policy should be adjusted accordingly. Where

Table 1 The location of HILP risk sources and effects relative to the firm

		Sources of risk	
		Internal to firm	External to firm
Effects of risk	Internal to firm	Firm has strong incentive to manage risk and can be left to do so. Private sector solutions will emerge spontaneously Examples: internal fraud, accident, technological failure. Associations or consultancies may assist	Firms have an interest in organizing to get others to reduce risk, perhaps through industry associations Examples: insurance industry and climate change; shortage of rare earth metals vital to industry; effect of traffic congestion or infrastructure deterioration on risk of catastrophic production disruption
	External to firm	Strong public regulation that alters firm incentives is needed Examples: Union Carbide and Bhopal toxic chemical release; Placer Dome/Marcropper mining disaster, subprime loan originators	Firms may be given incentives by state to help address catastrophic threats Examples: carbon markets, environmental remediation, research into new catastrophe-resistant crop varieties

the source of the risk is internal to the firm it will be important to distinguish between risks that can be left to the firm and not be regulated since their effects are mostly restricted to the firm, and risks that are externalized, requiring strong regulation. Where the source of risk is external to the firm, business can be recruited as an ally, including perhaps against firms that are generating risks. The most hazardous combination with regard to the contribution of business to bringing about an HILP risk event is the shaded southwest quadrant.

These distinctions provide indications of optimal mixes of public and private sector management of HILP risks that vary by the sources and effects of that risk. These variations in sources and effects will vary across types of HILP risk and across industries. The cross-industry variation is likely to be shaped by the distinctive interactions of the organization of industries, the particular technologies those industries rely upon, and their relationship to the physical environment in which they operate.

The following four challenges will complicate the ability of business to manage HILP risk:

1. Measurement and awareness. The low frequency of risk events means historical data for quantitative analysis is likely to be lacking. In some cases firms will have an active interest in suppressing or falsifying data, either to avoid having to take costly measures to mitigate risk or for fear that admitting or being associated with HILP risks may have reputational costs. However if the catastrophic character of the risk begins to be visualized then this may increase the incentives to address it, perhaps excessively.
2. Complexity and scale. The existential quality of HILP events means that they are likely to threaten a variety of interdependent subsystems in complex ways. Risk mitigation is likely to be costly, and because it addresses risks that are not business-as-usual these costs are likely to compete with rather than complement the firm's daily operations. Complexity and scale can make it difficult to identify responsibility for the generation of risks and their management. At the same time, rather than relying on lower level routines, they can require involvement of the scarce time of high-level executives in the firm because of the extraordinary systemic character of the challenge.
3. Temporality. There are two opposing distinctive temporal characteristics of HILP risk. The first is the likelihood that the time that passes before the risk materializes will be long because of the low frequency of the event. This provides an incentive to delay taking action to mitigate the risk. The second is that the catastrophic character of the event means that decisions and responses will need to be accelerated once the event occurs. Like complexity and scale, this means that disaster preparedness scenarios may compete with routine operations.
4. Governance challenges. As has been noted above, HILP risk governance at the firm level is challenging because it requires much greater firm-wide high-level executive involvement than is characteristic of routine risks. The firm's interaction with public authorities also becomes more difficult since HILP risks often

are spread across multiple jurisdictions. Public authorities may have great difficulty devising common strategies, and may fail to provide the complementary governance initiatives that are needed for successful HILP risk management. Indeed they may exacerbate collective action problems by promoting the short-term interests of their firms at the expense of the global public interest in HILP risk management. HILP risks are likely to cross industry borders as well, making reliance on industry associations for risk management less satisfactory than may be the case for more routine risk management.

The above discussion suggests the following three propositions about the optimal role of business relative to public authorities in the management of HILP risk:

1. Firms and industry associations will be unable on their own to manage or prepare for HILP risk and schemes that assume otherwise will fail.
2. Overly centralized public initiatives will also fail since HILP risk responses need to be built into the routine operations of a wide variety of firms. This is a lesson that is apparent in the UN's shift from disaster relief to risk preparation, but it is likely to be more generally applicable. However the UN disaster experience also suggests that strong centralized initiatives are important in responding to catastrophe once it begins.
3. Public authorities need to connect the very broad character of HILP risks with the internal incentives of the firms. Pursuing this hybrid public/private approach effectively will be the source of most advances in private HILP risk management, but the difficulty of doing so while also addressing collective action problems among states means that overall crisis prevention efforts will fall short, and the catastrophe will not be prevented. However preparation for catastrophes will help in reducing their frequency or duration.

In the following section I examine the two cases in turn to assess the relevance of the above propositions.

3 The Case of the Financial Crisis of 2007/8

The relevance of HILP risk to the 2007/8 financial crisis is very apparent. Like a great number of other transnational financial crises, only a few observers and participants predicted it—the prevailing view was that the global financial system was growing and stable, and that the probability of a global crisis was small. The impact was certainly high. As much as $10 trillion in output was lost in the US alone (US Government Accountability Office 2013: 15).

The crisis displays the four challenges of private sector HILP risk management that were set out above. While these were not recognized by most financial actors before the crisis, with hindsight they are now widely acknowledged as central aspects of the crisis, as evident for instance in virtually all official and private sector reports about the causes of the crisis. We shall also see that the crisis displayed the private sector relationship to risk associated with the most hazardous shaded quadrant of Table 1, where firms generate the risk but do not experience its effects.

Measurement of risk was a key problem. The term widely used by financial actors to refer to the newly acknowledged HILP risk was "tail risk", referring to the risks in the tails of the normal distribution. The crisis began in the US subprime mortgage market where too many decisions were based on the assumption that house prices could not decline simultaneously across the US. Such a decline had not occurred since the great depression of the 1930s, and the risk models and memories of financial market actors did not extend that far back. Contemporary risk management relies heavily on the diversification and hedging of risks, and models that might have worked well when house prices varied randomly across the US market failed when house prices declined simultaneously. Moreover the interdependence and lack of transparency of the financial system created additional severe risks, labeled "endogenous" risks by economists (Porter 2009b).

Complexity and scale were also key problems. Subprime mortgage lending involved an "originate to distribute" model that combined mortgages into separate legal entities, financed by issuing a series of securities which investors would buy in exchange for a share of the cash flow from the mortgage payments. The securities were sliced into tranches with different levels of risk, and these were often reprocessed in a similar manner. The resulting products were backed up by a form of insurance, credit default swaps. This aspect of the financial system alone was impossibly opaque and complex, with the location and accountabilities of the risk very unclear to market actors or authorities. For instance far too many credit default swaps were held by too few firms, especially American International Group (AIG), an insurance company that required a $182 billion government bailout during the crisis to prevent its failure, and the catastrophic impact of such a failure on the global financial system.

The crisis also displayed the temporal characteristics associated with HILP risk events. The causes of the crisis accumulated over a long period. The liberalization and globalization of finance originated in the 1960s. Securitized mortgages were initiated in the 1980s. Yet when the crisis began it unfolded at a frightening pace, with decisions affecting the stability of the global financial system needing to be taken in a matter of hours.

The governance challenges set out above were also very evident in the lead up to the crisis. This was especially related to the hazardous relationship of firms to risk associated with the shaded quadrant in Table 1 above. Even part way through the crisis this had been recognized in the pathologies of the originate-to-distribute system. Most of the risks were manufactured by firms rather than coming from a shock exogenous to the market. The aggressive pursuit of ever more questionable house purchases increased the risk of default and a downturn in house prices. Throughout the system used to finance these mortgages, from the mortgage originators, through the banks that packaged them into securities, the credit rating agencies that pronounced them safe, the CDS providers that supposedly insured them, and the firms that sold the resulting products to investors, there were disastrous incentive problems. Each of these actors collected their fee for their part in the process while passing the risk that this fee was supposed to reflect on to other actors. Within the banks CEOs similarly collected huge bonuses that failed to reflect the downside risk that they had exposed their firms to, often leaving the firm before the consequences of these risks became apparent.

At a more macro level the crisis triggered intense debates over the problem of taxpayers and citizens bearing the costs of financial market activities while financial firms and executives reaped the benefits. This was evident in debates over “moral hazard”, the concern that bailouts would exacerbate this tendency for private actors to take risks that would be borne by taxpayers, and the determination of public authorities to reform the system to ensure that bank shareholders and executives would bear the risks as well as the rewards of bank activities. However as the crisis continued to unfold these negative consequences for the firms that had contributed to the crisis began to be far outweighed by the remarkable lack of suffering of the actors that had been most culpable (Morgenson and Story 2011). At the level of public authorities at the national and transnational levels there has also been widespread media commentary on the revolving door problem of overly close ties between officials and industry. Conflicts between governments have contributed to the difficulty of devising effective transnational financial regulation.

Let’s look then at the three propositions specifying the performance of different relationships of business to public authorities in managing HILP risk. An important part of the response to the crisis has been to try to separate out the differing quadrants specified in Table 1 and to adjust regulation accordingly. For instance a major effort is to facilitate bankruptcy for firms that fail to manage their HILP risks properly. This seeks to expose individual firms to the HILP events that they generate. In contrast, stricter regulation of credit rating agencies (CRAs) involves public authorities more directly responding to the negative consequences for actors other than the CRAs of irresponsible practices on the part of the CRAs.

The first proposition stated that firms and industry associations will be unable on their own to manage or prepare for HILP risk and schemes that assume otherwise will fail. The crisis itself, which is now widely recognized as having been caused in significant part by excessive optimism about the industry’s capacity to manage its risks, is a testament to the relevance of this proposition.

The second proposition stated that overly centralized public initiatives will also fail since HILP risk responses need to be built into the routine operations of a wide variety of firms, but that strong centralized crisis management is useful once the catastrophe begins. The 2007/8 crisis and the lessons drawn from it confirm this proposition. First, it is increasingly accepted that strong decisive stimulus and bailouts mitigated the effects of the crisis once it began. However these are also widely seen as having a negative effect with regard to preventing future crises, since they create moral hazard, protecting reckless market participants from the consequences of their actions. This is the case not just with bailouts, but with the flooding of the market with liquidity that the US Federal Reserve has especially done, since excess liquidity contributes to the mispricing of risk, as it did before the crisis. The fiscal effects of centralized state intervention has also contributed to the likelihood of serious aftershocks or a future recurrence of the crisis as signalled by the sovereign debt crises that have already occurred after the initial crisis. These problems point to the limitations of strong unilateral state intervention.

The third proposition stated that a more hybrid approach in which public authorities connect the very broad character of HILP risks with the internal incentives of the firms will be the source of most advances in private HILP risk management, but that the difficulty of doing so while also addressing collective action problems among states means that overall crisis prevention efforts will fall short, and catastrophe will not be prevented. However preparation for catastrophes will help in reducing their frequency or duration. This hybrid approach has been characteristic of transnational regulation of finance for more than 20 years. The strongest, most detailed, and oldest standards in this regulatory regime are the Basel capital adequacy standards, now in their third iteration. From the first 1988 iteration these sought to alter the conduct of banks by linking their capital to risk weighted measures of their assets (such as loans). As such these altered the incentives of banks in making loans, and in being prudent in protecting their capital, which not only cushions the bank from insolvency (since it is the difference between assets and liabilities) but increases the incentive of bank shareholders to protect their wealth (since capital constitutes the value of shares). In the ensuing years, and since the 2007/8 crisis, these types of incentive-altering measures have become dauntingly complex and have extended beyond the original focus to include new issues such as executive compensation, macro-prudential regulation, derivatives trading, regulating the "shadow banking system", and the problem of banks that are "too big to fail" (TBTF).

Assessing the effectiveness of this regime with precision is difficult, in part because of the problem of counterfactuals, and in part because their long-range effects have not yet become apparent. Considering the growing frequency and severity of global financial crises over this period it is clear that the regime has failed to provide the needed stability. At the same time it is likely that the crises would have been more severe if finance remained as liberalized as it presently is, and the standards had not existed. The Basel II standards had not been fully implemented when the crisis started, and now a set of new measures, labeled Basel III, have been added. While a full analysis of these goes beyond the scope of this chapter, counter-posing two contrary assessments of them a rough sense of the boundary of the debate.

On the one hand, some respected observers have argued that Basel III is too weak. For instance Lord Adair Turner, chair of the UK's Financial Services Authority, argued in early 2011 that Basel III should have set the core capital at a ratio of 15–20 % rather than the 7 % that was agreed (Kumar 2011). Stefan Walter, Secretary General of the BCBS also warned in April 2011 that "Despite the severity of the crisis, we are already seeing signs that its lessons are beginning to fade" and that the risk of banking crises in one of the BCBS members was roughly one in 20, "unacceptably high" (Wilson 2011: 4). In 2011 the IMF commented "incomplete policy action and reform has left segments of the global banking system vulnerable to future shocks" (International Monetary Fund 2011: 1). At the same time it seems clear that Basel III does impose serious costs on banks and is significantly restricting their riskiness. A 2010 BCBS report estimated that the 94 largest banks would have to raise €577 billion. The big banks also were below the liquidity standards, with only 83 % of the short-term cash needed (Ewing 2010: 14).

It is remarkable the degree to which the transnational response to the financial crisis built incrementally on the existing practices, which in addition to the focus on regulating bank capital also involves the establishment of a series of relatively informal regulatory standard setters like the Basel Committee, which have been drawn together first by the relatively ineffective G7 dominated Financial Stability Board, created in 1999 in the wake of the East Asian crisis, and then by an expanded and more formalized Financial Stability Board, matching the membership of the G20, which during the crisis began meeting at the leaders level and replacing the G8. The regime permits some discretion, first for national regulators in applying the standards nationally, and also for firms, in managing their compliance. While this has been criticized as a weakness of the standards, it is difficult to see how stricter standards and greater uniformity could have elicited the needed support to be agreed transnationally, and without such transnational agreement it is unlikely that individual countries would unilaterally impose burdens on their own banks.

In short, the regime has been more effective than relying solely on market governance or on more ambitious centralized state intervention, and yet it is not likely to prevent a future crisis, consistent with the third proposition set out above.

4 The Sustainability of Automobiles and Other Road Vehicles

The world's road transport system, which is powered almost entirely by the internal combustion engine running on petroleum products, is similar to the financial system in its centrality for the organization of social and economic life. Road vehicles transport our goods, and shape the architecture of our cities, our cultures, and our individual identities. They kill more than a million people per year and injure 50 million. Manufacture of automobiles and other road vehicles are major sources of high-wage employment in many countries. The road and fuelling infrastructure involves massive investments. The securing of sources of oil, especially in the Middle East, has heavily influenced geopolitics, and has involved further massive investments in military capacities.[2]

While there is intense debate about the timing, it seems very likely that the world will exhaust affordable sources of oil by the middle of our current century. In addition to supply constraints there are limits to the use of fossil fuels because of their contributions to climate change. New technologies such as fracking have

[2] This section draws from Porter (2012).

allowed access to new sources of petroleum, but the environmental and economic costs of these are high and their long-range potential is uncertain (Ahmed 2013). Shifting to a new mode of transportation requires a massive simultaneous investment in new technologies that have a similar degree of complexity and interdependence as does our current system based on oil. While some of the alternatives can be phased in, such as hybrid motors or ethanol/gasoline mixes, these continue to be problematic in the long run due to shortcomings such as continued partial reliance on oil, or the environmental damage or competition with food that has been associated with biofuel production. The potential obsolescence of the internal combustion engine, then, is a HILP risk, but one that differs from finance in not yet having materialized as a catastrophe.

As with the financial crisis, let us start by considering the four challenges associated with HILP risk identified above.

The first challenge was measurement and awareness. There are three main measurement problems associated with the threat to the internal combustion engine (ICE). The first is measuring the future availability of oil. As the International Energy Agency has put it, "the size of ultimately recoverable resources of both conventional and unconventional oil is a major source of uncertainty for the long-term outlook for world oil production." Demand and supply uncertainties affect projections. In 2010 the IEA estimated oil production will peak close to 2035 (International Energy Agency 2010: 6). In 2013 it noted the unexpected growth of unconventional oil, especially in the US, but cautioned that this "does not necessarily create an era of oil abundance" (van der Hoeven 2013).

The second measurement problem concerns climate change and the constraints it will impose on the ICE. As the IEA (2010: 7) notes, "if governments do nothing or little more than at present. . .the global environment will suffer serious damage". The UN's International Transport Forum noted in its "Key Messages" for transport ministers, meeting multilaterally to consider transport and climate change for the first time, that "determined action to reduce transport's energy consumption to as to reduce CO_2 emissions is now imperative." However the ministers themselves noted that "there are areas where views on commitments or instruments differ and where further research, analysis and discussion are needed to find appropriate approaches" (UN Economic Commission for Europe 2008). These uncertainties are related to the third problem: the cost and performance measurements of the technology that will be needed to replace the ICE, discussed further below. These each involve severe measurement problems, and their combined effects hinder awareness of the overall problem.

The second HILP challenge is complexity and scale. The interdependence of roads networks, fuelling infrastructures, social and technical systems of oil production and delivery, vehicle manufacture, and urban architectures has been noted above. Moving to new systems involves further dramatic increases in complexity. In one of its best case scenarios the IEA has seen a 40 % reduction in CO_2 emissions from passenger and freight transportation as feasible by 2050, but this will cost as much as US $200 per tonne of CO_2 saved, and will require current technologies to be more efficient, new technologies to be implemented, and shift from automobile use to other modes such as public transit or walking. Each of the emerging technologies involves enormous complexity. For instance to be viable at the scale needed biofuels require the reorganization of land ownership in the global south, farming experimentation, strict rules governing their effect on ecosystems, more efficient energy use in their production, new fuel delivery infrastructures, engine modifications, and alternation of consumer loyalties to fossil fuel (International Energy Agency 2004).

The third HILP challenge concerns temporality. Both the exhaustion of oil and the date by which catastrophic climate change is irreversible lie far enough in the future that it is hard to bring them into the current calculations of consumers, business and states. However the lead time needed to implement the required changes is rapidly evaporating. The IEA has stated that the technologies "need to be introduced rapidly, at a rate and on a scale that is unprecedented in the last 40 years of transport evolution" (International Energy Agency 2009: 30).

The fourth HILP challenge is governance. There are severe governance challenges associated with the complexity, scale and speed of the changes needed. These are complicated by collective action problems involved in shifting to a new large scale system where the individual actors will have an incentive to wait for others to make the leap before joining in. These are present in the consumer's vehicle purchase decision, and the firm's and government's decisions about whether to invest in new vehicle technologies and infrastructures. At the international level these challenges include intense risks of geopolitical commercial and militarized conflicts over securing energy sources between powerful competitors like the US and China.

How are the causes and effects of HILP risk distributed across the boundaries of the firm? In contrast to financial crisis, the causes are external to the industry to a greater extent, since they concern the physical properties of the planet, corresponding to the north east quadrant of Table 1. At the same time tailpipe emissions fall squarely into the shaded southwest quadrant of Table 1, since firms produce the carbon emitting vehicles while the effects of the emissions are externalized. Accordingly one would expect a mixture of resistance and positive industry initiatives in addressing this risk, unlike the case of financial crisis. We shall see below that this is the case.

Let's look then at the three propositions specifying the performance of different relationships of business to public authorities in managing HILP risk.

The first proposition stated that firms and industry associations will be unable on their own to manage or prepare for HILP risk and schemes that assume otherwise will fail. This case provides strong support for this proposition. In 1998 the European Commission struck an agreement with the European auto manufacturer's association, the ACEA, by which the industry would voluntarily bring about a 25 % reduction in carbon emissions by 2008. Soon after this similar agreements were reached with the associations representing Korean and Japanese manufacturers. However by 2007 it was apparent that the agreements would fail to meet their targets and they were replaced by mandatory rules. Canadian reliance on voluntary programs similarly failed. As noted by the industry's principle transnational initiative for responding to the climate change, the World Business Council for Sustainable Development (WBCSD) Sustainable Mobility Project (SMP), "the benefits of GHG emissions reduction accrue to society at large rather than to any individual transport user. So the incentive for individuals to incur significant extra costs voluntarily to acquire and operate vehicles that emit significantly fewer GHGs is likely to be quite limited. Incentives will probably be needed, and only governments have the resources and authority to create them" (Sustainable Mobility Project 2004).

At the same time the industry has been much more actively engaged in anticipating HILP risk than the financial industry, consistent with the configuration of interests associated with the south *east* quadrant of Table 1. This is evident in the work of the SMP. Its members held senior positions, mainly at the CEO or Board Chair levels, in GM, Toyota, Royal Dutch/Shell (these three co-chaired the project), BP, DaimlerChrysler, Ford, Honda, Michelin, Nissan, Norsk Hydro, Renault, and Volkswagen. As the members noted, "Normally our companies compete vigorously, so to produce such an in-depth, agreed analysis is a distinct accomplishment" (Sustainable Mobility Project 2004: Foreword). The SMP was the largest member-led sector project ever undertaken by the WBCSD. It issued two major reports that engaged seriously with the sustainability challenges facing the industry. However as noted above the SMP recognized that strong government action was also needed. While the industry has made significant advances in hybrid and electric engines it is clear that continuing with the present pace of development will leave the industry far short of the degree of change needed over the next decades (International Energy Agency 2009).

The second proposition stated that overly centralized public initiatives will also fail since HILP risk responses need to be built into the routine operations of a wide variety of firms, but that strong centralized crisis management is useful once the catastrophe begins. While public initiatives are clearly required, the complexity of the challenge facing the transportation sector means that if these are too centralized they will fail. There are numerous examples of state initiatives that failed to interact adequately with firm incentives in the manner suggested by the third proposition. For instance major US government initiatives were the Partnership for the Next Generation of Vehicles (PNGV), introduced by the Clinton Administration in 1995, replaced in 2001 by the Bush Administration's FreedomCAR (Cooperative Automotive Research), which focused more exclusively on hydrogen fuel cells. The results were less than impressive. The program was criticized for the large number of political earmarks not central to the program's goals, up to 25% or more of the budget (Committee on Review of the FreedomCAR and Fuel Research Program 2008: 114). In a 2008 review the National Research Council noted that the program's goal of having a commercially viable hydrogen vehicle on the road by 2015 was far from certain (National Research Council 2008: 110) and the hydrogen focus was abandoned by the Obama administration. Similarly the US program on biofuels suffered from its politically beneficial emphasis on US corn farmers, where the consequences for food prices and the low net energy gain from such northern crops made this investment questionable if not harmful. The Obama administration has relied more heavily on aggressive fuel economy standards that will require automakers to nearly double the fuel economy performance of new vehicles between 2012 and 2025 (Vlasic 2012), while leaving considerable discretion to the manufacturers to determine the means of doing so.

The third proposition stated that a more hybrid approach in which public authorities connect the very broad character of HILP risks with the internal incentives of the firms will be the source of most advances in private HILP risk management, but that the difficulty of doing so while also addressing collective action problems among states means that overall crisis prevention efforts will fall short, and catastrophe will not be prevented.

Two examples illustrate the relevance of this proposition to the sustainability of the auto industry. The first has been analyzed by Mikler in his study of the superior performance of Japanese vehicle emissions regulations as compared to the US regime. The Japanese "Top Runner" system sets standards based on the best performing vehicles, and these standards then get ratcheted up as the manufacturers improve compete to improve their performance. The Japanese system is noteworthy for the tendency for firms to exceed the standards and to regard the government as lagging behind the industry in their commitment to fuel efficiency and emissions (Mikler 2009). In contrast the US has legislated mandatory standards that require firms to hit an average fuel economy target for its "fleet"—its production in a model year. Politically it has been difficult to raise this standard, and the industry subverted it by shifting to the production of light trucks, SUVs and vans which were not covered by the standards, a problem that did not occur in Japan. This is partly due to the successful efforts of the industry to game the rules, but it also reflects the sensitivity of automakers to customer vehicle preferences. In both the US and the EU fuel efficiency advances historically have resulted in more powerful vehicles, defeating their environmental intent. This illustrates the need for a more comprehensive multidimensional effort that alters consumer and firm interests simultaneously. If the stricter standards required by the Obama administration beginning in 2012 are to succeed, major changes in manufacturing and consumer preferences will be required.

The second example is the US Clean Cities Partnership, which brings together nearly 100 coalitions of government agencies and private companies, involving 8,400 stakeholders. It aims to reduce oil imports, and promote regional economic development, and better air quality through the use of alternative fuels, and altering use patterns of conventional vehicles. It claims to have reduced petroleum consumption by nearly 3 billion gallons from 1993 to 2010 (Johnson and Bergeron 2009). It describes its approach as follows: "Clean Cities is based on the concept that federal support can empower local citizens and organizations to become the leaders of a national movement for change" (US Department of Energy 2010). While more research is needed to assess the degree to which programs such as this can successfully be scaled up, the partnership seems to have been effective in blending government leadership with the initiatives of firms and local actors.

The third proposition also stated that the complexity of the governance challenges means that efforts to prevent catastrophe will fail, even if they postpone its onset or reduce its severity. The case of vehicle sustainability supports this claim. While vehicle fuel efficiency has improved very significantly over the past decades, much of this has been offset by increases in vehicle power and use, including rapid increases in vehicle use in countries like China. As in finance, improvements have been incremental. The type of systemic transformation needed to address the industry's HILP risk has not occurred. There is no evidence that the measures that have been specified as necessary by both public authorities and the industry have any hope of being adopted.

5 Conclusion

This chapter has argued that it is important to understand not just that transnational HILP risks are increasing, but also how the interaction of the institutional properties of business interacts with these risks to create difficulties and opportunities in managing them. The conceptual section started with an account of how these types of risks are increasing, but it then differentiated these risks by the location of their causes and effects relative to the boundaries of the firm, as illustrate in Table 1. It also identified four challenges associated with the management of HILP risk: measurement and awareness; complexity and scale; temporality; and governance challenges. It then specified three propositions, indicating the likely failure of over-reliance on business self-regulation or centralized state intervention, and the greater promise of a more hybrid approach that matched leadership provided by governments with alterations of the incentives of firms. It suggested that despite this greater promise the governance challenges, especially with transnational problems involving multiple states, would likely make prevention of catastrophe impossible.

The chapter then examined two cases of HILP risk: global financial crisis and the sustainability of the vehicle industry. While the two industries have many differences they display important similarities with regard to their failures and successes in managing HILP risks. This affirms the value in analyzing the distinctive properties of HILP risk which appear in similar ways in different industries. In both cases self-regulation has failed, and the collective action problems inhibit business from tackling HILP without the assistance of public authorities. At the same time, overly centralized approaches seem neither politically feasible nor likely to be effective in both industries. Progress has generally involved incremental change based on public authorities' ability to alter the incentives of firms. However there are also differences between the cases that relate to the relationship of the industry structure to HILP risks. In finance, before the crisis, the ability of financial actors to profit by creating exposures to HILP risks was pervasive, but the costs of HILP events were imposed on other actors. In contrast, the automobile industry, which is more concentrated, is more clearly exposed itself to the risk of a failure to manage the transition to an alternative to the internal combustion engine, and accordingly it has addressed HILP in a more serious collective and proactive manner. However in both industries the pace and seriousness of change has lagged behind what would be needed to avoid catastrophe. This does not mean that efforts are wasted, since incremental changes will move us towards the type of transformation that more intense experience of catastrophe will help motivate.

There is more research needed to extend the analysis of HILP risks to other cases, and to explore other dimensions of the problem, such as resilience. HILP risks appear to be proliferating, and they pose some of the most serious threats to sustainability in many issue areas, involving more intractable problems than do routine sustainability risks. The more we can identify their distinctive properties, how they interact with the organization of business, and how to manage them, the better able we will be to postpone and mitigate catastrophes, even if they cannot be avoided.

References

Ahmed, N. (2013). *Imminent peak oil could burst US, global economic bubble—Study. Guardian*. http://www.theguardian.com/environment/earth-insight/2013/nov/19/peak-oil-economicgrowth. Accessed 30 Nov 2013.

Beck, U. (1992). *Risk society: Towards a new modernity*. London: Sage.

Coburn, A., Ralph, D., Tuveson, M., Ruffle, S., Bowman, G. (2013). *A taxonomy of threats for macro-catastrophe risk management*. Draft of Working Paper 201307.20, Centre for Risk Studies, University of Cambridge. www.risk.jbs.cam.ac.uk. Accessed 30 Nov 2013.

Committee on Review of the FreedomCAR, & Fuel Research Program. (2008). *Review of the research program of the FreedomCAR and fuel partnership*. Second report. Washington, DC: National Academies Press.

Douglas, M. (1992). *Risk and blame: Essays in cultural theory*. London/New York: Routledge.

DuaneMorris. (2013). *Financial stability board designates nine global insurance groups as "globally systemically important insurers"*. http://www.duanemorris.com/alerts/financial_stability_board_designates_nine_global_insurance_groups_G-IIs_4974.html. Accessed 30 Nov 2013.

Ewing, J. (2010, December 17). Large banks falling short of capital requirements. *International Herald Tribune*, p. 14.

Global Challenges Foundation. (2013). *Global risk, finance and security experts issue declaration on climate change*. http://globalchallenges.org/press/press-releases/global-risk-finance-security-experts-issue-declaration-on-climate-change/. Accessed 30 Nov 2013.

Hiroki, K. (2012). *Strategies for managing low-probability, high-impact events*. Knowledge notes, cluster 6. Washington: World Bank. http://wbi.worldbank.org/wbi/document/strategies-managing-low-probability-high-impact-events. Accessed 1 Dec 2013.

International Energy Agency. (2004). *Biofuels for transport: An international perspective*. Paris: OECD.

International Energy Agency. (2009). *Transport, energy and CO_2: Moving toward sustainability*. Paris: IEA/OECD.

International Energy Agency. (2010). *World energy outlook 2010*. Paris: IEA/OECD.

International Monetary Fund. (2011). *Global financial stability report: Durable financial stability: Getting there from here*. Washington, DC: IMF.

Johnson, C., & Bergeron, P. (2009). *Clean cities annual metrics report 2008*. National Renewable Energy Laboratory, US Department of Energy. http://www1.eere.energy.gov/cleancities/pdfs/46424.pdf. Accessed 27 May 2011.

Kumar, N. (2011). Banking rules are not strong enough, warns FSA's chairman. *The Independent*. http://www.independent.co.uk/news/business/news/banking-rules-are-not-strong-enough-warns-fsas-chairman-2244033.html. Accessed 8 May 2011.

Lee, B., Preston F., Green G. (2012). *Preparing for high-impact, low-probability events: Lessons from Eyjafjallajökull*. A Chatham House Report. http://www.chathamhouse.org/publications/papers/view/181179. Accessed 1 Dec 2013.

Lloyd's. (2013). *Realistic disaster scenarios: scenario specification*. http://www.lloyds.com/the-market/tools-and-resources/research/exposure-management/realistic-disaster-scenarios/rds-scenario-specification-2013. Accessed 1 Dec 2013.

Mikler, J. (2009). *Greening the car industry: Varieties of capitalism and climate change*. Cheltenham/Northampton: Edward Elgar.

Morgenson, G., & Story, L. (2011, April 14). In financial crisis, no prosecutions of top figures. *New York Times*, p. A1.

National Research Council. (2008). *Review of the research program of the FreedomCAR and fuel partnership: Second report*. Committee on Review of the FreedomCAR and Fuel Research Program, Phase 2. www.nap.edu/catalog/12113.html. Accessed 22 Dec 2009.

North American Electric Reliability Corporation. (2012). *Cyber attack task force: Final report*. http://www.nerc.com/comm/CIPC/Cyber%20Attack%20Task%20Force%20CATF/12-CATF_Final_Report_BOT_clean_Mar_26_2012-Board%20Accepted%200521.pdf. Accessed 1 Dec 2013.

Organization for Economic Cooperation and Development. (2011). *Future shocks: Improving risk governance*. Preliminary version. http://www.oecd.org/governance/48256382.pdf. Accessed 1 Dec 2013.

Porter, T. (2005). *Globalization and finance*. Cambridge: Polity Press.

Porter, T. (2009a). *Catastrophic risk management failures in global financial and environmental governance*. Paper prepared for CIGI workshop on finance and the environment. Waterloo, 24–25 September 2009.

Porter, T. (2009b). Risk models and transnational governance in the global financial crisis: The cases of Basel II and credit rating agencies. In E. Helleiner, S. Pagliari, & H. Zimmermann (Eds.), *Global finance in crisis: The politics of international regulatory change* (pp. 56–73). London: Routledge.

Porter, T. (2012). The automobile and climate change: The embeddedness of private regulation. In K. Ronit (Ed.), *Private voluntary programs in global climate policy: Pitfalls and potentials* (pp. 179–281). Tokyo: UNU Press.

Power, M. (2007). *Organized uncertainty: Designing a world of risk management*. Oxford: Oxford University Press.

PricewaterhouseCoopers. (2013). *Developing effective crisis and disaster response*. http://www.pwc.com/ca/en/risk/enterprise-risk/business-continuity.jhtml. Accessed 30 Nov 2013.

Rosenthal, U., Boid, A., & Comfort, L. K. (2001). The changing world of crises and crisis management. In U. Rosenthal, A. Boid, & L. K. Comfort (Eds.), *Managing crises: Threats, dilemmas, opportunities* (pp. 5–27). Springfield: Thomas Books.

Scott, J. C. (1998). *Seeing like a state: How certain schemes to improve the human condition have failed*. New Haven: Yale University Press.

Society of Actuaries. (2000). *2000 valuation actuary symposium, session 33PD: Low probability/high impact events*. Washington DC, 14–15 September 2000. www.soa.org. Accessed 30 Nov 2013.

Sustainable Mobility Project. (2004). *Mobility 2030: Meeting the challenges to sustainability*. Conches-Geneva: World Council for Sustainable Development.

UN Economic Commission for Europe. (2008, June). *Transport and energy: The challenge of climate change: Key messages*. International Transport Forum (Informal Document No. WP.29-145-05).

UN International Strategy for Disaster Reduction. (2004). *Living with risk: A global review of disaster reduction initiatives*. New York: United Nations.

United Kingdom Government Cabinet Office. (2008). *National risk register*. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/61934/national_risk_register.pdf. Accessed 1 Dec 2013.

United Kingdom Government Office for Science. (2011). *Blackett review of high impact low probability risks*. http://www.bis.gov.uk/assets/goscience/docs/b/12-519-blackett-review-high-impact-low-probability-risks. Accessed 1 Dec 2013.

US Department of Energy. (2010). *Goals, strategies, and top accomplishments. Vehicle technologies program*. http://www1.eere.energy.gov/cleancities/pdfs/48231.pdf. Accessed 27 May 2011.

US Government Accountability Office. (2013). *Financial regulatory reform: Financial crisis losses and potential impacts of the Dodd-Frank Act*. www.gao.gov/products/GAO-13-180. Accessed 17 Sept 2013.

Van der Hoeven, M. (2013). *World energy outlook 2013: Opening remarks for launch*. http://www.worldenergyoutlook.org/pressmedia/recentpresentations/131107EDopeningremarksWEO2013.pdf. Accessed 30 Nov 2013.

Vlasic, B. (2012, August 29). U.S. sets higher fuel efficiency standards. *New York Times*, p. B1.

Wilson, H. (2011, April 7). Banking crisis risk 'unacceptably high'. *Daily Telegraph,* Business p. 4.

World Economic Forum. (2013). *Global risks 2013—Eighth edition. An initiative of the risk response network*. http://www.weforum.org/reports/global-risks-2013-eighth-edition. Accessed 1 Dec 2013.

Part III
Environmental Dimension of Sustainability

Environmental and Regulatory Sustainability of Biopesticides

Wyn Grant

1 Introduction

This chapter is concerned with an issue of central importance to environmental sustainability. Plant protection products are necessary to ensure security of food supply, but as toxic substances they also pose a series of potential challenges to the environment, including water pollution and possible threats to human and animal health and hence to biodiversity. This is why they are heavily regulated.

Conventional synthetic products are becoming less available and less popular. Many older products have been withdrawn for regulatory or commercial reasons. Others become subject to heritable resistance. The rate at which new, safer chemicals are being made available is very low. This is caused by a fall in the discovery rate of new active molecules and the increasing costs of registration. This creates a need for the use of alternative products as part of a more general Integrated Pest Management (IPM) strategy. Biopesticides are not necessarily substitutes for synthetic pesticides and are often used alongside synthetics as complementary products.

There is no formally agreed definition of a biopesticide, but a working definition is "a mass-produced agent manufactured from a living micro-organism or a natural product and sold for the control of plant pests." (Chandler et al. 2011). Biopesticides fall into three different types:

1. Microbials, e.g., bacteria, fungi and protozoa. At least 170 different products based on entomopathogenic fungi have been developed (in our project we worked on the *beauveria* fungus).

W. Grant (✉)
Department of Politics and International Studies, The University of Warwick, Social Sciences Building, Coventry CV4 7AL, UK
e-mail: w.p.grant@warwick.ac.uk

A. Lang, H. Murphy (eds.), *Business and Sustainability*,
Sustainability and Innovation, DOI 10.1007/978-3-319-07239-5_6

2. Biochemicals. Plants produce a wide variety of secondary metabolites that deter herbivores from feeding on them. Some of these can be used as biopesticides, e.g., pyrethrins which are fast-acting insecticidal compounds.
3. Semiochemicals, most typically insect sex pheromones which are used as mating disruptors, particularly in orchard crops.

Most biopesticides produce little or no toxic residue and development costs are significantly lower than those of conventional chemical pesticides. They can reproduce in or close vicinity to the target pest, giving an element of self-perpetuating control. They can usually be applied with existing spray equipment.

However, they do have some disadvantages compared with chemical pesticides. They have a slower rate of kill, shorter persistence in the environment and are susceptible to unfavourable environmental conditions. In many respects they are less efficacious than synthetic chemicals. Because they are highly selective, they are niche products with low profit potential. They require a greater investment in relevant technical knowledge on the part of the farmer.

Biological control has made the greatest headway in greenhouse crops, e.g., it is used on over 90 % of greenhouse tomato, cucumber and sweet pepper production in the Netherlands. Glasshouse production is more central to the agricultural economy of the Netherlands than the UK, while water pollution has been a particular concern given the intensity of agricultural production. Pesticide resistance evolved in some greenhouse pests as long ago as the 1960s, prompting the development of alternative methods of management. The pressure to reduce insecticide use was reinforced by the adoption of bumble-bees within greenhouse for pollination that could be killed by synthetic pesticides. Greenhouses represent intensively managed, controlled environments that are highly suitable for IPM. Biocontrol adoption was helped by the fact that greenhouse crop production is labour intensive and technically complex so that growers were already had a high level of knowledge and were used to technological innovation. "How IPM and alternative technologies such as biopesticides can be taken out to broad-acre crops and the wider rural environment – where human capital is spread thinly and where the ecological environment is far more complex and less stable than in a greenhouse – is an interesting question, and one where public policy is likely to play an important role."(Chandler et al. 2011).

This chapter examines the division of responsibilities between the EU and member states for the regulation of biopesticides and emphasises the contribution of particular member states to regulatory innovation that helps to create a more favourable environment for making such products available to farmers and growers. The industry has traditionally been dominated by small, 'science park' companies, but bigger players are becoming involved as the market develops. The industry has suffered from a lack of political influence, in part reflecting the absence of a clear constituency of support. However, consultants have played a key role as intermediaries between different actors, while the way in which the main trade association has become more politically sophisticated is examined.

2 The Regulatory Environment

The system of regulation of plant protection products was developed to deal with synthetic chemicals. Hence, it has not been particularly amenable to the different requirements of biological products. For example, the writer has been present at a pre-registration meeting at a regulatory agency where questions were asked which would be applicable to chemical products but not to biological ones. Hence, a regulatory barrier was created to the entry of more of these sustainable products on to the market.

In broad outline, regulatory responsibility is shared between the European Union (EU) and the member states, but the whole system is in a state of transition following the passage of new legislation which was still in the process of being implemented in 2013. The EU approves the active ingredients of products and the products themselves are approved by member states. This inhibited the functioning of the internal market as companies have had to deal with 27 (now 28) regulatory agencies, some with very limited resources. A recent EU revision of the relevant legislation has attempted to overcome this problem by creating three 'eco zones' in Europe (together with one for greenhouses covering the whole EU). In principle, a product approved in one member state in an eco zone should then be made available in all the other member states in that zone. How this works out in practice remains to be seen. The notion of a zonal Rapporteur for pesticides was mooted but has not found favour. It should also be noted that the European Food Safety Authority (EFSA), in collaboration with the EU Member States, is responsible for the peer review of active substances used in plant protection products and considers the risk posed by pesticides. How its role in the process will develop is also uncertain, but there are concerns that it may be excessively cautious and bureaucratic.

Those wishing to create a more favourable regulatory environment for biopesticides have therefore been obliged to pursue their case at both the member state and the EU level, although in practice the focus of activity has been in those member states which are well disposed in principle to the case for biopesticides, e.g., the Netherlands and the United Kingdom. In doing so, they have faced a number of challenges.

The biggest challenge that they have faced is the lack of a clear political constituency of support for biopesticides. Relatively few farmers use them so there is relatively little pressure from farming organisations for their wider availability (although the importance of the greenhouse sector creates a somewhat different political context in the Netherlands). The influential organic sector is not really a source of support as they are suspicious of 'biopesticides' on the grounds that they are 'still pesticides'.

The companies that develop and market biopesticides are, with a few exceptions, generally very small 'start up' companies with limited understanding of the political process and few spare resources to devote to lobbying. They are potentially open to opposition from chemical companies who see biopesticides as a potential encroachment on their market, although one or two of such companies have started to buy into the sector recently as sales have risen. Large-scale arable farmers are advised by agronomists who make their living from selling them synthetic products.

Retailers are a potential source of support because of their interest in food safety and quality issues. There has been a trend towards the privatisation of the regulation of such issues with big retail chains have their own supplementary systems for the approval of pesticides which may prohibit their suppliers from using products approved by the state system. Many retailers certainly see presenting themselves as ‘greener’ than their rivals as a useful means of market differentiation. However, they find it easier to give a message by promoting organics than by saying that their suppliers are users of biopesticides which does not convey a clear meaning to consumers. A couple of British retailers (Marks and Spencers, Sainsbury’s) have nevertheless promoted biopesticides, but largely as an individual commercial initiative.

In the United Kingdom at least the biopesticides policy network has been weakly developed and relatively immature, particularly when compared with the agrochemicals network. An incomplete and loosely integrated policy network “results in an underperforming network. As one may expect, a very loose and incomplete network has little impact on observable policy outcomes”(Greaves and Grant 2010: 35).

Nevertheless, some progress has been made at both the member state and the EU level. How has this been achieved? This analysis suggests that four factors have been important:

1. Interventions by national governments who wish to enhance the contribution made by biopesticides to sustainability goals.
2. A greater commitment by regulatory agencies to biopesticides, in part stimulated by national governments, but also in pursuit of ‘first mover’ advantage, although this commitment has its fragilities. As will be noted later, the UK may be losing its ability to compete in the regulatory market.
3. The role of consultants both as a resource for the industry and as intermediaries between the industry and regulatory agencies. Consultants have also argued for greater political sophistication and the mobilisation of external expertise to assist this process.
4. Improvements in the capacities and sophistication of the European trade association, the International Biocontrol Manufacturers’ Association (IBMA) which has had some impact on the policy-making process at the EU level.

3 The Role of Member State Governments

The UK is one member state government that has intervened to facilitate the regulation of biopesticides. The then Business Regulation Team (BRT) of the Regulatory Impact Unit of the Cabinet Office noted in 2003 that, “although Defra had been funding the research and development of ‘alternatives’ to synthetic pesticides, none had been able to obtain the authorisation required for such products to be placed for sale in the UK as plant protection products". They argued that the regulatory agency, Pesticide Safety Directorate's (PSD), testing requirements "were evidently designed to cope with standard, mass- produced synthetic chemical pesticides which, by their nature, tend to deliver very high efficacy rates, and not with this group of safer alternatives.. ...this appeared to be an interesting example of regulation-inspired market failure"(Business Regulation Team 2003: 19).

The Department of Environment, Food and Rural Affairs (Defra) hoped to encourage the wider use of biopesticides in order to achieve their sustainability objectives. It was also thought that if the UK gained regulatory 'first mover' advantage in this area, it might attract registrations from other member states. However, given the limited progress that had been made the institutions of the core executive were required to intervene. In the coded language of the civil service, "the BRT approached PSD seeking to help to establish a workable solution to this problem."In plainer language, they used their authority to lean on PSD. The fact that the Government leaned on PSD was confirmed both by a senior figure within PSD and by an industrial executive seconded to BRT to work on biopesticides. The then Director of Approvals commented that "there was a political driver but it wasn't Defra or growers, it was the Cabinet Office". Furthermore, "it was someone on secondment to the Cabinet Office, not a career civil servant". He added, "We did need some pressure to introduce the scheme. He gave us a kick in the teeth". PSD's 'aims and objectives' agreed with ministers in spring 2003, included reducing the "negative impact of pesticides by encouraging reductions in their use, taking account of good practice, and developing and introducing alternative control measures"(PSD 2004: 9).

The Director of Policy and the Director of Approvals made the joint decision to have a pilot scheme to facilitate biopesticides registration. The latter subsequently decided to make the Biopesticides Scheme permanent. The Scheme offered reduced payments for biopesticide registrations, free pre-submission meetings with regulatory staff and a designated 'Biopesticides Champion' within PSD.

The importance of the protected crops sector in the Netherlands has created a favourable environment for the promotion of biopesticides. Dutch Government policy is concerned with reduction of use, but also covers the stimulation of the use of natural products. Dutch law has a provision for products with a low toxicity profile (regulation exempted pesticides, RUB). Genoeg is a series of schemes which have attracted financial and political support from the Ministry of Agriculture. Genoeg is the acronym for Gwasbeschermingsmiddelen van Natuurlikje Oorsprong Effectief Gebruiken, which translates as using plant protection products of natural origin more effectively (or, more colloquially, the effective use of natural pesticides). It is a functional equivalent of the UK Biopesticides Scheme, although in the Netherlands companies received a subsidy from public funds, while in the UK fees were lowered. In the Netherlands, the process was a more 'bottom up' one than in the UK with a coalition of actors creating a new process.

The first phase of the project from 2001 to 2002 was an exploratory one concerned in particular with the development of an inventory of effective natural pesticides. After a phase of issue management concerned with the dissemination of knowledge to growers, Project Genoeg Toegelaten ran from 2003 to 2005 and was concerned with the support of five natural pesticides for use in glasshouses. One product approved through the Genoeg scheme was not approved in the UK by PSD. From 2004 to 2008, Project Genoeg Breed focused on the support of 10 natural pesticides for all uses. In 2008 seven agreements for support were in place involving the co-financing of 13 new products. The projects finished at the beginning of 2009.

The project was managed by a consultancy called the Centre for Agriculture and Environment (CLM) which has extensive experience in sustainable agriculture. It was started to serve as an intermediary between farmers and environmentalists and has good links with all stakeholders, cemented by regular meetings. The consensus and coalition building has been a key element in the success of the project. In selecting products for support, an emphasis is placed on products that have a low toxicity profile and where data on efficacy and toxicity is available. Products are ones where successful authorisation is expected and where the company will defend the product.

Fifty percent of the costs of research and registration were co-financed to a maximum of €100,000. Help was provided in literature search for registration by a body that has expertise in technical questions about ecotoxicology, the National Institute for Public Health and the Environment (RIVM). The regulatory body, the Board for the Authorisation of Pesticides (CTB), provided a help desk facility to assist applicants and established a biopesticides team made up of six staff members each with a defined expertise or speciality such as characterisation or residues.

4 The Role of Regulatory Agencies

It has been noted that in the case of the UK the regulatory agency proved to be receptive to an initiative on biopesticides or at least it received the backing of key individuals within it. Key individuals were vital in moving the process forward. The then Director of Approvals stressed the importance of an effective and strong team in driving through change. One consequence of the Biopesticides Scheme was the development of an informal internal network of staff with interest and expertise in issues related to biological control. These included the appointment of specialist bio-contacts. Staff members are used to team working as they work in groups on approval processes and the agency has a relatively informal working style and horizontal structure in which relationships are based on collegiality and mutual respect. They have received training to help them to develop their skills and have been very receptive to this career development opportunity. We have noticed in our research how those working on biopesticides showed great enthusiasm for their work, perhaps because of a desire to do a 'better job', or to gain new skills or expertise, or that doing the job well is a successful career building strategy. A senior official noted that they were "lucky in the people they had picked to work on biopesticides, if others had been chosen it may not have worked so well".

However, this reliance on committed individuals created some fragility. Biopesticides were not deeply embedded in the agency structure and they did not generate as much business as was hoped for which is significant as PSD operated on a cost recovery basis. The number of applications has increased recently, but they are sometimes of poor quality, either incomplete or poorly organised, increasing the regulatory agency's workload. In some cases applicants know less about their substance than they think As noted earlier, the constituency of support from stakeholders was not strong. This was evident in a stakeholder forum, the Availability and Alternatives Action Plan group for the National Pesticides Strategy (the writer is a member). There was some dispute within the group about the addition of the word 'Alternatives' to its title. It was evident that members of the group representing farming and agronomy interests wanted the emphasis to be on the availability of plant protection products and thought that the contribution of alternatives was relatively limited.

These weaknesses were reinforced by two exogenous changes. The Hampton review of quasi-governmental agencies concluded that there were too many of them and that the smaller ones should be merged. Originally Defra thought that it might be possible to combine PSD, the Plant Variety Rights Office and Seeds Division and the Plant Health and Seeds Inspectorate to create a Regulatory Science Agency which would then combine with the Central Science Laboratory (CSL) that is located near York where PSD had moved from its original location in Harpenden. In the event the CSL was reconstituted as the Food and Environment Research Agency (FERA). The future of some aspects of FERA's operations has been in doubt and the writer accompanied Defra officials on a visit to the agency on the day that the Coalition Agreement was announced.

Even before Hampton there had been discussion of pooling the resources of PSD and the Health and Safety Executive (HSE). The regulation of biocides was the responsibility of HSE at its offices in Bootle. The plan that was developed involved PSD becoming an in-house agency within HSE. This new entity would include the biocides work and was eventually given the title of the Chemicals Regulation Directorate (CRD), although it should be noted that its staff wear HSE badges. The intention was to retain the distinct identity of what had been PSD as a staff skilled based organization. It would remain at its offices in York (a matter of some concern for staff) and it is possible that the biocides work may eventually be moved there. It was argued that the combined organisation would be better placed to exert influence at the EU level building on PSD's influence in Europe. There are concerns, however, that recent cutbacks at CRD may weaken its ability to contribute to work at the Biopesticides Steering Group of OECD and activities that spin off from that within Europe with France taking an increasing leadership role alongside Germany.

There were a number of concerns about the plan. There was an aspiration that HSE would draw on the consumer and organisational focus of PSD, but would the organisational culture of the smaller organisation be sufficiently strong to influence and change that of the larger one? There was a concern that HSE was a relatively chemicals oriented organisation. Biopesticides were not talked about in any detail in the 'Proposition' for the new arrangements (Defra 2007).

It was argued that the new arrangements were about working more closely together and not about upheaval and lots of change. Comments were heard from within what was PSD that HSE procedures were less flexible than those they were used to. Cuts in public expenditure also meant that senior posts in the new organisation were merged, reducing the organisational resource base for policy innovation. In particular there were concerns that CRD's policy to influence policy at the EU level would be reduced.

The Biopesticides Scheme was therefore quite dependent on the personal commitment of particular individuals and was vulnerable to their disappearance through early retirement and other changes. Two such officials have left, along with the chief executive. Structural changes combined with public expenditure restraint have undermined the momentum behind the scheme. CRD is now contemplating charging £5,000 for pre-submission meetings which would be too high an entry barrier for most small companies, even if it could be reclaimed later against the costs of the dossier. This is of particular concern given that some member states are taking the view that pre-submission meetings are compulsory under the new regulation for active ingredient renewal. In fact it is only a very strong recommendation in the accompanying guidance, but some member states tend to treat the guidance as a second layer of regulation. The Biopesticides champion appears to be functioning largely as a first point of contact rather than as an advocate within the organisation. The fixed fee would continue, even though it would appear that CRD is making a loss on most biopesticide registrations. Nevertheless, in effect the Biopesticides Scheme is being hollowed out.

5 Consultants

Consultants specialising in biopesticides are generally one person businesses. The individuals concerned are generally highly scientifically qualified, normally to postgraduate level. They provide a range of services, but an important part of their work is advising on the registration of new products with regulatory agencies. They also provide advice on the selection and use of biocontrol products 'in the field' (Rationale 2000). Part of their self-image is constructed in terms of being actors who are in contact with a wide range of actors in the policy network and can act as intermediaries between them. In a sense they provide one mechanism for at least offsetting the incompleteness of the policy network, joining up its fragmented parts. In practice CRD deals with very few registration applications that have not involved consultants.

They are prominent in the International Biocontrol Manufacturers Association (IBMA) and often form the IBMA delegations that interact with the CRD, e.g., in the joint efficacy working group. There is, however, some ambivalence about them within the hub of the network. One perception within CRD is that 'We do consultants job for them' in the sense that consultants ring up and ask questions which they incorporate into advice that they sell to their clients. There is concern that in certain instances they could convey the impression to some clients that access to the regulatory system is more difficult than is the case and this can produce some reservations about their role. Part of the problem, however, is that companies, even larger ones, do not appear to know how to use consultants.

6 The Representation of the Industry

Governments and the EU have taken an increased interest in the potential of biocontrol as a sustainable approach to plant protection. However, this interest taken by government has been insufficiently sustained and systematic to provide a stimulus for effective industry representation. Government action in Europe has been focused on the regulatory process.

Indeed, it is the US that, somewhat paradoxically, more has been done by government to encourage the development of an effective trade association, the Biopesticides Industry Alliance (founded in 2000). This has been done by having a distinct division within the Environmental Protection Agency tasked with the promotion of biopesticides and by providing public funds to assist the development of a trade association. This was achieved through the IR-4 programme which is a long-standing partnership between the land grant university system and the United States Department of Agriculture. "IR-4 supported the growth of the Biopesticides Industry Alliance (BPIA) as a trade association of biopesticides companies"(IR-4 project 2004: ii). This different stance in the United States in part reflects a belief that the development of such technologies is the American national interest while in the UK interventions have been constrained by market failure oriented 'green book' definitions of what constitutes appropriate intervention by government (Grant 2010).

Under what circumstances does a new technology demand a new business association? New technologies can offer a challenge to incumbent technologies and in the case of biocontrol there is a challenge to synthetic products. Of course, biocontrol products account for a tiny share of the world market. Marrone (2007) has estimated that the biopesticides sector has a 5 year compound annual growth rate of 16 % (compared with 3 % for synthetic pesticides) which is expected to produce a global market of $10 billion by 2017. One motive for biopesticide producers to organise is their perception of the substantial political displacement enjoyed by synthetic chemical firms. From the perspective of the agrochemical companies, the political threat posed by biocontrol is arguably greater than the commercial threat. They challenge the claim that conventional synthetic products offer the only means of providing plant protection and hence guaranteeing food security.

Lang, Schneider and Werle (2008) emphasise the uncertainty reduction role of associations when firms are coping with a new technology. They see a pattern of development in which new associations concentrate on providing services such as professional conferences and training while external political leverage is low. “In a later stage, when a sector is consolidating, the significance of political interest representation increases” (Lang et al. 2008: 56).

The story of the IBMA is a little more complex than this model suggests. Certainly its annual conference in Lucerne is an important event, extended from 2 to 3 days in 2011. It serves as a ‘one stop shop’ for the industry which offers the usual combination of formal presentations and informal networking, but also provides an exhibition at which new products can be promoted.

However, it is evident that the IBMA has also given a considerable emphasis to its political role since its formation in 1995, although whether it has approached that role with sufficient sophistication is another matter. Although IBMA describes itself as a worldwide organisation, it is in effect a European organisation with a registered office in Switzerland and a postal address in France. Indeed, in its early years it was perceived as a France-centric organisation. There was talk of forming national groupings outside Europe, e.g., in Brazil, but the focus in the future is going to be in Europe. In 2013 the national groupings were all in Europe: Benelux, France, Germany/Austria, Italy, Spain, Switzerland, Turkey, UK. The chairs of the specialist working professional groups are drawn from across Europe, American and Australian companies are in membership, but most of its members are drawn from Europe and especially from France, Germany, Italy and the UK.

Historically, many biocontrol businesses were established “by farmers who began by producing products for their own use, and eventually found it more lucrative to supply local farming communities than grow crops themselves”(Waage 1997: 14). In the twenty-first century, a typical company in the sector would be a very small business operating on a science park and originating as a spin off from a local university. They would have all the resource problems that act as a disincentive to small companies to engage in representative activity. However, they are offset by two considerations: the companies have very highly educated personnel, albeit in the natural sciences, and the success or failure of their business is profoundly affected by regulatory decisions.

There is anecdotal evidence of larger companies becoming more involved in biopesticides as the market expands, although it is difficult to obtain precise information because of its commercial sensitivity. Bayer and BASF are both members of IBMA. Bayer acquired the largest American biopesticides company, AgraQuest, for around $500 m in 2012. Bayer has done a deal with Exosect (a typical small science park company) over their patented entostat powder: basically this is an electrostatically charged powder that can be used to improve the application characteristics of biopesticides. Becker Underwood, also a member, has acquired the rights to a Metarhizium fungus pesticide developed in Australia for locust control. Novozymes, an IBMA member who are the world’s largest enzyme manufacturer, have got the registration for and are selling Met52, the Metarhizium based fungal biopesticide for control of weevils, originally developed by Bayer as BIO1012. Syngenta Bioline in the UK are a member of the IBMA, but unconfirmed reports state that Syngenta Basle (not a member) are becoming more interested in biopesticides again.

IBMA does not organise all firms in the industry. There is not enough reliable data to calculate the share of firms that is organised, but there are significant omissions. Discussions about this topic suggest that some firms are concerned that commercially sensitive information about products might be inadvertently leaked through involvement in industry discussions. There are also the 'grey market' firms that are outside the registration system and to which IBMA is opposed on the grounds of unfair competition. If one does not make pest control claims for a product, one can market it as a 'leaf strengthener' or 'plant enhancer'. It has been alleged that firms have obtained a scoping decision from the regulator on whether a product falls within the pesticides legislation and then subsequently changed what is stated on the label. Essentially the mode of action and what is on the label brings a product within the scope of plant protection legislation. There is considerable variability in the implementation of regulations by the member states, particularly in terms of whether claims made must be in line with the demonstrated efficacy of the product. Even more mystifying, the well-known product Serenade is registered in France as a natural plant stimulant and as a bio-fungicide in the UK.

The 'grey' market of bio-stimulants, foliar feeds and plant strengtheners is of particular concern to biopesticides manufacturers. Marketing products in this way is entirely legal so long as these products make no claim on their labels to control pests. Some of them are actually registered elsewhere as pesticides. It was estimated that as many 30 products were being sold as bio-stimulants in the UK in 2007, creating a way of going round the system of regulation. A manufacturer expressed the dilemma in the following terms:

> Because of the grey area around bio stimulants and physical products, the grower does not feel confident of using biopesticides because of products sold with a wink and a nod. The grower spends a couple of years using the product, then find it doesn't work, undermine confidence in bio-pesticides. 'Muck and mystery' products. There is a lot of passing off going on, this product is as good as that one. The whole biopesticide product range is brought into disrepute.

In a 2009 paper the IBMA noted that some of its members were 'becoming increasingly aware that there are some products in the market place that are being described as "biopesticides" but which are not registered. What is not clear is whether these products comply with the legal requirements (IBMA 2009).'

The IBMA saw the issue as falling into five categories:

1. Products containing micro-organism active substances listed on Annex 1 (the main list of active ingredients for inclusion in plant protection products), being sold in the UK without national approval. While the regulations are isolate specific, the situation for additional examples of products of the same species is unclear.
2. Products containing active substances not included in the current EU review, with unproven efficacy, making claims of direct pesticidal activity.

3. Some products, particularly micro-organisms, have both plant protection qualities and plant growth stimulant properties.
4. Products containing active substances with known pesticidal activity, being sold without national approval either as plant tonics, foliar feeds or other nutritional supplements.
5. Products incorporated into growing media, composts or as amendments that may include annex 1 active substances or considered as biopesticides.

There are some differences between member states in the treatment of these products, In the Netherlands, a claim about plant strengthening falls under regulations involving indirect effect. All substances influencing plants are considered plant protection products. However, in Spain some 700 products are registered as 'phyto-fortificants'. Biopesticide producers consider that it is too easy to get under the radar with some products, but some grey market producers argue that they are unfairly targeted and are an important source of innovation. In any event, they are not members of the IBMA and supporting regulation to maintain entry barriers and keep out competitors that are perceived as damaging the image of the industry is a classic role of a trade association.

At a national level, CRD had to build up its relationship with IBMA as it sought to strengthen its regulatory presence in relation to biopesticides. CRD had to develop its relationship with IBMA in order to find a route into the industry. As a senior CRD official put it, "[We] had to build up confidence, [we are] now much closer to IBMA, [we] had to break into them, [we went] out there telling them there is a plan, but they were reluctant to come and meet us."Another official summed up, "it's a new relationship with the IBMA . They've offered us visits round plants – formulation technology, unfamiliar techniques, opportunities to see it in a field". One practical indication of this new relationship is the joint working group of IBMA and CRD on efficacy issues. IBMA is also a member of the Availability Action Plan Group and CRD and others have been invited to IBMA meetings. Budgetary constraints may, however, affect the intensity of the relationship in future.

The IBMA has, however, always seen its main arena of operation as the EU and this is why it is organised on a European basis. It is at the EU level that the best hopes exist for adapting and reformulating regulations to take account of the particular needs of biocontrol products. The IBMA has, however, been hampered by a lack of political sophistication and limited resources. Its current income is around \$220,000–\$240,000 a year. Members join the European level association which assigns a small portion of the subscription to national and product groups. The national groups can also raise additional funds of their own, e.g., to fund a national part-time secretary.

The IBMA's lobbying efforts were limited to a part-time lobbyist operating in Brussels. From 2010, however, it has employed a full-time executive director who has an industry background which is appropriate given the technical nature of the subject matter that it deals with. In order to improve its political sophistication, the UK branch asked me to give presentations on establishing relations with the

European Parliament and I was asked to address the annual conference in Lucerne on political strategies and tactics. Indeed, the ambiguity of my role was demonstrated when I was asked to join an IBMA delegation meeting at a regulatory agency and subsequently accepted an informal role as their political strategist.

In 2009 the European Union enacted a series of legislative measures which replaced the regulatory system set up by Council Directive 91/414/EEC enacted in July 1991. These measures created a more favourable regulatory environment for biopesticides, although much will depend on how they are implemented in practice. These changes are not the result of direct lobbying by IBMA, although some of the detailed proposals relating to biopesticides were influenced by them. The proposals arose from the 6th Environmental Action Programme which called for a reduction in the impact of pesticides on human health and the environment and the need to achieve a more sustainable use of pesticides. They were also influenced by reviews of the existing regulations which showed that the system was slow and complex and there was variability in the level of protection across member states.

A key plank of the Commission proposals to reform the system was risk based comparative assessment and substitution to encourage the replacement of more hazardous substances and/or products with alternatives. This was good news for advocates of biopesticides, and had been called for by the IBMA in its 2005 'white paper' on the regulation of biologicals, but the influential European Crop Protection Association (ECPA) was opposed in principle to regulatory substitution at any level. Farmer organisations were also opposed because they were concerned about the reduced availability of products.

IPM was at the centre of the EU's strategy. The regulatory system was revised by the passage of a directive on the sustainable use of pesticides (2009/120/EC) which has to be transposed by November 2011. This was centred around the creation of National Action Plans to identify areas of risk, the reduction of risk and use, the minimisation of impacts on human health and environment, responsible use and IPM. Directive 91/414/EEC was replaced by regulation (EC) 1107/2009 and comes into force in June 2011. (There is also a regulation on statistics on pesticides and a revised directive on machinery for pesticide application).

The new legislation does give a specific status to non-chemical and natural alternatives and requires them to be given priority wherever possible. The definition of non-chemical methods mentions in article 3 (8) 'physical, mechanical or biological pest control.' Biological controls should generally qualify as low-risk active substances in Annex II, Section 5 Problems may be caused by the requirement that they are not persistent in the sense that their half life in the soil is less than 60 days. This provision will almost certainly require a guidance document as provided for in Article 77 which permits the Commission "to adopt or amend technical and other guidance documents ... concerning micro-organisms, pheromones and biological products, for the implementation of this regulation."

Being classified as a low-risk active substance gives initial approval for 15 years rather than the standard ten. A fast track decision on authorisation should be taken within 120 days providing no data is missing. A reduced dossier can be submitted for plant protection products containing them, but this has to include a demonstration of sufficient efficacy. The products may be advertised as 'Authorised as low-risk PPP', but paradoxically no such claim can be made on the label. It should also be noted that the final categorisation of low risk substances will depend on EFSA peer review. Much will depend on the composition as the so-called 'green list' of active substances, although there is a view within DG Sanco that there may be too many low risk substances. It is possible that private standards organisations such as GlobalGAP may require products to be grown using only low risk substances.

The new European legislation does not give biological controls all they might have hoped for, but it does give them legislative recognition and opens up the potential for faster authorisation processes and effective mutual recognition. As is so often the case, the 'devil is in the detail' of interpretation and implementation and it is here that the role of the IBMA will be important. Its task is assisted by having a presence in key member states as well as at the EU level.

7 Conclusions

The potential contribution of biopesticides to environmental sustainability is considerable as is recognised by their key role in the EU's IPM strategy. Although the development of new biopesticides continues, and the greater involvement of larger companies in what is seen as a promising market should enable more products to be brought to the market, they still face a number of obstacles in realising their full potential.

The political profile of biopesticides remains low and their political displacement is in many respects fragile. Their relationships with regulatory agencies have often depended on the commitment of particular individuals rather than being deeply structurally embedded. They exist as a rather precarious halfway house between conventional agriculture and the economically and politically powerful multinational agrochemical companies and organic agriculture which has a much higher political profile and a much better organised and more effective policy network. "Compared with the macro agendas of climate change and food security, the micro agenda of biocontrol products may seem to be relatively insignificant. Nevertheless, they offer a key element of the IPM approach which is now at the centre of the EU regulatory agenda and which is likely to play an important role in climate change adaptation"(Bailey et al. 2010: 221).

One of their weaknesses has been the absence of a strong consumptionist dimension at a time when the role of the consumer-as-citizen has assumed a greater importance (Micheletti 2003). Retailers do make strong interventions in the use of pesticides using their contractual power over their suppliers but, with certain limited exceptions, not to promote biopesticides. Indeed, when they have contemplated such interventions, they have often appeared to misunderstand the contribution of biopesticides which are niche products with lower efficacy than conventional plant protection products.

More generally, the lack of recognition of biopesticides by consumers creates a vicious cycle in which their low profile discourages their wider use. The advocacy of biopesticides is then forced back on a productionist discourse but this is weakened by the relatively limited development of the industry and its representative organisation. The IBMA has, however, been quite astute in developing its political sophistication, given the limited resources available to it. A key test of its effectiveness will be how far it is able to influence the development and implementation of the new EU regulatory regime for plant protection products. That regime is of key importance to the regulatory sustainability of biopesticides which will in turn influence their contribution to environmental sustainability.

References

Bailey, A., Chandler, D., Grant, W. P., Greaves, J., Prince, G., & Tatchell, M. (2010). *Biopesticides: Pest management and regulation*. Wallingford: CABI Books.

Business Regulation Team. (2003). *Regulatory impact unit: 2003 report*. London: Cabinet Office.

Chandler, D., Bailey, A. S., Tatchell, G. M., Davidson, G., Greaves, J., & Grant, W. P. (2011). The development, regulation and use of biopesticides for integrated pest management. *Philosophical Transactions of the Royal Society, 366*(1573), 1987–1998.

Defra. (2007). *Consultation on the future of the Pesticides Safety Directorate*. London: HMSO.

Grant, W. (2010). Environmental and food safety policy. In D. Coen, W. Grant, & G. Wilson (Eds.), *The Oxford handbook of business and government* (pp. 663–683). Oxford: Oxford University Press.

Greaves, J., & Grant, W. (2010). Underperforming policy networks: The biopesticides policy network in the United Kingdom. *British Politics, 5*(1), 14–40.

IBMA. (2009). *IBMA request for clarification of position of 'grey area' products in the UK* (Internal document submitted to CDR). Mourenx: International Biocontrol Manufacturers' Association.

IR-4 Project. (2004). *Annual report*. New Brunswick: Rutgers University.

Lang, A., Schneider, V., & Werle, R. (2008). Between politics, economy and technology: The changing environments of business associations. In J. Grote, A. Lang, & V. Schneider (Eds.), *Organized business interests in changing environments: The complexity of adaptation* (pp. 42–62). Basingstoke: Palgrave-Macmillan.

Marrone, P. G. (2007). Barriers to adoption of biological control agents and biological pesticides. *CAB Reviews: Perspectives in Agriculture, Veterinary Science, Nutrition and Natural Resources, 2*(051), 1–12.

Micheletti, M. (2003). *Political virtue and shopping*. Basingstoke: Palgrave-Macmillan.

PSD. (2004). *Pesticides Safety Directorate annual report and accounts 2003/04*. London: HMSO.

Rationale. (2010). *Rationale biopesticide strategists*. www.biorationale.co.uk. Accessed 4 May 2011.

Waage, J. K. (1997). Biopesticides at the crossroads: IPM products or chemical clones? *BCPC Symposium Proceedings, 68*, 11–20.

Product Labelling and Standards: Business Participation in Energy Efficiency Regimes

Achim Lang, Thomas Malang, and Volker Schneider

1 Introduction

A common view of business in political science and sociology is that capital owners, managers, firms and their associations are only short-term profit-seekers. If this were true, business "as such" would have fought against social and environmental policies at all times and in all places. In fact, business contributed to many long-term problem-solving processes with respect to social and environmental issues. Most of these ecological approaches are currently subsumed under the concept of sustainability, and one of the most important strategies in this respect is energy saving. Since our world's energy resources are limited and the usage of many energy forms implies some severe long-term negative externalities (e.g. global warming or radio activity), energy saving is one of the key strategies that contribute to sustainable social and economic development. In this chapter, we study a special area of energy saving and energy efficiency improvement, that is, the reduction of electricity consumption in private households. With respect to the numbers and types of policy measures designed to reduce energy consumption, there is large variation between countries. Many countries apply regulatory measures (voluntary or mandatory norms and standards with respect to energy efficient appliances), labelling programs, information campaigns, and counselling activities. Additionally, monetary incentives in positive (e.g. primes, tax reductions, subsidies) or negative forms (e.g. specific energy taxes) have primarily been used by Western EU and OECD countries. We focus on product standards and environmental labelling. Both types of policy instruments are well established measures in helping reduce energy consumption. Both policy instruments can be implemented

A. Lang (✉) • T. Malang • V. Schneider
Department of Politics and Public Administration, University of Konstanz, Universitätsstr. 10, 78464 Konstanz, Germany
e-mail: achim.lang@uni-konstanz.de; thomas.malang@uni-konstanz.de; volker.schneider@uni-konstanz.de

A. Lang, H. Murphy (eds.), *Business and Sustainability*,
Sustainability and Innovation, DOI 10.1007/978-3-319-07239-5_7

as mandatory or voluntary schemes administered by public authorities or private organizations. At this level, there is broad leverage for business involvement, such as appliance and equipment producers, retailers, energy producers and energy efficiency agents/promoters. Business thus may become a key actor next to the government in such a policy environment. We provide a detailed account of how public and private initiatives have evolved regarding product standards and energy efficiency labelling. The aim is to disentangle the often-proclaimed antagonism between (semi)public and private regulation that "overlooks the continuities and dynamic connections between public and private regulation. [...] for a growing body of evidence suggests that industry self-regulation is closely linked to regulation by the government, like two partners joined in a mazy dance" (Gunningham and Reese 1997: 397). Our expectation is that the manner and intensity with which business gets involved and cooperates in this collective efficiency improvement is shaped by (historically evolved) institutional environments which are more or less supportive of this cooperative behaviour. This chapter is organized into six parts. In the next section, we provide a short sketch of approaches to business participation and regulatory activities regarding product standards and labelling that are used as background theories for our empirical analysis. The third section describes data collection and analysis. In the fourth section, we provide a macro-analysis of countries and voluntary policy instruments which is accompanied by an in-depth analysis of the U.S., Germany (as an EU member state) and China. The conclusion summarizes our findings.

2 Energy Efficiency Labelling and Product Standards: Theoretical Considerations

In this paper, we focus on two types of regulatory instruments, namely product standards and environmental labels. The establishment of environmental labels and standards depend on the decisions of business, governments and NGOs with regard to three main objectives. First, environmental conservation and protection is the main reason to establish environmental labelling schemes and product standards. Resource dependence reasoning has long played a minor role but is now frequently considered a driver of energy efficiency measures. Second, fostering product innovations and leadership in environmental sound technologies provide another objective to implement eco-labels and standards. Third, labelling schemes may also serve to increase consumer awareness on energy use or to raise the salience of environmental issues (Bozowsky and Mizuno 2004). Environmental labels are used to communicate respective standards to the end consumer. The purpose of introducing labels is to overcome information asymmetries and to convince consumers to buy and manufacturers to produce energy efficient appliances (Mahlia et al. 2002). According to the International Organization for Standardization (ISO), the overall goal of environmental labels is (ISO 14024):

> …through communication of verifiable and accurate information, that is not misleading, on environmental aspects of products and services, to encourage the demand for and supply of those products and services that cause less stress on the environment, thereby stimulating the potential for market-driven continuous environmental improvement.

A label is a mandatory or voluntary sticker affixed to products or packaging containing information on the energy efficiency or energy consumption of the product (Duffy 1996). Basically, there are two types of labels. On the one hand, endorsement labels classify household appliances into categories (Mahlia et al. 2002). The Eco-Label of the EU is an example, where a letter system from A to G provides data on energy consumption, capacity, and noise of the product. On the other hand, comparison labels provide information about the energy efficiency of a product in relation to the lowest and highest energy consuming model. This kind of labelling was initially used in Canada and the US, but the system confused consumers and was changed after a few years (Banerjee and Solomon 2003). Furthermore, labels may apply to all products or only to the best products. The EU Labelling Directive requires a label which rates the energy efficiency of all products while the Energy Star is awarded only to the most energy efficient products within a certain product category (Office of Fair Trading (OFT) 2008).

Environmental labelling is a suitable policy instrument regarding energy efficiency since it is applicable to purchases by private and public organizations as well as individual consumers. It aids quick purchasing decisions when consumers lack understanding of complex environmental impacts. In addition, it is a soft policy instrument that does not rely on authoritative command-and-control but on benchmarks and best practices (Allison and Carter 2000).

The International Organization for Standardization (ISO) developed standards and classifications for environmental labels with respect to the content and the origin of the labels. The ISO 14020 series of standards for environmental labelling sets benchmarks that provide guidance for business, governments and NGOs to prepare their own labels. According to the ISO, environmental labels fall into three categories (International Organization for Standardization (ISO) 2012):

- Type I environmental labelling encompasses recommendations for third-party certification of environmental claims. In this case, a third-party, which can be public and/or private organizations, specifies the standards for environmentally-friendly products and certifies compliance with these product standards. The Japanese Eco Mark or the German Blue Angel are examples of Type I labels.
- Type II labels are based on ISO 14021 which has a wide range of applications. Type II labels indicate self-declared environmental claims by the manufacturer, without being evaluated by a third party.
- Type III labels are based on ISO/TR 14025, and are principally designed to meet business-to-business needs. These labels do not meet certain predefined standards but provide a summary of quantitative environmental impact measures based on life cycle assessments. Type III labels aim to "assist purchasers in green procurement where they need to make informed comparisons between separate products" (International Organization for Standardization (ISO) 2012: 22)

Energy efficiency standards provide another important policy instrument that is widely applied among developed and developing countries. On a very general level, an energy efficiency standard is defined as a minimal requirement of efficiency of the respective household appliance. The common baseline is the goal to save energy by adhering to a certain level of energy efficiency. According to McMahon and Turiel, an energy efficient standard prescribes the energy performance of manufactured products, sometimes prohibiting the manufacture of products with less energy efficiency than these minimum standards (Mcmahon and Turiel 1997). These standards can either be mandatory or voluntary by nature, realized in the form of minimum allowable energy efficiency or maximum allowable energy use (Mahlia et al. 2002). Product standards are designed to correct market failures in product markets if consumers prefer less environmentally-friendly products due to difficulties in identifying energy efficient products and/or due to ignorance about life-cycle costs and environmental impacts (Maur and Shepherd 2011; Office of Fair Trading (OFT) 2008).

The appropriateness of product standards and labelling depends on which market failure is going to be targeted (Office of Fair Trading (OFT) 2008): lack of information or ignorance about long-term costs. Lack of information can best be tackled by labelling schemes that motivate customers to buy energy efficient products. As a result, companies that participate in these labelling schemes increase sales which in turn encourages competitors to invest in the production of more environmentally-friendly products (Office of Fair Trading (OFT) 2008). In cases where consumers focus solely on purchasing costs and thereby ignore life-cycle or environmental costs, standards are the appropriate policy instrument. “In these situations, removing the option for customers to buy products with excessive running costs can help achieve both economic and environmental objectives” (Office of Fair Trading (OFT) 2008: 8).

Product labelling and standards are often used in a complementary fashion. Environmental labels reward companies who invest in new technologies and procedures that improve performance and energy efficiency. Product standards are required to prevent market failures regarding the use of less energy efficient techniques (Office of Fair Trading (OFT) 2008: 7). Another reason why product standards go hand in hand with labels is that labels often lack consumer awareness if some product characteristics (e.g. design) determine buying decisions which do not relate to energy efficiency or if consumers lack the ability to understand the environmental impacts. The establishment of product standards then ensures “that environmental impacts that are less likely to be subject to consumer demand are incorporated into product design” (Allison and Carter 2000: 58). Product standards are often used alongside single issue labels (e.g. energy efficiency) if other product characteristics also have significant environmental impacts (e.g. resource use) and when there is no trade off between impacts. Product standards can also be used together with voluntary environmental labels in order to establish minimum efficiency standards, while labelling rewards further improvement and best practice (Allison and Carter 2000).

Environmental labelling and product standards can be implemented by public or private schemes, or both. Rees (1988), for example, distinguishes between two forms of regulation by private actors. *Voluntary self-regulation* denotes rule formulation, implementation and enforcement which are carried out by firms or trade associations. Voluntary self-regulation is normally set up without government involvement. *Mandated self-regulation* is an extension of the voluntary self-regulation mechanism insofar as the voluntary agreements and standards are backed and sanctioned by the government "which monitors the program, and if necessary, will take steps to ensure its effectiveness" (Gunningham and Rees 1997: 365).

Few theoretical approaches have tried to explain why countries prefer private schemes over public ones. Most studies provide detailed accounts of industry codes of conduct and analyse the strategic choice of companies to join such private agreements but fail to consider more systemic factors, in particular institutional factors that have a bearing on industry self-regulation (Gupta and Lad 1983; Hemphill 1992). In contrast to most industry studies based on economic theory, the sociology-oriented varieties of capitalism approach provides an institutional account of business behaviour by indicating institutional constraints on private actor involvement. The varieties of capitalism approach, as put forth by Hall and Soskice (Hall and Soskice 2001b), is based on a firm-centred political economy or socio-economics. In this perspective, company activities are embedded in specific institutional settings. Hall and Soskice, in their introduction to the volume "Varieties of Capitalism: The Institutional Foundations of Comparative Advantage" (Hall and Soskice 2001a), assert that each country developed an unique institutional setting over the course of time, in which different coordination mechanisms complement each other thereby attenuating mutual weaknesses. Hall and Soskice divide existing national economies in two broad categories: liberal market economies (LME)[1] and coordinated market economies (CME).[2] From their perspective, each type of economy displays specific capacities for coordination that will condition what firms and government do (Hall and Soskice 2001b: 35). In liberal market economies, economic activities are coordinated by hierarchical structures within the firm and competitive market arrangements (Chandler 1977). Market relations are based on the exchange of goods and services which is embedded in formal contracting (Williamson 1991). Supply and demand is coordinated by the prize mechanism. In contrast, coordination within liberal market economies is accomplished by non-market relationships such as hierarchies, networks, alliances and business associations (Powell 1990; Streeck and Schmitter 1985). Coordination in CMEs involves higher transaction costs and is in good part based on political bargaining. Christmann and Taylor argue that voluntary policy instruments are more suitable to liberal market economies, in particular those with a long history of free market and few governmental interventions. In their case study about self-regulation in China, they find that voluntary initiatives come into conflict with the

[1] The United States is the ideal type of liberal market economy. Other LMEs include Australia, Canada, New Zealand and United Kingdom.

[2] Coordinated market economies include Austria, Germany, France, Italy, Japan, and Sweden among many others.

still widespread "compliance" mentality and the legacy of the centrally-planned system (Christmann and Taylor 2006). By contrast, in the U.S., as the paradigm case of a liberal market economy, voluntary agreements between market partners are widespread and have a long history. We will find out if these observations can be generalized across a large number of cases in the next section.

3 Data and Methods

The data on energy efficiency labelling and standards was collected by a joint research team of the University of Konstanz and the consultant company Content5. The data collection was part of the larger research project TRANSPOSE, funded by the German Federal Ministry of Education and Research. The aim of the whole integrated project was to analyze opportunities for the transfer of electricity-efficient policies in Germany (Brohmann et al. 2012). The data have been assembled from various sources and by several people involved in the project and contain all national electricity efficiency policies, which were in power between 1995 and the beginning of 2009.

The policy-dataset consists of 30 countries, 21 OECD and 9 non-OECD countries, including the BRIC states. The observed time period is 1995–2008. In the dataset, all variables are coded on a yearly basis, allowing for a longitudinal analysis. Our analysis focuses on several categories of electronic home appliances:

- Televisions, monitors
- Personal computers, laptops
- Camcorders, cameras, video game consoles, CD/DVD players, HiFi/home cinema, telephones, answering machines, etc.
- Toasters, coffee makers, vacuum cleaners, hair dryers, etc.
- Air conditioning, ventilation
- Water heaters/boilers
- Heat pumps
- Night-storage heating, electric heating, space heaters
- Lighting appliances, light bulbs
- Dishwashers
- Freezers
- Refrigerators
- Ovens/stoves, microwaves
- Tumble dryers
- Washing machines
- Multiple sockets, chargers

We analyse the existence and application of compulsory and voluntary labels and standards for each category of electronic home appliances. In order to discern macro-regimes, we created four additive indices for compulsory and voluntary labels as well as standards. A hierarchical cluster analysis is performed that serves to identify homogeneous country groups. Hierarchical (agglomerative) methods are the standard procedure. The starting point of a hierarchical cluster analysis is an identity partition in which all participating objects are in different clusters. It then joins the pair of participating objects which are the most similar. These then become a single cluster. The algorithm continues in this manner until all participation objects have been joined into a single cluster. The different profiles are ordered according to decreasing levels of similarity. Hierarchical clustering methods start with the calculation of pair-wise dissimilarities that build the foundation for the divisive or agglomerative clustering. We calculated Euclidian distances for each pair of objects. The Euclidian distance is defined as the root of the squared sum of differences between two profiles.

Hierarchical cluster analysis not only serves to classify types of policy regimes but also to identify typical and deviant cases for which cases studies have been carried out. We decided to have a closer look at three countries that provide examples for a European regime (Germany) and a liberal market economy regime (the U.S.). China is a deviant case of the developing country regime.

4 Macro-regime Types in Energy Efficiency Labelling and Standards

The aim of this section is to provide an overview of general patterns that can be observed for the policy output – voluntary labels and voluntary standards – in electric efficiency policy. A cluster analysis serves to identify macro-regime types in energy efficiency labelling and standards. Three different regime types can be identified (see Fig. 1):

- The first regime type involves virtually no voluntary or compulsory labels (cluster 1, white).
- The second regime type involves high levels of compulsory labels and voluntary standards together with minor levels of voluntary labels and compulsory standards (cluster 2, grey). Countries pertaining to this regime type have set up almost nine compulsory labels for different appliances and more than four voluntary standards.
- The third regime type involves high levels of voluntary labels (on average 11.71) and compulsory standards (on average 7.57) together with minor levels of compulsory labels and voluntary standards (cluster 3, black).

Country regimes have evolved over time from a market laissez-faire regime without labels and standards since the mid-1990s to highly regulated regimes in 2008. However, country trajectories vary considerably. Developing countries have not set up any or just some standards or labels – either voluntary or compulsory – regarding energy use of domestic appliances since 1999. They basically remained at the same stage of development with the exception of Brazil, Chile, China and Korea.

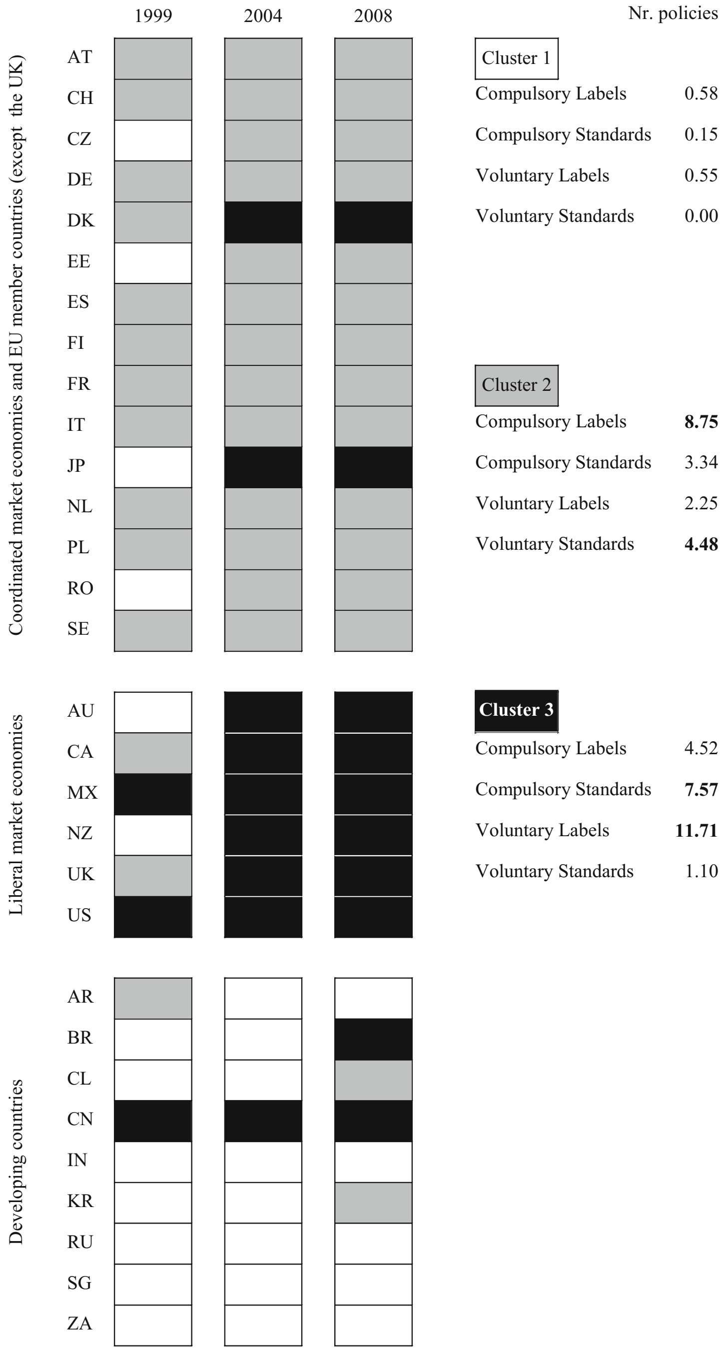

Fig. 1 Regulatory regimes in energy efficiency policies

Liberal market economies, in contrast, began to establish compulsory standards and voluntary labels at the beginning of the new millennium. In particular, the implementation of voluntary labels in energy efficiency policy varies considerably between countries. Liberal market economies such the U.S., the United Kingdom, Canada and New Zealand are clearly the forerunners for this kind of policy instrument. However, some other countries also use voluntary labels to provide information to their citizens about domestic appliances with low energy consumption. Japan, Mexico and China belong to the group of countries with many voluntary labelling agreements. On the other end of the political landscape are most Eastern European and developing countries that have not implemented voluntary labels so far. EU member countries occupy a middle ground with some voluntary labelling agreements put into force. At the same time, quite surprisingly, compulsory standards also flourished in liberal market economies.

EU member countries (and coordinated market economies) developed a different policy regime with opposite complementarities. In their case, voluntary standards and compulsory labels go hand in hand.

The Varieties of Capitalism approach is helpful in explaining variance in policy regimes. Hall and Soskice argue that in liberal market economies, few business associations or other private actors are capable of organizing authoritative and mandatory collective standard setting processes. As a result, standards emerge out of market developments in which rule compliance is more or less voluntary. These processes, however, are often "stimulated" and "nudged" by governmental actors (Newell and Siikamäki 2013). This expectation is confirmed in our analysis. Liberal market economies seldom develop authoritative standards on a voluntary basis. The opposite holds true for coordinated market economies. However, since most coordinated market economies are EU member states, the VoC effect is suppressed by the EU effect. A case in point is the high level of voluntary standards in the United Kingdom which is basically driven by EU mandated self-regulation.

Coordinated market economies employ less voluntary labelling arrangements than do developing countries and liberal market economies. Labels concerning the efficiency of domestic appliances are often seen as alternative policy instruments which improve market mechanisms in the provision of a broader spectrum of information on the quality of products (Norberg-Bohm 1999). In this way, they affect the buying decisions of consumers (together with the price signal) which feed back to the decisions of manufacturers and retailers to offer better and more efficient products. As a result, labels transform markets and steer consumers to buy more energy efficient and (in the long run) cheaper products. In this respect, voluntary labelling programs are perfectly compatible with the market process in liberal market economies but are seen as too soft a measure in coordinated market economies and in the EU. The reason for the reluctance of coordinated market economies to rely on voluntary labels is that energy efficiency labels do not demand basic efficiency levels and rely solely on changing consumer attitudes and manufacturer preferences.

5 Mechanism Triggering More Business Participation: Case Studies

Gunningham and Reese (1997) argue that the dichotomy between voluntary and compulsory policy instruments is misleading and both types of instruments join in a "mazy dance". In the case of energy efficiency instruments, the pattern is far from mazy but still joint in that there is a co-existence of compulsory standards and voluntary labels as well as compulsory labels and voluntary standards. Both regime types seem to be complementary.

In order to get a more detailed picture of industry self-regulation and the mechanisms prompting them, we present three case studies of different countries and country groups. In particular, we analyse the sequence of instrument implementation. The guiding research questions are: which kind of policy instrument comes first, compulsory or voluntary? Which factors trigger the sequence of actions? In this paper, we emphasize the participation of business in this process and therefore have a closer look at the motivations of these actors to set up voluntary standards and labels.

The case study selection is based on the different levels of implementation for voluntary and compulsory standards and labels. EU member states have the highest adoption rate of voluntary standards while the U.S. was a first mover regarding voluntary labels, later joined by other countries such as China.

5.1 EU Members

In the EU, the majority of regulatory activities regarding energy efficiency policy transpose EC directives into national law. It is important to note the nature of a directive compared to a regulation. Directives require member states to achieve a particular result without dictating the means of achieving that result. Hence member states and their respective organizational state of interest groups have more degrees of freedom to implement a directive compared to a regulation. A comprehensive framework of directives and regulations to improve energy efficiency in energy-consuming products, buildings and services is in force in Community law. These include the Eco-Design Directive,[3] the Energy Star Regulation,[4] the Labelling Directive[5] with its eight implementing Directives, the

[3] DIRECTIVE 2005/32/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 6 July 2005 establishing a framework for the setting of ecodesign requirements for energy-using products and amending Council Directive 92/42/EEC and Directives 96/57/EC and 2000/55/EC of the European Parliament and of the Council.

[4] REGULATION (EC) No 2422/2001 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 6 November 2001 on a Community energy efficiency labelling programme for office equipment.

[5] COUNCIL DIRECTIVE 92/75/EEC of 22 September 1992 on the indication by labelling and standard product information of the consumption of energy and other resources by household appliances.

Directive on Energy End-Use Efficiency and Energy Services[6] and the Energy Performance of Buildings Directive.[7]

The most important EC directive for our case here is the Directive 92/75/EEC on the indication by labelling and standard product information of the consumption of energy and other resources by household appliances with its implementing Directive 94/2/EC on energy labelling of household electric refrigerators, freezers and their combinations that triggered a multitude of transpositions in EU member states. The EU Commission not only provided the basis for compulsory instruments but also triggered self-regulatory initiatives suggested by European peak associations. Starting in 1997, the European Committee of Manufacturers of Domestic Equipment (CECED) signed a series of voluntary commitments notified to the EU Commission with a derogation to European competition law (European Committee of Manufacturers of Domestic Equipment (CECED) 2004).

All CECED voluntary commitments included basically two steps. In the first step, participating companies declare that they will stop producing domestic appliances to import into the Community Market that belong to low energy efficiency classes up to a certain point in time. In the second step, each participating company commits itself to contributing to the overall objective for European production to achieve a reduction in the weighted average energy consumption (European Committee of Manufacturers of Domestic Equipment (CECED) 2004). The national member associations of the CECED take part in negotiations at the European level and also act as a watch dog that reports violations of the voluntary commitment to the public authority in charge and prohibit commercialization of the reported products (SONITRON 17/07/2009).

The interplay between voluntary and mandatory segments are even easier to observe in the Commissions' follow up directive from 2010.[8] Here, in article 12 of the Act, it is stated that:

> A completely voluntary scheme would lead to only some products being labelled, or supplied with standard product information, with the risk that this might result in confusion or even misinformation for some end-users. The present scheme should therefore ensure that for all the products concerned, the consumption of energy and other essential resources is indicated by labelling and standard product fiches.

Member states are therefore requested to apply the standards and labels to a specific set of household appliances. In our dataset, these include air conditioning and ventilation, water heaters and boilers, heat pumps, lights appliances, freezers and refrigerators, and tumble dryers, to name the most common.

[6] DIRECTIVE 2006/32/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 5 April 2006 on energy end-use efficiency and energy services and repealing Council Directive 93/76/EEC.

[7] DIRECTIVE 2002/91/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2002 on the energy performance of buildings.

[8] DIRECTIVE 2010/30/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 19 May 2010 on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products.

The genesis of the 2010 directive shows the inclusion of business, but also the struggle for power behind doors. Heinzle and Wüsthagen point to the different preferred solutions to overcome the problem that older labels no longer represented the reality of energy efficiency, since the highest energy efficiency class has become a de facto standard in many product categories (Heinzle and Wüstenhagen 2012). Consumer and environmental organizations (ANEC/BEUC 2008) were in favour of the old labelling scheme but pressed for the criteria to be reduced on a regular basis. This option would have required the inclusion of a date on the label indicating how long the label would be valid (BUND/DUH 2009). In contrast, industry associations (CECED 2007) favoured an extension of the scale by means of introducing new categories 'beyond A' (A+, A++ and A+++ for the most efficient class). In autumn of 2009, members of the European Parliament and representatives from the European Commission and the EU Swedish Presidency finally reached an agreement to continue using letters A to G for classifications, but to allow introducing up to three additional classes on top of class A.

To sum up, European industries participated in several activities regarding energy saving and energy efficiency. However, most national industries did not develop their own initiatives but rather participated in government-designed programs or implemented CECED voluntary standards. All self-regulatory mechanisms pertain to the mandated self-regulation type in which voluntary agreements and standards are backed by the EU Commission who monitors and evaluates the measures. All measures implemented by business organizations, mostly trade associations, are *sectoral guidelines* that include product and labelling requirements as a reference point for member firms.

5.2 The United States

Whereas voluntary labelling programs and their applications are a rather recent phenomenon in Europe, in the U.S. they have had a longer history and are more broadly used, particularly in the context of environmental and energy policy. Stanwick and Stanwick (1999) give an overview on 26 voluntary initiatives that were promoted by the U.S. Environmental Protection Agency (EPA) during the 1990s, a time in which U.S. Energy increasingly encouraged corporate involvement in voluntary environmental programs. The overview also includes the first voluntary energy labelling programs in the U.S.:

- Energy Star Buildings and Green Lights Partnership (established 1991): to promote energy savings through energy efficient lighting in commercial and industrial buildings.
- Energy Star Office Equipment Program (established 1993): to encourage the production of energy efficient office equipment.
- Energy Star Residential Program (established 1995): to foster energy efficiency in the residential sector.
- Energy Star Transformer Program (established 1995): to reduce energy loss through inefficient transformers used by utility partners.

All Energy Star programs are based on the promotion of simple labels carrying logos indicating a minimum level of efficiency requirements of a given product. Labelling as such was not novel at that time. Banerjeea and Solomon (2003) counted over 20 eco-labelling programs in the US including a wide range of products. But the new element was a voluntary partnership. A mandatory label for energy efficiency has existed since the 1970s, when the U.S. EPCA 1975 stipulated that energy labels had to be placed on a spectrum of energy-intensive new home appliances (refrigerators, freezers, washers, air conditioners, etc.). The “Energy Guide” label was finally introduced in 1979 and allowed the comparison of a specific product with the lowest and the highest efficient comparable appliance.

Banerjeea and Solomon (2003) give a systematic review and evaluation of the five major energy-labelling programs in the US. Only one is mandatory, four of them are voluntary:

- The single mandatory labelling program is the above mentioned *Energy Guide*. It depicts a bright yellow label which was introduced in 1979 and was based on the Federal Trade Commission’s Appliance Labeling Rule of 1980. It is administrated by the U.S. Department of Energy (DOE) and implies efficiency tests and regular updates of standards.
- *Green Seal* is a voluntary non-governmental labelling program that was established in 1989 by an independent non-profit organization. Green Seal promotes manufacturing and use of environmentally responsible consumer products through eco-labelling.
- Another non-governmental and voluntary label is provided by *Scientific Certification Systems (SCS)*. This non-profit organization was founded in 1984 and was primarily active in the certification of food safety through SCS labels. In 1989, it launched the first third-party US certification program for environmental policy goals. In the energy efficiency context, it certified environmentally preferable energy sources based on scientific life-cycle analysis. Today, SCS has grown into a global corporation (SCS Global Services).
- Green-e is another label that is promoted by a non-profit organization, the Center for Resource Solutions (CRS). It started a voluntary certification program in 1997 which grants a seal-of-approval label to certify that electric power is generated from renewable sources.
- *Energy Star* is a family of voluntary governmental programs geared towards improvement of energy efficiency and reduction of greenhouse gases. Originally introduced in the early 1990s by the EPA, it is now jointly administered by the EPA and the DOE since 1996. Energy star programs promote the Energy Star ® label, a registered brand logo that is used in a growing range of products.

Since Energy Star is the most successful programs, it will be outlined in more detail. Various case studies have been presented on these programs in recent years (Banerjee and Solomon 2003; Joiner and Laux 2008; Paton 2004). The first and best known is the office equipment program that was launched in the early 1990s. According to Paton (2004), it began with the Environmental Protection Agency (EPA) defining performance standards for computer hardware and allowing participating firms to use the EPA's Energy Star logo to label program-compliant products. The new strategy aimed to create a market for energy efficient desktop computers by creating incentives for manufacturers to improve the efficiency of their products and providing opportunities for consumers to make informed purchasing decisions. According to Paton's case study, whose analysis is based on interviews with industry experts, the Department of Energy (DOE) had initiated the program with little to no consultation with industry leaders (Paton 2004). Initially, there was a sharp divide within the industry because firms differed considerably in their ability to comply with the requirements of the label. After a relatively short time, however, more and more manufacturers succeeded to qualify for the product label. In office equipment, it became a de facto standard. In the meantime, consultation with industry partners has become more firmly institutionalized, along with updating energy efficiency levels for particular product categories. Both the EPA and DOE actively promote this labeling program through the Internet and through all mass media channels. The Energy Star website informs consumers on a broad range of certified products. The EPA stresses that "more than 23,000 organizations across the U.S. that have partnered with EPA" and that "more than 40,000 individual product models, produced by over 1,700 manufacturing partners, have earned the ENERGY STAR across more than 60 product categories" (United States Environmental Protection Agency (EPA) 2012).

Banerjeea and Solomon (2003) concluded that Energy Star was successful both in terms of consumer and manufacturer response. While market penetration of the mandatory Energy Guide is clearly higher than that of the voluntary Energy Star, the usefulness of the Energy Guide to consumers is seriously questioned. Energy Star® is nowadays the most recognized energy efficiency label. Based on a huge advertising budget, it is now highly recognized by millions of consumers. After Energy Star's broad success, manufacturer interest in energy-efficiency labelling by purely private programs has largely disappeared.

Prior to various public and private labelling schemes, the U.S. Congress enacted several federal programs that established energy targets for a large number of electronic household appliances. The first of such programs was established with the National Energy Policy and Conservation Act (NEPCA) that was signed by President Ford in 1975. The NEPCA was met with fierce resistance by the oil industry since it was primarily designed to lower gasoline consumption (Martz and Bishop Jr. 1976). "In 1978, DOE was authorized to set mandatory energy efficiency standards for 13 household appliances and products under the National Energy Conservation and Policy Act" (United States Department of Energy 2010: 18). In 1987, NEPCA was amended and updated by the National Appliance Energy Conservation Act (NAECA), which established minimum efficiency standards for many common household appliances such as refrigerators, freezers, air conditioners, water heaters, furnaces, dishwashers, and washers and dryers. These national minimum efficiency standards aimed at abolishing energy inefficient, cheaper household appliances that were sold at higher rates even when energy efficient appliances were subsidized (United States Department of Energy 2010). The NAECA was welcomed by industry representatives since the national program avoided the establishment of a myriad of state regulations (Tolchin 1987). In 2005 and 2007, the Energy Policy Act and the Energy Independence and Security Act updated minimum efficiency standards for several product categories (United States Department of Energy 2010).

5.3 China

From 1979 to 2009, China was able to quadruple its GDP by doubling its energy consumption. This unprecedented economic growth with comparatively low resource investment has been accomplished through energy conservation initiatives set up by China's government. These initiatives featured prominently within several Five-year Plans (Asia Pacific Energy Research Centre (APERC) 2012). In order to realize the goal of reducing energy consumption, China's government established a series of policy, legal and economic measures that also included standards and labelling initiatives throughout various branches of the economy.

However, residential electricity consumption rose exponentially at an annual rate of 16.3 % from a previous 3–12 % of total electricity consumption. Estimates account refrigerators and freezers, now found in 70 % of urban households, for about half of all residential electricity consumption (Fridley et al. 2007; Lu 2006). By 2008, China's urban households had on average a colour television, a washer, a refrigerator and an air conditioner. This persistent growth of appliance ownership corresponded with increasing residential electricity consumption at an annual average rate of 13.9 % between 1980 and 2007 (Price et al. 2011). Boosts in personal income triggered massive investments in electronic appliances among the urban population. In contrast, rural households lagged behind by about 20 years (Fridley et al. 2007; Xiaohua and Zhenmin 2001).

In 2005, the Communist Party and the Chinese government were concerned about high levels of energy consumption and demanded sustainable energy demand growth rates in order to reduce and to avoid associated adverse consequences. In November 2005, the Politburo of the Communist Party gave an official statement which demanded a reduction of energy intensity by 20 % within five years in order to keep energy demand within the range experienced during the 1980s and 1990s (Zhou et al. 2010).

Zhou et al. argue that the success of the Chinese energy conservation strategy in the 1980s and early 1990s was based upon the establishment "of a network of energy conservation bureaucrats, engineers, experts and policymakers. Of particular importance were the 140 energy conservation technology service centres that China created to provide technical assistance to large energy users and to promote energy efficiency" (Zhou, Levine and Price 2010: 12). This institutional infrastructure contributed to the implementation of government policies by means of monitoring and enforcing energy consumption standards and quotas. As a result of its success, budget cuts weakened the capacity of this infrastructure resulting in reduced performance during the new millennium (Zhou et al. 2010).

In order to cope with fast-growing appliance ownership, China established an institutional setting that exclusively deals with energy consumption and environmental issues (Fridley et al. 2007; Lin 2002). China's State Economic and Trade Commission (SETC) is responsible for the overall governance of China's economic development. Within the SETC, the Department of Resource Conservation and Comprehensive Utilization develops the national energy conservation policy, implements the Energy Conservation Law, and monitors the implementation and compliance of energy efficiency standards and labels. The State Bureau of Quality and Technical Supervision and Quarantine (AQSIQ) is an armth-length body of China's highest decision making institution, the State Council of the People's Republic of China. It authorizes and issues all standards pertaining to energy efficiency and conservation. The China National Institute of Standardization (CNIS) provides technical support to AQSIQ such as data collection and analysis which informs the development of mandatory minimum energy efficiency standards. The CNIS is also responsible for the development of China's energy information labelling program. In 1998, the China Standards Certification Center (CSC, formerly the China Certification Center for Energy Conservation Products) was established as an independent certification agency. Its aim was to manage a voluntary endorsement energy labelling program. CSC is subordinated to the CNIS but its operations are mandated by SETC and AQSIQ (Fridley et al. 2007; Lin 2002).

Policy initiatives regarding energy efficiency started in the late 1980s when minimum efficiency standards were introduced for refrigerators, air conditioners, washing machines, televisions, automatic rice cookers, radio receivers, electric fans, and electric irons (Fridley et al. 2007). In 1997, the Energy Conservation Law was passed, which sets the legal basis for voluntary and compulsory energy efficiency standards and labelling programs.

International collaborations also played an active role in the establishment and development of labelling and standardization programs. This led to a harmonization of Chinese and international norms. Collaborating organizations included the U.S. Environmental Protection Agency (U.S. EPA), the Lawrence Berkeley National Laboratory (LBNL), the Global Energy Foundation (GEF), and the Collaborative Labelling and Appliance Standards Program (CLASP) (Fridley et al. 2007; Lin 2002). China has three major programs related to energy efficiency standards and labelling (Asia Pacific Energy Research Centre (APERC) 2012; Fridley et al. 2007; Lin 2002; Richerzhagen et al. 2009; Zhou et al. 2010):

1. *Compulsory minimum efficiency standards*. In the late 1990s, CNIS developed mandatory energy efficiency standards that cover most residential and commercial appliances. However, norm compliance remains a major problem and "is now a major policy focus in the area of mandatory standards" (Fridley et al. 2007: 11). Since 2007, the CNIS and the CSC have set 46 efficiency standards in order to implement the Energy Conservation Law. Most of the standards formally went into effect on June 1, 2008.

2. *Voluntary energy efficiency labelling*. In collaboration with the US Energy Star program, a voluntary energy efficiency endorsement has been established and covers most home appliances. The labelling program is coordinated by the CSC. The endorsement label is granted to products that meet quality and performance criteria.
3. *Compulsory energy information labelling*. China established a mandatory energy information label, which imitates the EU energy label. The information label applies only to refrigerators and air conditioners, but is expected to cover other products in the future as well. The information label is administered by CNIS.

Today, many electric home appliances are subject to minimum energy efficiency standards as well as voluntary labelling. Until recently, some appliances such as printers and computers were covered by the voluntary labelling program but not by minimum efficiency standards (Zhou et al. 2010).

To sum up, energy efficiency and conservation has become a top priority of the Chinese government. Since the 1990s, China has established a complex institutional setup that is assigned with the task of smoothing out the increase in total household energy consumption. The first policy program included compulsory minimum standards for some household appliances which has been amended several times and now incorporates almost all domestic electronic devices. The Energy Conservation Law of 1997 provided the legal basis for more concerted actions regarding labelling and standards. In particular, it encouraged the establishment of voluntary and mandatory labelling schemes that were eventually set up. The labelling schemes were designed according to their primary export markets: the US Energy Star and the EU energy label.

6 Conclusions

Our analysis covered a set of 30 advanced and emerging economies. We analyzed to what degree business participates in policies contributing to energy saving and/or efficiency improvements. In particular, we focused on energy efficiency labelling and product standards.

Liberal and coordinated market economies display different development paths regarding the establishment of energy efficiency standards and labels. Liberal market economies typically set up voluntary labels which are accompanied by compulsory standards. Two reasons essentially account for this instrument mix. First, liberal market economies rely on competition and price effects and therefore, prefer voluntary schemes over compulsory ones. Second, in line with the literature on varieties of capitalism, liberal market economies lack encompassing and resourceful business associations that are able to set up, monitor and enforce binding agreements.

As the most prominent example of a liberal market economy, the U.S. first began to establish several voluntary (and also some compulsory) labelling schemes. While most voluntary schemes are administered by NGOs or businesses, the most prominent example of a voluntary scheme is the Energy Star which is jointly managed by the Department of Energy (DoE) and the Environmental Protection Agency (EPA). Another widespread labelling scheme is the Energy Guide which operates on a compulsory basis and is run by the DoE and the EPA. Regarding standards, the only standardization scheme in the U.S. is the compulsory minimum efficiency standard first established in 1975 by the Energy Policy and Conservation Act along with its amendments and updates. Compulsory standards were set up to avoid state legislation and to correct market failure that resulted from consumer preferences of less environmentally-friendly but cheaper products. Business has no active part in standard-setting activities and only provides additional labelling schemes which are clearly outshone by the public *Energy Star* and *Energy Guide* programs.

China followed a similar trajectory to the U.S. Minimum energy consumption standards were defined in the 1980s for the most frequent household appliances in order to slow the increasing amount of energy consumption in private households. In 1997, the Energy Conservation Law provided the legal basis for continued voluntary and compulsory energy efficiency standards and labelling programs that were subsequently put into force. *Compulsory minimum efficiency standards* were developed in the late 1990s. *Compulsory energy information labelling* similar to the EU energy label and a *voluntary energy efficiency labelling program* developed in collaboration with the US Energy Star program were introduced in 1998 and 2005 respectively. Business does not take part in any of the labelling and standardization activities.

Coordinated market economies, in contrast, generally developed compulsory instruments, either compulsory labels or compulsory standards. Both types of instruments are backed by EU legislation. An important aspect of European energy efficiency programs are voluntary standards which are set up by the European branch association CECED. However, these voluntary standards are also backed by the European Commission.

In sum, business hardly participates in standard-setting and labelling activities. Even in liberal market economies, business only collaborates in minor labelling initiatives since main activities are put into action by national governments. In EU member states, standards are typically negotiated between producers under the auspices of the sectoral branch association CECED. Again, these agreements need backing by a public authority, this time from the European Commission. The degree of government intervention, however, is determined by the type of capitalism: more “nudging” in liberal market economies compared to compulsory programs in coordinated market economies. However, when nudging fails there is a clear tendency to provide a baseline for energy efficiency standards.

References

Allison, C., & Carter, A. (2000). *Study on different types of environmental labelling (ISO Type II and III Labels): Proposal for an environmental labelling strategy*. Brussels: DG Environment, European Commission.

ANEC/BEUC. (2008). *Consumers strongly in favour of keeping the A-G Energy Label*. http://www.anec.eu/attachments/ANEC-PR-2008-PRL-009.pdf. Accessed 28 Feb 2011.

Asia Pacific Energy Research Centre (APERC). (2012). *Compendium of energy efficiency policies of APEC economies*. Tokyo: Asia Pacific Energy Research Centre.

Banerjee, A., & Solomon, B. D. (2003). Eco-labeling for energy efficiency and sustainability: A meta-evaluation of US programs. *Energy Policy, 31*(2), 109–123.

Bozowsky, E., & Mizuno, H. (2004). *Introduction to ecolabelling*. Ottawa: Global Ecolabelling Network.

Brohmann, B., Bürger, V., Dehmel, C., Fuchs, D., Hamenstädt, U., & Krömker, D. (2012). Sustainable electricity consumption in German households – Framework conditions for political interventions. In R. Defila, A. Di Giulio, & R. Kaufmann-Hayoz (Eds.), *The nature of sustainable consumption and how to achieve it* (pp. 399–409). München: oekom Verlag.

BUND/DUH. (2009). *Stellungnahme zur Neugestaltung der EU Energieverbrauchskennzeichnung*. http://www.bund.net/fileadmin/bundnet/pdfs/klima_und_energie/20091111_energie_label_stellungnahme.pdf. Accessed 28 Feb 2011.

Chandler, A. D. (1977). *The visible hand: The managerial revolution in American business*. New York: Belknap.

Christmann, P., & Taylor, G. (2006). Firm self-regulation through international certifiable standards: Determinants of symbolic versus substantive implementation. *Journal of International Business Studies, 37*(6), 863–878.

Duffy, J. (1996). *Energy labeling, standards, and building codes: A global survey and assessment for selected developing countries*. Washington, DC: International Institute for Energy Conservation.

European Committee of Manufacturers of Domestic Equipment (CECED). (2004). *Summary of CECED unilateral industrial commitments*. Brussels: CECED.

European Committee of Manufacturers of Domestic Equipment (CECED). (2007). *Top executives discontinue energy efficiency agreements*. Brussels: CECED, Press Release 21 March 2007.

Fridley, D., Aden, N., Zhou, N., & Lin, J. (2007). *Impacts of China's current appliance standards and labeling program to 2020*. Berkeley: Lawrence Berkeley National Laboratory Environmental Energy Technologies Division.

Gunningham, N., & Rees, J. (1997). Industry self regulation: An institutional perspective. *Law & Policy, 19*(4), 363–414.

Gupta, A. K., & Lad, L. J. (1983). Industry self-regulation: An economic, organizational, and political analysis. *Academy of Management Review, 8*(3), 416–425.

Hall, P., & Soskice, D. (Eds.). (2001a). *Varieties of capitalism: The institutional foundations of comparative advantage*. Oxford: Oxford University Press.

Hall, P. A., & Soskice, D. (2001b). *An introduction to varieties of capitalism* (pp. 1–68). Oxford: Oxford University Press.

Heinzle, S. L., & Wüstenhagen, R. (2012). Dynamic adjustment of eco-labeling schemes and consumer choice – The revision of the EU energy label as a missed opportunity? *Business Strategy and the Environment, 21*(1), 60–70.

Hemphill, T. A. (1992). Self-regulating industry behavior: Antitrust limitations and trade association codes of conduct. *Journal of Business Ethics, 11*(12), 915–920.

International Organization for Standardization (ISO). (2012). *Environmental labels and declarations. How ISO standards help*. Geneva: ISO.

Joiner, T., & Laux, J. (2008). Energy star: A competitive advantage? *Journal of Business Case Studies, 4*(10), 9–16.

Lin, J. (2002). Appliance efficiency standards and labeling programs in China. *Annual Review of Energy and the Environment, 27*(1), 349–367.

Lu, W. (2006). Potential energy savings and environmental impact by implementing energy efficiency standard for household refrigerators in China. *Energy Policy, 34*(13), 1583–1589.

Mahlia, T., Masjuki, H., & Choudhury, I. (2002). Theory of energy efficiency standards and labels. *Energy Conversion and Management, 43*(6), 743–761.

Martz, L., & Bishop, J., Jr. (1976). Energy: A bill and a prayer. *Newsweek*

Maur, J.-C., & Shepherd, B. (2011). Product standards. In J.-P. Chauffour & J.-C. Maur (Eds.), *Preferential trade agreements policies for development: A handbook* (pp. 197–216). Washington, DC: World Bank.

Mcmahon, J. E., & Turiel, I. (1997). Introduction to special issue devoted to appliance and lighting standards. *Energy and Buildings, 26*(1), 1–3.

Newell, R. G., & Siikamäki, J. V. (2013). *Nudging energy efficiency behavior: The role of information labels* (RFF Discussion Paper 13–17). Washington, DC: National Bureau of Economic Research.

Norberg-Bohm, V. (1999). Stimulating 'green' technological innovation: An analysis of alternative policy mechanisms. *Policy Sciences, 32*(1), 13–38.

Office of Fair Trading (OFT). (2008). *The competition impact of environmental product standards*. London: OFT.

Paton, R. B. (2004). Two pathways to energy efficiency: An energy star case study. *Human Ecology Review, 11*(3), 247–259.

Powell, W. (1990). Neither market nor hierarchy: Network forms of organization. *Research in Organizational Behavior, 12*, 295–336.

Price, L., Levine, M. D., Zhou, N., Fridley, D., Aden, N., Lu, H., et al. (2011). Assessment of China's energy-saving and emission-reduction accomplishments and opportunities during the 11th Five Year Plan. *Energy Policy, 39*(4), 2165–2178.

Rees, J. V. (1988). *Reforming the workplace: A study of self-regulation in occupational safety*. Philadelphia: University of Pennsylvania Press.

Richerzhagen, C., Frieling, T., Hansen, N., Minnaert, A., Netzer, N., & Ruãÿbild, J. (2009). *Energy efficiency in buildings in China: Policies, barriers and opportunities*. Bonn: German Development Institute (DIE).

Stanwick, S. D., & Stanwick, P. A. (1999). Exploring voluntary environmental partnerships. *Journal of Corporate Accounting & Finance, 10*(3), 111–125.

Streeck, W., & Schmitter, P. C. (1985). Community, market, state – and associations ? The prospective contribution of interest governance to social order. In W. Streeck & P. C. Schmitter (Eds.), *Private interest governments* (pp. 1–29). London et al.: Sage.

Tolchin, M. (1987). WASHINGTON TALK; An industry asks for regulation. *The New York Times*. New York: The New York Times.

United States Department of Energy. (2010). *Multi-year program plan – Building regulatory programs*. Washington: U.S. DoE.

United States Environmental Protection Agency (EPA). (2012). *ENERGY STAR® and other climate protection partnerships. 2011 Annual Report*. Washington, DC: Environmental Protection Agency.

Williamson, O. E. (1991). Comparative economic organization: The analysis of discrete structural alternatives. *Administrative Science Quarterly, 36*(2), 269–296.

Xiaohua, W., & Zhenmin, F. (2001). Rural household energy consumption with the economic development in China: Stages and characteristic indices. *Energy Policy, 29*(15), 1391–1397.

Zhou, N., Levine, M. D., & Price, L. (2010). Overview of current energy-efficiency policies in China. *Energy Policy, 38*(11), 6439–6452.

Part IV
Social and Cultural Dimensions of Sustainability

Sustaining Cultural Diversity When Faced with Changing Technologies

Harvey B. Feigenbaum

1 Introduction

The twenty-first century has presented us with an odd paradox: the forces of technology, and most especially the digital revolution, have been providing us with increasingly individualized entertainment options, while the forces of the economy have tended to reduce those options and to homogenize them, homogenizing cultures in the process. Under the guise of increasing individual choice, the diversity of the world's varied cultures is under threat.

Cultural diversity is a value in itself and a collective good. It is only natural that people wish to preserve the connections to their collective pasts and identities. This wish to maintain a sense of community is both particular and universal. Indeed, we all benefit from the preservation of cultural diversity: encountering folkways other than our own exposes us to different ways of thinking and can lead to new, occasionally profitable ideas. We are, at the very least, enriched. Can the world's cultural diversity be protected? Can it be sustained?

Mass entertainment has been moving from a collective experience to an individual choice. The world's great cultures blend and submerge in waves generated by private markets, while guided by American power. It is as banal as it is true to call this phenomenon globalization. As American movies, television shows, music, and fast food are propagated around the world, they are driven by economic incentives and by the increasingly free movement of capital, goods, and services. Technology has altered the way in which these are consumed. We can now watch movies in cinemas, on televisions, computer screens, or cell phones. We choose what we wish to watch on tiny screens embedded in airplane seats or automobiles. We listen to news or music on radios, computers, or mp3 devices. These various

H.B. Feigenbaum (✉)
Department of Political Science, George Washington University, Monroe 425 2115 G Street, N.W., Washington, DC 20052, USA
e-mail: harveyf@gwu.edu

A. Lang, H. Murphy (eds.), *Business and Sustainability*,
Sustainability and Innovation, DOI 10.1007/978-3-319-07239-5_8

entertainments are delivered in a variety of ways: celluloid reels, broadcasts via microwaves, analog imprints on tape or vinyl, digital streams or optical discs. The list of options is obsolete as soon as it appears.[1]

The point that I would like to make in this paper is that technology is double edged sword. Some technologies add convenience but pose a threat to the world's cultural diversity. Other technologies improve the capacities of countries and groups to compete in the cultural market place. Whether cultural diversity is sustainable is an open question.

This paper asks three questions: what is the role of technological change in shaping the world's cultures? What are the consequences of declining cultural diversity? And, can policy play a role in maintaining the advantages of a diverse world?

2 The Current State

2.1 Obsolete Policies

The marked influence of American culture is not a new phenomenon. The problem of cultural dominance goes back at least to the Greeks and Romans. While these cultures were widely admired, they were also associated with military victory and political occupation. Alexander the Great Hellenised Egypt and the Middle East. The Romans reset the cultures of the Mediterranean basin and much of Europe. In Asia the Chinese Middle Kingdom spread its cultural influence beyond the already considerable reach of its armies over a period spanning 50 centuries (Katzenstein 2005). By the late nineteenth century aggressive European powers imprinted their languages and folkways over much of the world as they competed with each other to colonize what to them were peripheries.

More recently the cultural metropole has shifted to America. And while American armies played their role in two great wars, as well as in an intense competition with the Soviet Union, the principal mechanism for the spread of American culture has been economic. In some ways this may seem both more acceptable and more insidious. American culture has spread through the decisions of private individuals to purchase American products and services. For reasons that are complex, American films, television shows, literature, music, and fast-food have found ready markets outside US borders. The reasons have to do with both scale economies, sophisticated production, world-wide distribution capabilities and multicultural tastes. Culture is pluridimensional, but the subject is immense. Much could be written about any one of the many activities that collectively constitute culture. In

[1] Indeed, the Nielson media measurement company estimated that the number of US households with televisions actually dropped for the first time in 20 years (Gelles and Edgecliffe-Johnson 2011: 14).

this essay, however, I'll limit my analysis to film and television. This is somewhat arbitrary, but if one is interested in popular culture, where breadth may be more important than depth, these two audiovisual media are similar enough to each other to be treated as a single case. They are also broad enough in their impact to be considered – not to put too fine a point on it – important.

Policies intended to reduce American influence have been tried since the inter-war period. They have been initiated by private sector competitors, state and local governments, and most recently by the European Union and the United Nations. Some, like the UNESCO declaration on cultural diversity, are primarily symbolic, while others have had real material and impacts (Balassa 2008: 15–18). Most such policies have been undermined either by effective counter-measures in the private sector, or by changes in the technological and economic environment. It is the latter that informs the thrust of this paper.

Policies in the audiovisual sector normally are intended to address one or several of the following: managing the spectrum, regulating competition, and supervising content.[2] Outside of the US, policy normally includes, in addition to these three purposes, some effort to protect or subsidize a local audiovisual industry, usually while attempting to attract inward investment and foreign-based productions with a series of financial incentives. On this latter point, not only do various countries compete with each other, but there is a similar competition among sub-national units, as virtually every American state and some cities join a race to the bottom. Nor is this a peculiarly American phenomenon, as similar competitions are found in many countries, including the states of Australia, Canadian provinces and German *Bundeslaender* (Davies and Wistreich 2007).

In a world where departures from free trade need to be justified, such policies are usually defended as necessary to maintain a national industry and infrastructure, so that cinemas and airwaves offer films and television shows in the national idiom.

The most frequent policies aimed at preserving national culture in the area of film and television, are subsidies and quotas. In the area of film, arguments by governments to protect national culture go back at least to 1928, when the Herriot Commission recommended a protective regime in France (De Grazia 2005: 309).

Most countries outside the United States offer subsidies to encourage local film production and in many countries these subsidies extend to television. Subsidies are an integral part of the European audiovisual policy. According to Morawetz et al. (2007), most governments in EU member states have introduced film support institutions on the national or regional level which administer the provision of subsidies. Representatives of the European audiovisual industry heavily lobbied for continuing the protectionists and subsidizing policies (Hennig and Alpar 2005). However, the poor results of these subsidy programs led to a reassessment of instrument choice. The generous support of the European audiovisual industry led to a "subsidy trap" mentality of European producers which had to prove that their films are not commercial in order to qualify for public money. As a result, European

[2] For the discussion of these three tasks, I rely heavily on Feigenbaum (2002).

Table 1 Geographical origin of TV fiction programmed by major networks (in %, sample week 12–18 March 2000)

		Domestic	US	European	Other
United Kingdom	Whole day	47	43	0	10
	Prime time only	51	49	0	0
Germany	Whole day	36	57	5	2
	Prime time only	56	44	0	0
France	Whole day	25	56	15	5
	Prime time only	75	25	0	0
Italy	Whole day	19	64	4	13
	Prime time only	43	51	6	0
Spain	Whole day	20	56	7	17
	Prime time only	51	37	12	0

Source: Eurofiction (2001)

films failed to find an audience in any EU country, even in its own, since films were deliberately produces to find no audience (Halle 2002; Morawetz et al. 2007). In the mid 1990s policy changed and was since then designed to attract FDI in order to build a local films industry.

Quotas are less universally applied, but all members of the European Union have agreed to reserve 50 % of prime time for European-produced television shows. Similar quotas exist in Canada, Australia, South Africa and a variety of other countries. Quotas on film exhibition are less frequent, but a number of countries limit the number of days a year that American films can be shown in commercial theaters. Table 1 illustrates the situation in selected European Countries.

Quotas have always been challenged. Even when the French inaugurated the quotas instigated by Herriot in 1928, where companies needed to make four films at home in order to import one foreign film, wily entrepreneurs went into the business of producing cheap “quota quickies” to get around the restriction (De Grazia 2005: 309).

Today, technology has made television and some film quotas unenforceable. Before broadband internet connections became ubiquitous, satellites posed a significant problem for regulators. As the satellite footprints frequently encompassed more than one country, the Direct Broadcast Satellite (DBS) companies rarely adhered to individual national quotas. In Europe they had the blessing of the European Court of Justice (ECJ). While recognizing the legitimacy of national quotas, the ECJ ruled that European Union states, at least, could not take “excessive measures” to block trans-border reception (McPherson 2000: 101–102). This became a sticking point when the EU considered renewing the famous “Television Without Borders” Directive and ultimately led to the innovation of a “country of origin” standard when the new Audiovisual Media Services Directive replaced TWB. The new directive parsed the problem of quotas by establishing that internet and satellite companies must adhere to the restrictions placed by the country where the content was uploaded (European Commission 2008).

3 The Problem

Before going further it is probably worth sketching out the problem that these Directives have been intended to address. The key issue is that the audiovisual media and film industries are economic behemoths which are thought to have an impact on culture, and are therefore politically sensitive. The main problem, as far as the EU has been concerned, is how protect and affirm the cultural assets of Europe (the *dirigistes*' concern), without losing the economic possibilities afforded by the entertainment industry and now, by new media (the neo-liberals' concern).

Although the impact of the film and audiovisual industries may be cultural, the early film industry was commercial from its inception. Europe and America traded intensely and competed vigorously from the end of the nineteenth century onward. The French film giants, Pathé and Gaumont, had initially been part of the Edison Trust. They had had active branches in the US from the earliest days of the industry. Before World War I the US imported more films from Europe than it exported. After the First World War many of the indigenous European film industries came into their own. The German industry had been founded in response to the communication and propaganda needs of the military High Command before the Great War. The new industry, with its Neu Babelsberg studio complex both competed with Hollywood, and attracted the investment of major Hollywood studios.[3] Mussolini created the extensive Cinecittà film-making complex outside of Rome; and the French competed from the Eighth Arrondissement of Paris and eventually from studios in Boulogne Billancourt. The British had their own industry, the famous names of Ealing, Pinewood and Shepperton come to mind, as did most of the countries of Europe. This vibrant European growth was initially abetted by the advent of sound, which, at least briefly, served as a barrier to importation of foreign films. However, the cumulative effect of the two world wars and the special acumen of Hollywood eventually established the US as the hegemon of film (Feigenbaum 2007; Izod 1988).

American films were lavishly produced, opulently marketed and efficiently distributed to markets around the world. In most countries, people preferred to watch Hollywood films to local ones (Feigenbaum 2007: 382–383). To some extent the relationship between Hollywood and the world was reciprocal: world markets demanded Hollywood films, and Hollywood films, as production costs rose, eventually needed world markets to break even (Feigenbaum 1996). Figure 1 offers a sample year comparison of film productions in selected countries and their associated production costs. Figure 2 illustrates the trend in terms of numbers of movies.

In Fig. 1 the line indicating "EU" films produced is somewhat deceiving. This is not only because the category includes also movies produced after the EU enlarged to most of Eastern Europe, but especially because films produced in Europe were rarely exported beyond their country of origin. In fact, one of the major issues for

[3] This section is mainly based on historical background information taken from de Grazia (2005).

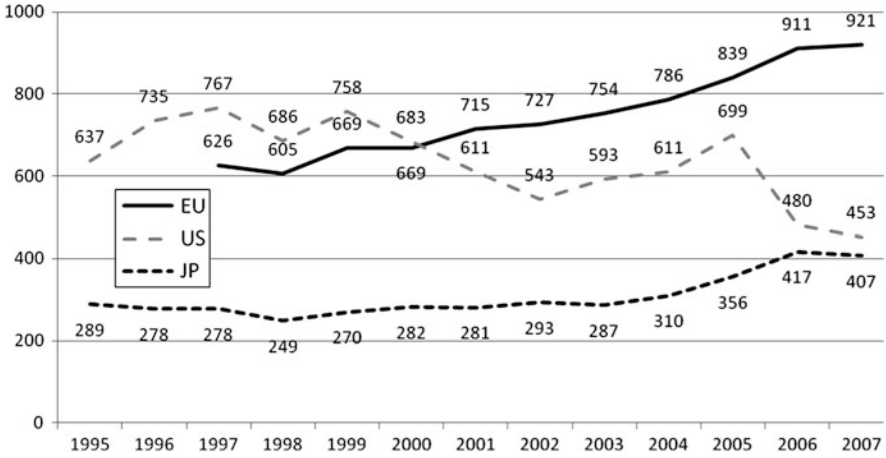

Fig. 1 Film production trends in major regions (Data: European Audiovisual Observatory (various years))

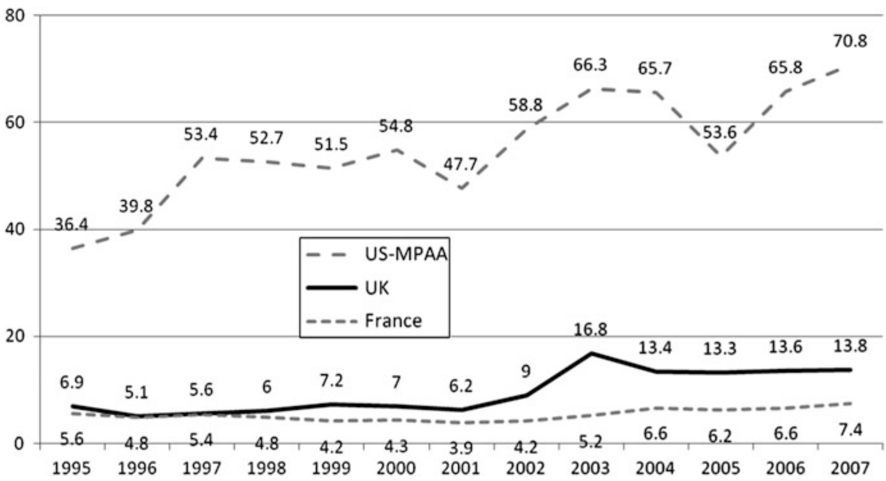

Fig. 2 Film production costs in major regions (1995–2007, in Mio $) (Data: European Audiovisual Observatory (various years))

European countries is that local films often have trouble finding distribution *even within the country of origin*.

Part of the reason for rising production costs in the US was that Hollywood studios saw lavish productions as a method to compete with television. Faced with the widespread purchase of televisions after the Second World War, studios, which were shorn of their theatrical profit centers by the Supreme Court's *Paramount* decision in 1948 (U.S. Supreme Court 1948), sought to use lavish decors and

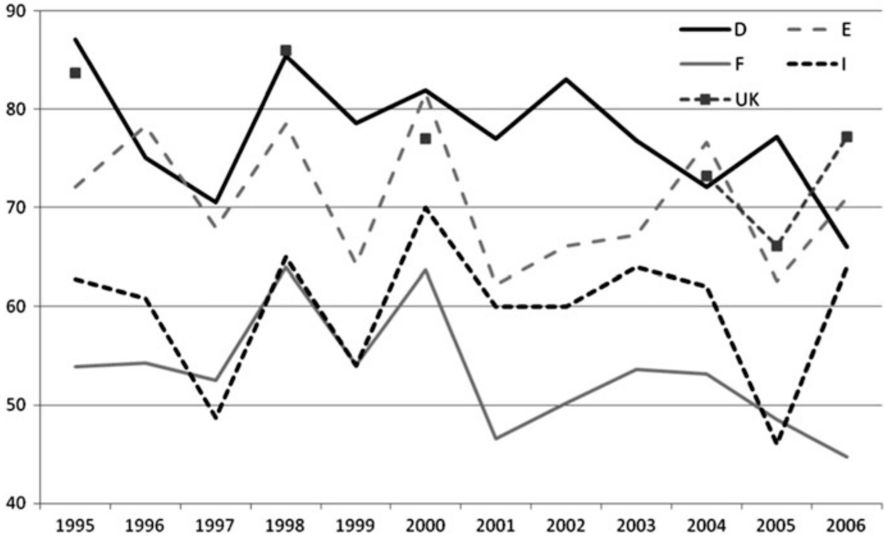

Fig. 3 Market share of U.S. productions (1995–2006) (Source: Media Salles (2006))

foreign locales as method of attracting audiences away from the free entertainment offered by the electronic box in the living room (Hozic 2001; Izod 1988).

While this strategy was entirely created in response to the needs of the domestic American market, the effect was to produce films that not only filled a gap in Europe left by the wartime hiatus, but ended up with a product that Europeans had not the resources to match. As a result, US films dominated European film markets everywhere they were allowed to be shown. Only in France, which enforces a quota in its cinemas, do US films occasionally occupy less than 50 % of the market. This is illustrated by Fig. 3.

The story for television is a bit different. Audiovisual imports have been a source of concern for many of the EU member states, but it is worth noting that American dominance of television export markets was not entirely the same as its dominance of feature films. The factor here is the proliferation of television channels beginning in the 1980s. They had been made possible by new technologies such as cable and satellite (Feigenbaum 2003). Digital technology greatly increased the number of TV channels available and crucially, most were financed by advertising (Feigenbaum 2009). With the rapid increase in the number of channels (France for instance went from three public channels to over 90 in the period from 1980 to 2000, and now channels number in the hundreds) meant that advertising audiences were fragmented. This limited revenues to broadcasters and the latter were forced to fill their schedules with cheap American reruns. Because American television shows are amortized over not only the huge domestic market, but also on secondary (re-run) and international markets, unit costs of American shows are much lower than locally produced European programming. American shows run from one-fourth to one-tenth the cost of broadcasting a European show (Feigenbaum

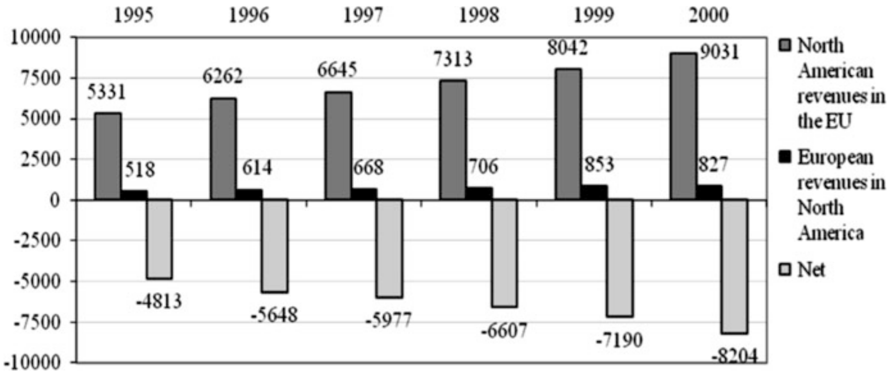

Fig. 4 Estimates of the trade of audiovisual programmes between European Union and North America (1988–2000, in Mio $) (Source: Lange (2002))

1996). Thus, the paradoxical result was that the proliferation of channels led to the domination of European markets by American shows that Europeans actually did not want to see.[4] Programmers would accept a reduction in Nielson scores (a measure of audience size) because American shows were so cheap that the cost savings made up for the fact that American shows were less popular.

Another important issue of the US dominance in the era of multichannel television is their ability to adapt content to local demands by creating "hybrid television brands and media products that appeal ever more to European viewers" (Chalaby 2006). Early precursors such as MTV and CNN were soon be followed by dozens of other US channels all over Europe which successfully blend American and European culture (Chalaby 2006). This led to American dominance of EU-US television trade. See Graph 2.

While Fig. 4 helps us understand the strong support for the *Television Without Borders* (TWB) and *Audiovisual Media Services Directives,* Fig. 5 indicates at first glance that the Directives were not terribly effective. Table 1, however, clarifies this a bit in that it shows the TWB Directives did allow countries to reduce American programming in prime time, if they so desired. Here we find that reduction in American programming approximates the liberal versus "dirigiste" preferences dividing EU member states.

[4] In a comparison of the most watched television shows in Australia, France, Italy, Sweden and the United States, only in Australia was the most watched show an import. Curiously, once Australia is excluded only France had an American production in the top ten: the movie *Star Wars* (International Herald Tribune 2005).

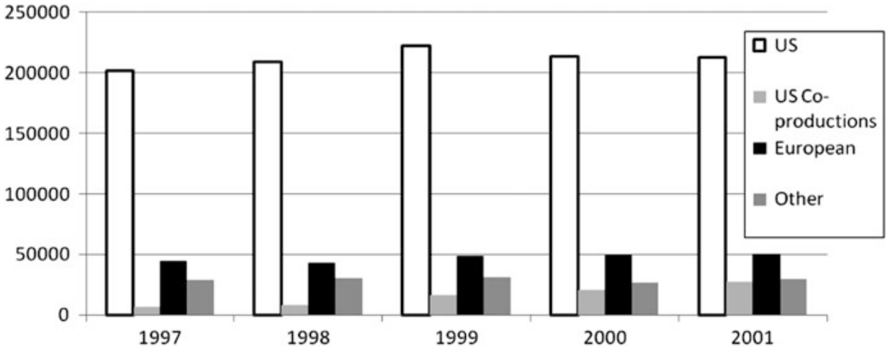

Fig. 5 Imported American, European and other programming broadcast on TV channels in Western Europe (1997–2001, percentage of total hours broadcast) (Source: Lange and Newman (2002))

4 Political Consequences

There are political consequences to this American penetration of international film and television markets. I have argued this in greater detail elsewhere (Feigenbaum 2011: 112–113), but I would like to briefly suggest the stakes of America's cultural dominance here.

Thanks to American exports, people often become more familiar with American folkways than their own. Examples abound: some accused of crimes in French courts address the judge as "*Vôtre Honneur*," rather than the proper address, "*Monsieur le Juge*." German law students query their professors on how to approach a jury, not knowing that Germany has no juries.[5] Both groups, of course, had gotten their ideas from American television shows. To the extent that television screens and movie theatres play American products, they take the place of local films and programs. They become part of the discourse, and ultimately provide many of the symbols of everyday speech. Moreover, symbols are the shorthand of politics (Dallmayr 1984) and imported categories can constrain thought. For example, the American notion of the political left does not extend beyond "*liberal*", which for Europeans is a category of the right, yet British commentators, for whom *liberal* formerly designated the political centre, have begun using the American terminology. In a piece on cultural diversity no less an analyst than the very acute Desmond King (2002: 167) qualified left-of-centre British newspapers as the "liberal-leaning press". This articulation thereby accepted the American categorization of politics as a simple dichotomy between liberal and conservative, rather than the historically wider British spectrum which distinguished between the nineteenth century concept equating liberalism with the left, and the more

[5] Conversation with a German law student at the Friedrich Ebert Foundation, 2008.

sophisticated view occurring later in Europe, which saw liberalism as the archaic left, surpassed by social democratic and socialist concepts.

The symbolic and linguistic aspects of politics are hardly trivial. They trigger emotions and are used to both persuade and to manipulate. Much of the efforts in political campaigns are devoted to how arguments are framed, with each side doing its symbolic best to evoke images favourable to its side (Lakoff 2004). Innocent and apparently apolitical reference points, such as “the family” or “the police”, become symbolic cues which redirect political discourse.

Moreover, access to popular images approaches the very root of human thought. A wealth of literature from the fields of psychology and cognitive science documents the widespread view (well known to advertisers and political campaigners) that people think in metaphors and that metaphors have consequences (Dallmayr 1984; Fiumara 1995; Lakoff and Johnson 2003). That which is familiar, often becomes translated into a sense of comfort and identity.

However, the issue is not simply a fear of US domination. At a systemic level, Americanization is the contrary of cultural diversity. The argument here is that cultural diversity is valuable to everyone, not merely to those who fear their amalgamation into a larger whole.[6] Indeed, the defense of cultural diversity has become one of the key missions of the United Nations (UNESCO 2001). Just as education is enriched by including people from diverse backgrounds, the vibrancy of an economy or a society is enhanced by the injection of new ideas. The latter are often stimulated by reference to and comparison with the ideas from exogenous cultures.

Many governments fear that the dominance of American popular culture puts the vibrancy of all societies at risk. The very market forces that spread American audiovisual products, may be leading to greater homogeneity. Thus it is the improbable dialectic of global markets, that in the long run, they reduce, rather than promote, choice (Feigenbaum 2002).

5 Technology

While economic incentives have facilitated America’s cultural dominance, changes in technology may offer new opportunities. It is true, that many of the new technologies have tended to undermine policies intended to protect national cultures. Quotas have been challenged by Direct Broadcast Satellite, while the increased capacity of the broadcast spectrum has created a hunger for cheap American products to fill the schedules of television companies faced by increasingly fragmented audiences. Video-on-demand has further made of mockery of such restrictions.

[6] Meeting of experts in Vancouver, Canada (19 March 2002) regarding “Recommendations, Theme 1” by the Organization of American States.

Not all technological changes point in the same direction. The oldest technology that turns out to be an ally of culture is cable television. While it is true that the proliferation of channels made possible by cable and DBS have fragmented markets and thus provided an incentive to import cheaper American products, cable channels also make possible the distribution of poorly funded cultural channels. The most obvious (and least watched) in this regard are the "public access" channels which companies are required to carry – at least in the United States – in exchange for the privilege of doing business. Cable generally has created an appetite for "content" and thus has increased the general level of demand for cultural products, including those of local film and television industries. It is much cheaper to sustain a cable network than a conventional broadcast network, consequently less commercial cultural channels are more viable on cable. Thus, for example, the Bavarian-speaking minority of Bolzano, Italy, is served by Tele-Radio Südtirol, a privately financed station (Mercator-Media 2011).

Similarly the internet can play a positive role in the protection of cultures, especially for those communities whose numbers make a film market commercially difficult. Narrow casting (providing entertainment or information through websites), now facilitated by advances in streaming technology, provides a low cost conduit for cultural content. Not only can entertainment in non-English speaking idioms be sustained easily, but costs are so low that minority cultures within towns or cities can also afford this medium, even those minorities who might be too small to support even a cable channel.

While the huge success of the movie *Avatar* made advanced 3-D technology fashionable, increasing barriers to market entry; the digital revolution has mostly lowered the costs of producing feature films, documentaries and television shows.[7] This is thanks to the development of the digital video (DV) camera, computer-based nonlinear editing and special effects, and digital projection (DLP, for Digital Light Projector). These technologies allow even the smallest film enterprises the possibility of creating movies and television shows that would have cost many millions of dollars as little as a decade ago.

Perhaps the most important innovation on the production side is the digital video camera. Traditional video cameras offered lower resolution, and generally poorer quality than 35 mm film. The DV camera changes this with its ability to provide resolution approximately the same as a 35 mm camera (though much less than a 70 mm camera) and now effectively can mimic film by scanning at 24 frames a second. Moreover, the DV camera has greater depth of field than a 35 mm (Masters 2001: 14–15). This development has put filmmaking within the means of people who could never have afforded traditional film techniques. This is because film stock and processing are among the most expensive parts of low-budget films. That is, even if a producer is not paying the millions of dollars for actors, sound stages, or location shooting, the cost of film alone is enough break the independent

[7] Production Director Ted Kenney noted that "If you have a bad story. . .using 3D is not going to make it any better. You'll just have a bad story. . . in 3D!" (Stolzberg 2011).

filmmaker's budget (Broderick 2000: 62). In Hollywood terms, practically all films made outside Hollywood are "low budget."

By lowering this cost the use of DV cameras can also improve quality. A typical shooting ratio for low budget filmmakers is 3: 1 (one foot of film used for every three shot). With digital this ratio can climb to 50: 1 and, unlike a conventional shoot, the filmmaker can often use more than one camera for a scene, and then use the best angle. In a conventional shoot more than one camera is a luxury even studios cannot afford, not to mention the cost of reblocking the cameras and rearranging the lighting each time you change angles (Broderick 2000: 66–67).

Computer-based innovations in postproduction have also had a major impact on costs. The oldest of these innovations is non-linear editing, most familiarly associated with Avid software, long the Hollywood standard. In this process film is transferred to videotape (if the original shot is not already DV), entered into a computer, and then manipulated via computer software. This produces an edit decision list for cutting the film, or simply remains in electronic form if a print is not to be made (Broderick 2000: 66). Moreover, with the advent of Apple "Final Cut Pro" software, even amateurs can afford sophisticated digital editing.[8]

While digital production has greatly improved the efficiency of movie-making and lowered many of the most important costs, distribution and exhibition have been transformed dramatically in the last several years. As I alluded to in the introduction to this paper, consumers are no longer dependent on collective venues, and devices, or "platforms" that make entertainment available have become increasingly diverse. Movies, for example, were given a huge shot in the arm by the shift from video-tape to DVDs. These shifted home consumption from rental to "sell-through", that is, highly profitable direct purchase. However, more recently, various internet delivery systems have grown in importance.

Films can now be downloaded to set-top boxes and consumed as video-on-demand, or be transferred to a DVD or flash drive for later viewing.[9] They can also be streamed directly and viewed in "real time" (OECD 2008: 89–90). Likewise, digital streaming has begun to challenge traditional network and cable television (Louderback 2011).

The possibility of delivering films by internet has revolutionized distribution and has important advantages for countries wishing to preserve their own film industries. Distribution has been the most important bottle neck for both independent American film makers and foreign film makers. Many films are made and never seen. A few find distributors at film festivals like Sundance or Toronto. Some film festivals, like Cannes, are also important for linking distributors to nascent projects in search of financing.

[8] I'm grateful to Nina Seavey for this point.

[9] Not all down-loaded files are compatible will systems developed by different electronics firms. A movie file from Blockbuster.com won't work on a SONY HDTV, for example. This has led to a film industry initiative called "Digital Entertainment Content Ecosystem" to develop a single standard (Stone 2010).

Digital streaming has made it possible for film makers to distribute their films directly or for some festivals, most recently Tribeca in New York and Sundance Institute, to become distributors of independent films (Barnes 2011).

This is an important innovation, not only because it adds additional opportunities for film makers to find audiences, but because in some countries all distribution is controlled by American firms which privilege American products. Historically, this was the case in Britain where local distributors did not survive the economic hard times of the 1970s, leaving American firms in virtual control of the British market. British film makers, often benefiting from Arts Council support, then had trouble distributing their films in their own country.[10] In 2010, 100 of the 505 films distributed in the UK accounted for 80 % of total box office (UK Film Council 2011).

Similarly, a digital marketing campaigns for films is much cheaper than the traditional P&A, ("Print and Advertising" – the Hollywood term for replicating film prints and publicity campaigns). Historically, making celluloid prints for first run theatrical release could cost millions of dollars. With the advent of digital distribution, digital light projectors, or various internet distribution technologies, these costs are greatly reduced.

6 New Businesses, New Techniques

Perhaps the most exciting changes that have come about as a result of digital technologies, are the need for new services and the development of new techniques made possible by social networks.

As film distribution becomes increasingly digitized, the storage and management of digital film content may be spun off to new data-archiving enterprises, while duplicating companies are focusing on digital image quality control and technical services (OECD 2008: 102). These are businesses that may well be attractive to international competitors.

Social networks, the banner phenomenon which has played out dramatically in the political world, launched the campaign of Barack Obama, undermined the repressive governments of Tunisia and Egypt, and made a 26 year old Harvard drop-out a billionaire, also have implications for audiovisual products. The OECD report, "*Remaking the Movies,*" notes the value of interactive networks to facilitate marketing. This has important implications for film industries abroad who are dwarfed by the capacities of Hollywood: ". . .social network sites could provide smaller independent producers with a venue for releasing their product (in whole or in part) and for receiving the kinds of feedback from audiences that might otherwise be available only from expensive market research" (OECD 2008: 95). This can help

[10] Interviews, British Film Institute.

filmmakers outside of Hollywood and especially outside of the United States, more sophisticated and more competitive in world markets.

In recent days, interactive social networks have become players in film distribution as Warner Brothers announced the availability of films on Facebook, much to the displeasure of Netflix (Britt 2011), and Google announced that plans for commercial film distribution on You Tube are underway. In the same topsy-turvy world, Netflix, the film rental company offering films via the mail, or by internet streaming, announced it was going into the business of television content production (Lidtke 2011).

7 New Policies for the Digital Age

The policies of film and television quotas, originally developed in the 1920s and enshrined in European Union Directives, from Television without Borders to the Audiovisual Media Services Directive, have brushed up against their figurative mortality. One can hardly enforce quotas when programs are delivered by satellites which span continents, or where technology allows viewers to choose the time and the place they wish to view a program or film. In the new world of digital distribution and individualized entertainment, quotas no longer make sense. Prime time is now 24 h a day.

So if the goal is to preserve the world's cultural diversity, what policies do make sense? Certainly, subsidies can still play a role, but the traditional subsidies offered through production tax incentives, while useful, are not sufficient.

The increasing importance of digital technology means that many of the new opportunities for audiovisual industries are derived from R and D spending that is not necessarily industry-specific.[11] Clearly, advances in information and telecommunication technologies are likely to open new doors for the production, distribution and consumption of entertainment products. This gives an advantage to those countries which generally devote significant shares of GDP to scientific research.

Attention to distribution is also key to maintaining a viable film or television industry. Here the Spanish have been especially innovative: the Spanish Institute for Cinematography and Audiovisual Arts (ICAA) has an incentive scheme to support independent distributors, and subsidizes efforts to make Spanish-language films available for digital distribution (OECD 2008: 113). The French Ministry of Culture similarly takes an interest in maintaining the commercial viability of the country's small distribution firms.[12]

However, while technology and hardware are important, it is crucial to realize that the audiovisual industries are highly dependent on human capital. The more

[11] These policy suggestions are largely based on the OECD report, *Remaking the movies* (2008: 107–117).

[12] Interview, French Ministry of Culture.

general advantage of maintaining scientific research is certainly dependent on a strong system of higher education and public-private research partnerships pursued by universities. However, more direct training relevant to the industry cannot be neglected. This means that public support of film and video training facilities are an essential part of the infrastructure. Some countries have a long tradition of support: FEMIS (and IDHEC) in France, the Australian Film, Television and Radio School, and the British Film Institute are examples. Canada maintains 33 such schools across 11 provinces.

However, it makes little sense to train personnel if there is no work for them. This means that a system of financial incentives for film production needs to complement to efforts to maintain a local community of skilled technicians. This is the advantage of incentive schemes that are open to foreign film companies. When a Hollywood film locates production in Britain, or post-production in Australia, or subcontracts computer generated imagery to New Zealand, these activities provide significant employment to local technicians and service companies, and allows those countries to maintain a level of skilled personnel who are then available to do local productions. As the OECD report puts it: "[F]inancial inducements *alone* without the development of the complementary human resources and related infrastructures are probably not sufficient to yield local benefits except in the very short term....the greatest level of economic spinoff is obtained when studio and post-production facilities can be found in these locales also" (OECD 2008: 114; emphasis in original). This means an important role for the state in promoting such communities.

Many countries have recognized this, as has the European Union. The EU, however, offers positive and negative examples of useful approaches to cultural diversity. Much of the European Union's MEDIA 2007 program recognizes this complementarity of foreign film production and maintaining a high level of skills by including subsidies for personnel training. However, the European Commission is somewhat at cross purposes. In the course of my interviews in Brussels for this study, the main problem in the film market, from the point of the view of the Commission, was the compartmentalization of the film market. That is, the main problem from their perspective was the fact that EU members' films are not shown in each others' markets. Thus for them the problems of the industry could be solved by completion of the single market for film. The elephant in the room, competition from Hollywood, seems invisible in Brussels. This problem of the EU's ideological blinders has been confirmed in other studies: "the Commission seems to apply a model of classical economic analysis to the audiovisual sector, which ignores, to some extent, the problematic of culture and artistic expression" (Herold 2004).

8 Conclusion

When social scientists, or the public at large, encounter the term *sustainability*, the context is almost always a concern for the natural environment. There is the usually the well grounded fear that economic activity will lead to a degradation of the environment, or will gradually diminish once-abundant natural resources. Sometimes this process is not so gradual, and in many areas the degradation of the natural environment is alarming.

This chapter has focused on another type of sustainability, a different aspect of human ecology. Human life faces another kind of degradation. The environment is not only physical, but cultural. The gradual disappearance of cultural diversity does not threaten the physical existence of humanity, but it does change the quality of life. The combination of market forces and changing technologies have challenged societies which must now struggle to preserve their uniqueness. Loss of culture is as much a threat as species extinction. Not only do separate cultures have intrinsic value, but cultural diversity offers collective benefits.

The overall thrust of technological change has created advantages for some societies and disadvantages for others. The biggest beneficiary has been the cultural industry in the United States. Technologies like the internet and video-on-demand, have made it easer for American pop culture to spread, and harder for other countries to resist a kind of cultural assimilation.

Fortunately, though, some scientific advances can reinforces and sustain cultural diversity. New computer applications, digital equipment, and the development of human capital can all improve the range of possibilities for countries to advance their cultural goals. Digital technology can be put in the service of cultural diversity. But such a positive outcome can only come about if there is a will to do so, that is, to put science in the service of culture.

References

Balassa, C. (2008). *America's image abroad: The UNESCO cultural diversity convention and US motion picture exports*. Nashville: The Curb Center for Art, Enterprise, and Public Policy at Vanderbilt University.

Barnes, B. (2011, February 28). Film festivals set big digital goals as distributors. *New York Times*, p. B-1.

Britt, R. (2011). *Warner's Facebook plan hits Netflix shares*. http://www.marketwatch.com/story/facebookwarner-bros-deal-hits-netflix-shares-2011-03-08. Accessed 12 May 2011.

Broderick, P. (2000). Moviemaking in transition. *Scientific American Magazine, 283*(5), 61–69.

Chalaby, J. K. (2006). American cultural primacy in a new media order: A European perspective. *International Communication Gazette, 68*(1), 33–51.

Dallmayr, F. (1984). *Language and politics*. South Bend: University of Notre Dame Press.

Davies, A. P., & Wistreich, N. (2007). *The film finance handbook: How to fund your film*. London: Netribution.

De Grazia, V. (2005). *Irresistible empire*. Cambridge: Belknap Press of Harvard University.

Eurofiction. (2001). Press release, 9 October 2001. http://www.obs.coe.int/about/oea/pr/pr_eurofiction_bis.html. Accessed 6 May 2008.
European Audiovisual Observatory. (various years). *World film market trends*. Strasbourg: European Audiovisual Observatory.
European Commission (2008). AVMD – What's new? http://ec.europa.eu/avpolicy/reg/avms/index_en.htm. Accessed 30 April 2008.
Feigenbaum, H. B. (1996). Why Hollywood is like Japan, only better. *Business & the Contemporary World, 8*(1), 36–42.
Feigenbaum, H. B. (2002). Public policy and the private sector in the audiovisual industries. *UCLA Law Review, 49*(6), 1767–1781.
Feigenbaum, H. B. (2003). Digital technology jumps the border. *Scientific American Magazine, 288*(3), 78–83.
Feigenbaum, H. B. (2007). Hegemony or diversity in film and television? The US, Europe and Japan. *The Pacific Review, 20*(3), 371–396.
Feigenbaum, H. B. (2009). The paradox of television privatization: When more is less. *Policy and Society, 27*(3), 229–237.
Feigenbaum, H. B. (2011). America's cultural challenge abroad. *Political Science Quarterly, 126* (1), 107–129.
Fiumara, G. (1995). *The metaphoric process: Connections between language and life*. London: Routledge.
Gelles, D., & Edgecliffe-Johnson, A. (2011, May 4). Americans ditch TV in move to save money. *Financial Times*, p. 14.
Halle, R. (2002). German film, aufgehoben: Ensembles of transnational cinema. *New German Critique, 87* (Autumn), 7–46.
Henning, V., & Alpar, A. (2005). Public aid mechanisms in feature film production: The EU MEDIA Plus Programme. *Media, Culture & Society, 27*(2), 229–250.
Herold, A. (2004). EU film policy: Between art and commerce. *European Diversity and Autonomy Paper (EDAP) 3/2004*. http://aei.pitt.edu/6160/. Accessed 13 May 2011.
Hozic, A. (2001). *Hollyworld – Space, power, and fantasy in the American Economy*. Ithaca: Cornell University Press.
International Herald Tribune. (2005, 23 May). Television: Most-watched programs. *International Herald Tribune*, p. 10.
Izod, J. (1988). *Hollywood at the box office: 1895–1986*. New York: Columbia University Press.
Katzenstein, P. J. (2005). *A world of regions*. Ithaca: Cornell University Press.
King, D. (2002). *Americanisation and cultural diversity at home and abroad: Cultural factors in the decision making of the European Union*. Athens: Etablissements Emile Bruylant.
Lakoff, G. (2004). *Don't think an elephant! Progressive values and the framing wars – A progressive guide to action*. White River Junction: Chelsea Books.
Lakoff, G., & Johnson, M. (2003). *Metaphors we live by* (2nd ed.). Chicago: University of Chicago Press.
Lange, A. (2002). *The imbalance of trade in films and television programs between North America and Europe continues to deteriorate*. Press release, 9 April 2002. http://www.obs.coe.int/about/oea/pr/desequilibre.html. Accessed 6 May 2008.
Lange, A., & Newman, S. (2002). *Yearbook 2002 – Film, television, video and multimedia in Europe: Volume 5. Television channels – Programme production and distribution*. Strasbourg: European Audiovisual Observatory.
Lidtke, M. (2011, March 16). Netflix vying to acquire original TV series. *The Huffington Post*. http://www.huffingtonpost.com/2011/03/16/netflix-tv-series-rights_n_836713.html. Accessed 12 May 2011.
Louderback, J. (2011, May 4). The 7 biggest lies out of digital Hollywood. *Advertising Age Digital*. http://adage.com/article/digitalnext/7-biggest-lies-digital-hollywood/227365/. Accessed 13 May 2011.
Masters, C. (2001). French provincial. *The Hollywood Reporter, 367*(40), 14–15.

McPherson, C. (2000). EU policy inconsistency, market concentrations and satellite television: A specific case with pan-business implications? *European Business Review, 12*(2), 100–109.

Media Salles. (2006). *European cinema yearbook*. http://www.mediasalles.it/ybk07fin//. Accessed 9 May 2008.

Mercator-Media. (2011). *German South Tyrol*. http://www.aber.ac.uk/cgi-bin/user/merwww/index.pl?rm=lang_detail;id=118;lang=1. Accessed 11 May 2011.

Morawetz, N., Hardy, J., Haslam, C., & Randle, K. (2007). Finance, policy and industrial dynamics – The rise of co-productions in the film industry. *Industry and Innovation, 14*(4), 421–443.

OECD. (2008). Remaking the movies: Digital content and the evolution of the film and video industries. http://www.keepeek.com/Digital-Asset-Management/oecd/science-and-technology/remaking-the-movies_9789264043305-en#page1. Accessed 25 Mar 2014.

Stolzberg, J. (2011). Digital Hollywood 2011: Ted Kenney – 3D content evolves. A production director's perspective. http://www.hollywoodtoday.net/2011/05/08/digital-hollywood-2011ted-kenney-3d-content-evolves-a-production-directors-perspective/. Accessed 25 Mar 2014.

Stone, B. (2010, January 4). Trying to add portability to movie files. *The New York Times*. http://www.nytimes.com/2010/01/04/technology/04video.html. Accessed 11 May 2011.

UK Film Council. (2011). Distribution and exhibition. http://www.ukfilmcouncil.org.uk/distributionandexhibition. Accessed 12 May 2011.

UNESCO. (2001). Protecting our heritage and fostering creativity. http://portal.unesco.org/culture/en/ev.php. Accessed 25 Mar 2014.

U.S. Supreme Court. (1948). United States v. Paramount Pictures, Inc. – 334 U.S. 131 (1948). http://supreme.justia.com/cases/federal/us/334/131/. Accessed 24 Mar 2014.

The Business Pursuit of Local Governance: Extractive Industry and Civil Society for Public Accountability in Colombia

Ana Carolina González Espinosa

We are obviously interested in showing that we have a positive impact over the region where we work (said the company's employee). And we won't demonstrate this if we had not clear indicators of how the public budget (of the local government) has increased; but also if we don't have clear indicators of how such budget has been spent [. . .] We are those with the greater interest in a well spent budget, that is used for development and not for white elephants that are useless. (Personal interview with a Newmont employee (Newmont is a mining company and the main business partner of the gold company Yanacocha in Peru), Lima, November 24th, 2009.)

1 Introduction

This statement by a high-ranking employee at Newmont in Peru contextualises business interests in state and government functioning. It shows how companies are concerned with public accountability, and how they pay an increasing amount of attention to public servants' duty of reporting their actions to citizens as well as to the citizens' right of rewarding or sanctioning them (Goetz and Jenkins 2002). This gives the impression that private interest are aligned with the general interest of accountability and democracy reinforcement.

However, within the contemporary process of globalization, the interaction between business, political and social actors is ruled by different considerations. Businesses are often questioned on multiple levels. Various demands emerge from international NGOs, multilateral organizations, national and local authorities, and grassroots organizations and communities. For instance, debates in the extractive industry centre around what is considered the "resource curse": the fact that instead of promoting development, the abundance of natural resources in some countries

A.C. González Espinosa (✉)
Facultad de Finanzas, Gobierno y Relaciones Internacionales, Universidad Externado de Colombia, Calle 12 No. 1-17 Este, Bogotá, Colombia
e-mail: ana.gonzalez@uexternado.edu.co

A. Lang, H. Murphy (eds.), *Business and Sustainability*,
Sustainability and Innovation, DOI 10.1007/978-3-319-07239-5_9

provokes adverse effects on the economy and political system (Bjorvatn et al. 2012; Mehlum et al. 2005; Robinson et al. 2005; Ross 2013).

Companies' response to such an environment is not only reactive; it implies a proactive adaptation to new societal expectations on actions that, at the same time, have to be compatible with profit-maximization: the creation of renewed corporate political strategies. In this context, the perception of the Newmont employee is not an isolated case. Since the end of the 1990s, many companies have been getting explicitly involved in promoting good governance, involving "efforts by companies, either on an individual or collective basis, to account for their interactions with government, and where relevant, to participate in public policy dialogues and advocacy platforms and to help governments build public capacity, strengthen institutions and deliver public goods" (Nelson 2008: 2). Some argue that these tasks are a government's responsibility, for which companies have no democratic credentials (Nelson 2008). In fact, some companies avoid disclosing their activities in relation to programs aimed at reinforcing public sector capacities. They usually fear that these actions could be misinterpreted as an improper interference of multinational companies in internal country affairs.

However, this type of practices diffuse on a global scale and the oil & mining sector is very prolific in this regard.[1] The Extractive Industry Transparency Initiative (EITI) was launched in 2002 and it counts on the support of more than 80 companies to promote governments, companies and civil society agreements to publish information about the sector (González Espinosa and Klein 2013). But many other initiatives are being implemented on the national and local level. At least three of the largest mining & oil companies have programs to promote transparency, citizen participation or the strengthening of government capacities.[2] Therefore, despite the importance of environmental concerns for the extractive sector, these types of initiatives focus on the socio-economical dimension of sustainability. The objective here is to guarantee that natural resource extraction is translated into local development and improved quality of life for the population through extraction revenues or royalties.[3]

But why are for-profit organizations, whose aim is to extract natural resources and make profit, willing to invest time and money in promoting governance? Which

[1] See the Medicines Transparency Alliance (MeTA) and the Construction Sector Transparency Initiative (COST) in other sectors. At the national level, the Bulgarian 2000 Coalition or the National Anticorruption Forum in South Africa is also an example of these types of initiatives where private companies play a key role in public accountability promotion or public sector capacity building processes. There are even more specific programs, such as the one supported by the National Business Initiative in South Africa to reinforce public school administrative capacities (Educational Quality Improvement Programme) or a similar project in Brazil promoted by the American Chamber of Commerce (Instituto Qualidade no Ensino).

[2] Exxon Mobil (2011: 39), British Petroleum BP (2013 and 2011) and Shell, RioTinto (2011: 15), Anglo American and Newmont.

[3] For a deeper discussion on the multiple dimensions of sustainability, see the introduction of this book.

factors allow for some companies to get more involved than others? The present chapter intends to answer this question. Based on a case study in Colombia and more than 40 interviews with companies' employees, public servants and societal leaders, I analyze the motivations, interests and values that led an extractive company to engage in these types of initiatives.[4] The argumentation is organized in two parts. First, a theoretical framework is established that links public accountability and corporate political activity. Second, the case study of the Colombian Royalties Investment, Evaluation and Follow-up Committees (CSIR for its acronym in Spanish) highlights the factors that best explain a company intervention in sustainability issues related to the promotion of public accountability at the local level. The conclusions at the end will summarize the findings.

2 Promoting Public Accountability as a Corporate Political Activity: A Theoretical Framework

For the purpose of this chapter, citizen participation, transparency, state effectiveness or public sector capacities strengthening programs are conceived as public accountability initiatives. Accountability implies two elements. On the one hand, there is an obligation for public servants – including elected officials – to inform citizens about their decisions and to justify them. This is what Andreas Schelder calls "answerability" (2004: 12). According to John Ackerman (2003), accountability also demands public servants to accomplish the tasks assigned to them and, at the same time, consider the implications on policy goals. This element of accountability is called "receptiveness". By consequence, public servants should not only comply with their duties in a transparent and honest way, but also consider the results of the policies they implement (Behn 2001). On the other hand, accountability refers to the capacity of citizens to reward or punish the behaviour or achievements of public servants; that is, their enforcement capacity. Thus, the citizens' action, the pressure that is exercised from below to require a government to protect the rule of law and to fulfil their engagements is also part of accountability (Ackerman 2003). This control "from below" includes elections (vertical accountability) or any citizen initiative which aims at monitoring, evaluating or measuring policy effectiveness or the observance of the law, as well as denunciating corruption, inappropriate behaviour of public servants, etc. The latter is known as social accountability (Peruzzotti and Smulovitz 2002).

How can we explain the interest of extractive companies in these types of affairs? Can it be conceived as part of their involvement in sustainable development? A company is part of the larger social system with which it interacts and with which it is interdependent (Rival 2002: 18). Yet, some authors conceived

[4] This article is based on a PhD dissertation presented by the author in 2013 (González Espinosa 2013b). Two other case studies are analyzed in this dissertation.

companies as independent of their environment (Rojot and Bergmann 1989; Taylor 2003). Thus, their behaviour was perceived as exclusively opportunistic. Such was the consideration of the most liberal approaches but also of neo-Marxist analysis and even other studies of lobby and regulation or critical perspectives to Corporate Social Responsibility – CSR (Cutler 2008; Demsetz 1968; Easterbrook and Fischel 1991; Friedman 1970; Greer and Bruno 1996; Hart 2010; Harvey 2005). However, we consider that instead of assuming pre-established preferences from companies, it is important to empirically analyze their motivations and the environmental context which surrounds them (Lagroye François, and Sawicki 2006: 209; Swenson 2002; Woll 2007). Perceiving business intervention in sustainability issues, specifically public accountability promotion, as driven exclusively by profit-seeking, discards various important elements: (i) the possibility of advocacy from other groups – i.e. social activists – and their influence over a company; (ii) the different interactions between the company, the state and civil society in different contexts or countries, an idea that has been studied under the notion of "varieties of capitalism" (Hall and Soskice 2001); and (iii) the heterogeneity of actors, motivations, attitudes and political projects within a company.

Which factors can explain the intervention of a company in public accountability promotion? In general, the growing participation of the private sector in public affairs has been analyzed through the lens of Corporate Social Responsibility (CSR), defined as "firm efforts to do more in favor of a wider range of social and collective problems" (Vogel 2008: 6). As a discourse, CSR becomes an important contextual element that allows companies to justify their intervention in public accountability as a strategy to deal with social risks and reputation (Capron and Quairel-Lanoizelée 2004). However, the usefulness of the CRS concept as an analytical tool is debatable. Its level of abstraction and its common political and normative connotation bring up difficulties when using it as a reference for research (Carroll 2008). That is the reason why business intervention in public accountability is understood, in this chapter, as a corporate political activity (CPA), an activity conducted by a firm with the aim of producing a social or political environment or producing specific public policy results that are favourable to its survival and economic success (Skippari 2005).

Indeed, "although in most cases the primary competitive focus of firms is on their business rivals, there is no firm that is not confronted in one way or another with public bodies, government organizations, councils, committees, and regulatory agencies. The importance of government leads firms to develop strategies to react to, anticipate, and try to influence public decision making" (Wilts and Skippari 2007: 129). By conceiving the business intervention in public accountability as a CAP, we avoid the moral digressions between what is a responsible and irresponsible company. We also remain distant from the novelty perception implied in the CSR notion to understand the political interaction of the company with its environment from a historical perspective.

Business and politics literature has privileged the study of business collective action, lobbying and the varieties of capitalism emerging from business and government interactions in different countries (Coen and Grant 2006; Hall and Soskice

2001; Schmitter and Streeck 1985; Schmitter 1974; Schneider 2004; Wilson 2006; Woll 2007). Yet, this chapter focuses on the analysis of individual corporate political activity at the local level. According to Duane Windsor (2007), the conventional interaction between companies and government is not longer enough. In a globalized world where policies are the result of negotiations between multiple actors, in various countries and at different levels, companies must design strategies that can be adapted to each of these levels and arenas. In such a context, besides the state, other social and political actors and institutions have been targeted by corporate political strategies. Nonetheless, the institutional environment and business-state relations are taken into consideration as contextual factors in the emergence of the initiatives studied in this chapter.

Once business intervention in public accountability promotion is understood as a corporate political activity, the determinants of such activities need to be defined. The public policy "three i" framework (ideas, institutions and interests) that has been developed by John Campbell to the study of business activities (Campbell 2007; Palier and Surel 2005; Surel 2006) is used in order to better organize the paper's argumentation and classify the different factors that explain business intervention. First, the *ideas* dimension stresses the importance of cognitive and normative elements such as transparency and citizen participation. The subsequent section analyses if company interventions materialise these concerns and paradigms. Secondly, the *institutional* dimension conceptualizes how company interventions are related to inertias or changes in public policies or business-state-society relations. I aim at discovering whether these types of public accountability initiatives that are promoted by companies are a result of state regulation or incentives. I also examine how relations between the companies, public institutions and other national and local actors create an enabling environment for such initiatives. Finally, from the *interest* perspective, the strategic motivations or considerations that lead companies to get involved in these initiatives are studied.

It is worth mentioning that the "three i" perspective does not propose a strict application model but rather an analytical framework that allows hypothesis formulation in order to determine the weight of different variables in time (Surel 2006). The integration of these variables follows the approach developed by Crozier and Friedberg (1977), which states that the strategic reasoning about actors – their motivations, interests, preferences and contemplated opportunities for gain or loss – needs to be complimented with an analysis of the institution and belief system that surrounds them, as it conditions what is perceived as rational behaviour. Following this line of reasoning, the next section tries to define how important these different types of variables are in explaining the emergence of a company's intervention in a public accountability initiative at the local level in Colombia (see Fig. 1).

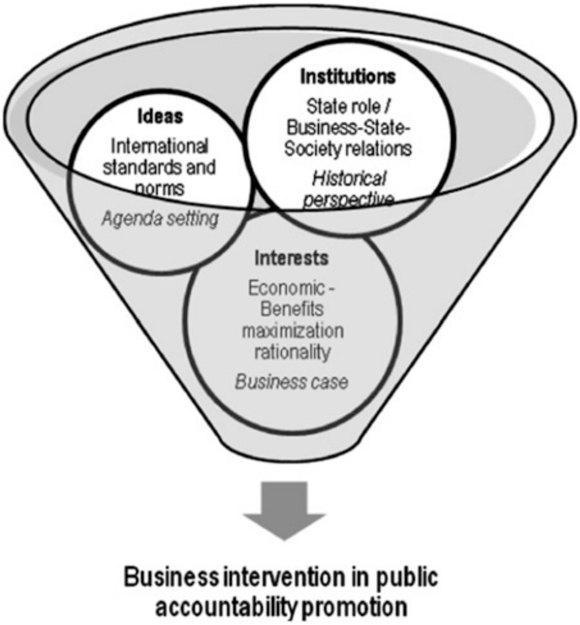

Fig. 1 Determinants of business intervention in public accountability promotion

3 An Oil Company Supporting Social *Accountability* for Royalties Management in Arauca, Colombia

In order to empirically define the determinants of business intervention in sustainability, particularly in public accountability promotion, a case study was selected to identify some trends that could afterwards be compared to other cases.[5] This section analyzes the factors explaining the intervention of the oil company *Occidental Petroleum de Colombia* (OXY)[6] to create, together with local civil society, a committee aimed at promoting better use of oil revenues (royalties) by local governments in Arauca.[7] The so-called *Comités de Seguimiento a la Inversión de las Regalías* – Royalties Investment, Evaluation and Follow-up Committees (CSIR,

[5] The PhD dissertation in which this chapter is based actually develops two other cases in Colombia and Peru.

[6] Occidental is a U.S. international oil and gas exploration and production company, which owns a chemical manufacturer subsidiary (OxyChem) and with more than 40,000 employees and contractors worldwide. In 2012, they produced 766,000 barrels of oil per day on average. OXY has important investments in the Middle East accounting for about a third of its production and owns some other projects in Latin America, especially in Colombia, where the most important field is Caño Limon in Arauca discovered in 1983 and exploited through a production sharing agreement with the Colombian state-owned company called Ecopetrol (see www.oxy.com).

[7] Royalties are an economic compensation paid to the Colombian state by companies that extract natural nonrenewable resources. A portion of such revenues is distributed to producing regions like Arauca located in the east of the country on the border with Venezuela.

for its acronym in Spanish) – was created in 2006 with the support of national oversight institutions (the fiscal control agency *Contraloría General de la República* and the disciplinary control institution *Procuraduría General de la Nación*) in different regions of the country. OXY that actually funds and leads the initiative, as well as regional university representatives, the regional chamber of commerce and other business associations, some grassroots and civil society organization delegates (including youth and indigenous people) are invited on *ad honorem* base to the Committee in Arauca. The company has hired an expert to assume the technical secretariat and to convene periodical meetings of the members where committee activities are organized. The main objective of CSIR is to "allow the pooled action of governmental actors; natural resource producing and transporting companies; and business, civil society and citizen oversight associations, with the purpose of monitoring royalties' adequate expenditure".[8] The committee was established in 2006. The analysis covers the period between its creation and the year 2011.

The CSIR-ARAUCA focuses on information dissemination activities (information bulletins, media statements, radio programs, press articles and more recently, Facebook groups). The technical secretariat (normally composed of a senior and a support professional) is in charge of collecting and processing of the information. Within these activities, it is worth mentioning the organization of accountability audiences where the Arauca authorities must deliver to citizens a formal rapport that indicates how oil royalties are being spent. The public servants are supposed to respond to all citizens' queries regarding the use of royalties. This is what one of the CSIR advisors later called "justification and explanation areas" (Maldonado 2009). Other types of activities developed by CSIR are related to training. The purpose is to provide all citizens with a basic knowledge about royalties management as well as budgetary and procurement processes. Additionally, CSIR builds capacities in civil society organizations so they can monitor the procurement processes and the execution of royalties-funded projects. Indeed, the CSIR is not directly engaged in this auditing and monitoring process except for specific projects, but it is expected that other social and civil organizations fulfil this role with CSIR support (González Espinosa 2013a).

The CSIR–Arauca emerges in a region marked by the economic and political influence of the company OXY. First, when OXY arrived, it positioned itself as the most important employer of the Arauca region. Additionally, the company became an ally of the state for public services delivery, but also as a source of public revenue – royalties – and political networking. In the 1980s, Colombian government entrusted an oil field in Arauca to OXY in order to counteract oil shortages, but it also used the oil project to re-establish socio-economic ties to that distant and abandoned region. OXY became a broker between national public institutions and local governments. In an intricate paternalistic relation with the local population and its political leaders, and despite the threat of powerful guerrilla forces in the

[8] PowerPoint presentation by Contraloría General de la República about CSIR, 2006.

area, the company consolidated its oil extraction activity. The state and civil society, far from being passive actors, helped legitimate the extractive industry. However, the new millennium brought new challenges for OXY such as the intensification of armed conflict, complaints of human rights abuse by military forces that were, at that time, an important ally of the company, and protests held by indigenous and environmental organizations. In addition, a general perception emerged that the abundant revenues earned through oil exploitation in the form of royalties were not producing the expected positive impact on local development. The initial optimism vanished as these numerous and further challenges mounted up: distortions in the economy, environmental impacts, reinforcement of illegal armed conflicts, difficulties in revenue management, etc.

One of these problems which received the greatest attention from the media and national authorities, particularly at the end of the 1990s, was the mismanagement of oil royalties at the local level. The misappropriation of public resources by local authorities and illegal armed groups and the funding of "white elephants" – expensive and useless public works – produced a negative impact on national and local public opinion. As a result, the main problem in revenue management was attributed to the local level (El Tiempo 2008). This diagnosis was reinforced by investigations administered by national institutions like the fiscal oversight institution, *Contraloría General de la República*, and the national executive planning and technical institution, *Departamento Nacional de Planeación*. Thus, leaving aside socio-environmental issues and other types of considerations regarding the impact of the extractive industry, local mismanagement was presented as the main problem and was exclusively attributed to local governments, but not to other national and local institutional actors that were related to revenue management or oversight. Such interpretation in terms of local politician's corruption created an enabling environment for the establishment of initiatives like CSIR and for the intervention of OXY. But, which factors specifically led to this emergency? Following the arguments pointed out in the theoretical framework, the importance of ideas, institutions and interests is assessed in explaining OXY's participation in the CSIR.

4 Ideas: Corporate Social Responsibility as an A Posteriori Norm to Justify OXY Intervention in CSIR

"Times are different" says an OXY employee when asked about the factors that enable the company's participation in CSIR.[9] The behaviour of the company has been transformed since the 1980s. At the beginning, OXY's and Ecopetrol's foundation *El Alcaraván* conducted several social programs, that focused mainly on farming projects (i.e. Alcaraván Farm) and on training activities. Progressively, they developed other micro-credit projects, health campaigns, alphabetization

[9] Personal interview with OXY employee, Bogotá, March 5th, 2010.

programs, etc. But, as the interviewed employee acknowledged, the company has changed and it recognizes new forms of community support. "Twenty years before, maybe the CSIR would not be possible [. . .] the inclusion of human rights within company's policies was fashionable, as transparency is today [. . .] it all starts by reasons of interests and benefits [. . .] and it is gradually promoted for reasons linked to belief and conviction".[10] The CSIR has been defined as a citizen participation mechanism that is guided by the principles of CSR, as it is confirmed not only by OXY but also by the Colombian oil business association. Thus, international paradigms or norms play an important role in the emergence of these type of corporate political actions. Companies, indeed, are key actors in norm emergence and dissemination (Flohr et al. 2010).

Despite the popularity of CSR norms, in 2004, when national oversight institutions invited different companies to promote these royalties' citizen monitoring committees in various regions, OXY was reluctant to the idea. Even when the company was continuously involved in community and public servant training, the fear of a more active role that could transform the neutrality they had assumed during the previous decades restrained company behaviour.[11] As a matter of fact, OXY established CSR measures relatively late compared to other companies in the extractive industry. Their first CSR report was published in 2005.[12] The company had reinforced their safety provisions through a new health, environment and safety system (HES) with the aim of reducing accidents and work-related illness. Only some time later did the aim change to obtain environmental certifications (i.e. *Wildlife at Work)*. Other efforts centred on the hiring of local employees and workforce well-being.

Around the year 2000, the company signed the Sullivan Principles, a framework that covers human rights, equal opportunity, freedom of association, and community development.[13] In 2003, they also started to implement the Voluntary Principles on Security and Human Rights in Colombia.[14] Demands and criticism regarding OXY's role in the middle of the armed conflict affecting Arauca induced those changes. As a result, in 2004, the board of directors of the company adopted a human rights policy that, even today, remains the basis of their CSR program (Occidental Petroleum Corporation – OXY 2004, 2011). In 2007, OXY integrated CSR standards into their HES system. But when the idea of participating in the CSIR came up, CSR paradigms were scarcely embraced and did not guide company action regarding public affairs or democracy promotion. In consequence, even if the CSR discourse is present in CSIR, it is hard to situate this activity as a product of

---

[10] Personal interview with OXY employee, Bogotá, March 5th, 2010.

[11] Personal interviews with the state-owned oil company *Ecopetrol*, Bogotá, March 14th, 2008, with a public servant at *Contraloría General de la República*, Bogotá, March 6th, 2008, and with a *Petrobras* employee, Bogotá, March 7th, 2008.

[12] Personal interview with a former OXY employee, Bogotá, March 7th, 2012.

[13] http://www.thesullivanfoundation.org/The-Global-Sullivan-Principles.html

[14] http://www.voluntaryprinciples.org

OXY's new CSR strategy. The notion seems to be integrated *a posteriori* to the program. On the contrary, the company's intervention in public accountability seems to be related to a former concern for local management of oil revenues, increased by the alarms raised by the media and national institutions. The next section explores how the national context together with historical local company interactions have induced a certain evolution of the way that OXY perceived its role regarding these topics.

5 Institutions: The State and Business-State-Civil Society Relations as a Key Factor for OXY's Participation in CSIR

The institutional dimension questions the impact of state regulations and State-Business-Civil Society relations on the establishment of CSIR. An OXY employee points to the crucial role of the state: "I have to recognize that if the *Contraloría* in that moment would not have had the idea of inviting us, explaining that their intervention [in revenue management control] was late [...] and that they needed our contribution, [CSIR would not exist]".[15] As mentioned before, it was this fiscal oversight institution that together with the *Procuraduría* invited extractive companies to join the CSIR. In Arauca, the support of these institutions and their then very well-known directors convinced OXY to participate.[16] This leadership of state institutions as promoters of business intervention in public accountability can be linked to three specific elements of the Colombian institutional context.

This context includes, first, the prevalence of public institutions in debates around royalties' management during the 1990s and the 2000s. Actions directed towards fighting corruption in oil and mining revenues were promoted by national public authorities and not so much by social movements or civil society pressure. Some civil society monitoring processes existed but public authorities clearly dominated the debate. A second element was more related to a circumstantial fact. Since 2001, the fiscal and disciplinary oversight bodies were administered by leaders coming from regions where there has been a big concern around royalties' management. In 2003, an agreement was signed between these two authorities and the public prosecutor's office in order to fight corruption. CSIR was included as part of the strategy.[17] The last contextual factor that triggered OXY's participation in CSIR were regulations set up by the national government that gradually added more restrictions on business activities. In particular, the

[15] Personal interview with OXY employee, Bogotá, March 5th, 2010.

[16] Personal interviews with the state oil company *Ecopetrol*, Bogotá, March 14th, 2008, and with an employee of a oil transportation company, Bogotá, April 4th, 2008.

[17] Assessment of the agreement subscribed by *Procuraduría General de la Nación, Fiscalía General de la Nación and Contraloría General de la República*, July 12th, 2005.

environmental licensing process obliged companies to assess and design actions to reinforce state capacities at the local level (Ministerio de Ambiente, Vivienda y Desarrollo Territorial 2010).

Aside from these contextual elements affecting state institutions, state-business relations are frequently characterized as cooperative in Colombia (Rettberg 2005; Schneider 2004; Thorp and Durand 1997; Thorp 1991). Although the strength of business associations decreased with the emergence of more business groups (Thorp and Durand 2004), the relation between business leaders and the government is still supportive. Within the oil sector, the main business association is the *Asociación Colombiana de Petróleos* (ACP) created by the end of the 1990s. The ACP maintains different dialogues with the government (government-Industry agreements; risk analysis; security, social and environmental guides; the Mining and Energy Committee, etc.). It was in these dialogues platforms that the necessity for companies to contribute to local governance was raised. In fact, ACP supported CSIR and played an important role convincing companies of the benefits of such an initiative.

At the local level, OXY interaction with public institutions and civil society organizations seemed to trigger company participation in CSIR. It was already indicated that since its arrival, the company established multiple alliances with national institutions, followed by cooperation with local governments. In relation to civil society, the population realized from the beginning that the company could help solve immediate or short term needs and many organizations asked OXY for resources, employment or social investment. In general, the extractive activity was not questioned in itself, nor was the intervention of the company in social affairs rejected; on the contrary, more involvement was requested.[18] Despite the tensions related to environmental concerns and important demands by indigenous populations (see Rodríguez et al. 2010) and human rights organizations, the company intervention for the promotion of public accountability in royalties management is mostly accepted, especially in urban areas. For some organizations, even a more decisive intervention would be welcomed.[19] At least, the participation of some grassroots and indigenous organizations within the CSIR demonstrates that they accept the OXY intervention in these affairs, and that labour, environmental or social conflicts can be managed separately and do not prevent interactions at CSIR.

In sum, evidence suggests that OXY's intervention for public accountability promotion depends greatly on an institutional configuration that favours its existence. This is not only because of state regulation and incentives or traditional national relations between the private and public sector, but also as a result of the local configuration of actors' interactions and the history of the company in the

[18] Personal interview with a former OXY employee, Bogotá, March 7th, 2012.

[19] Personal interviews with a public servant at the regional office of *Contraloría General de la República*, Arauca, April 22th, 2010, with a manager of the Chamber of Commerce, Arauca, April 22nd, 2010, and with an expert and consultant at *Procuraduría General de la Nación*, Bogotá, April 20th, 2010.

region. In consequence, this case study shows that it is necessary to balance the weight that norms or international standards have in the emergence of business intervention for sustainability. The national context and the traditional business-society relations also play an important role.

6 Interests: CSIR as an OXY Corporate Political Strategy to Reduce Social Risk in Arauca

A number of extractive companies in Colombia were not as excited as OXY with regard to the proposal of national oversight institutions to promote citizen control over local government's royalties' management. As a result, these companies decided not to implement CSIR in their regions. Thus, apart from the institutional environment, it is necessary to consider interests factors and determine in this section if there is an economic rationality behind OXY's participation in CSIR.

There is a historical background in the establishment of social programs as corporate political activities at OXY, even in relation to royalties' management. According to a former employee, the company had a political oriented strategy that included establishing cooperative relations with public and private organizations, but also with individuals, so that anyone in the region would have something to win from OXY's presence.[20] There was even a political message to disseminate though some social programs. The farming initiatives included a capacity building component for local organizations that, besides contributing with technical knowledge, taught the leaders how to engage in cooperative relations. "[For] a company the goal is establishing relations, networking, social capital, and the mean is alphabetization, agriculture or any other program. That does not indicate that it is a bad quality social program, it is just a different logic", said the former employee that was interviewed.[21] In addition, OXY served as a broker between national and local public institutions because OXY management was convinced that if local governments could not provide the social services society expected, people would ask the company to provide them.[22]

OXY's intervention at CSIR Arauca is framed within a strategy that seems reasonable for the company. Given the violent context, the risk analysis conducted by the company identified severe security concerns. However, the topic of royalties gradually started to become a problematic issue, also because these revenues increasingly became a kind of booty to the rebels.[23] In the opinion of an oil business consultant close to OXY, the mismanagement of royalties produced vulnerability

[20] Personal interview with a former OXY employee, Bogotá, March 7th, 2012.

[21] Personal interview with a former OXY employee, Bogotá, March 7th, 2012.

[22] Personal interview with a former OXY employee, Bogotá, March 7th, 2012.

[23] Personal interview with a manager at Asociación Colombiana de Petróleo (ACP), Bogotá, March 4th, 2010.

over the operational sustainability of the extractive activity, because the population demands from the company everything they cannot obtain from the government.[24] For company managers, this implies not only an additional cost for the company but also a risk of confrontation and even the possibility that some community members will decide to join guerrilla forces looking for economic opportunities.[25] Thus, it was a risk that needed to be managed.

Another former OXY employee explained: "The risk is directly proportional to the task and inversely proportional to competences [. . .] If the risk is both for the company and the state, then the competence that is needed requires a combination of company and state efforts [. . .] To reinforce state capacities to deal with a common task is then a common interest".[26] Another employee indicated: "These [type of strategies] relieve the company. It can't be true that the nearby community relies on 100 % on the industry and that they prefer to ask the company for their well-being instead of asking their authorities. [It is absurd that] they rather prefer to protest asking for a job, instead of asking how much revenues the politicians are keeping for their private pockets".[27] Additionally, in cost-benefits terms, the initiative was interesting not only because of the expected outcomes, but because of the very few resources required. The amount of money invested by OXY was estimated at 150,000 U.S. dollars annually.

Public accountability promotion at the local level is then a corporate political activity associated to the strategic interest of reducing risks. Even if, as a result, better management of oil royalties can only be achieved in the long term, the fact that the population was aware that they should ask their authorities for responses and not the company, as well as the company being perceived as the population's partner in the search for an effective and efficient revenue administration, is already an achievement for OXY. Additionally, such an initiative disseminates the image of a company that is concerned with local development and opens new interaction spaces that help the enterprise manage their reputational risks and increase their legitimacy.

7 Conclusions

Business participation in sustainability issues can take different forms. Not only has it gone beyond environmental concerns including economic and social dimensions, but it has made an incursion into more political affairs. Promoting public accountability – transparency, citizen participation, state efficiency and efficacy – implies

[24] Meeting with various business representatives associated to the different regional CSIRs in Colombia, March 5th, 2008.

[25] Personal interview with an OXY employee, Bogotá, March 5th, 2010.

[26] Personal interview with a former OXY employee, Bogotá, March the 7th, 2012.

[27] Personal interview with OXY employee, Bogotá, March 5th, 2010.

an entry into the core of public policy-making and state functioning. Exploring the factors that lead companies, and particularly extractive companies, to such interventions has been the objective of this chapter. The thick description of the role of the oil company *Occidental de Colombia* (OXY) in the promotion of a citizen committee (CSIR) aimed at monitoring how local governments spend oil revenues (royalties) allows to define some trends in corporate political activities.

CSR norm dissemination has increased in the last decades. CSR is often used to justify business actions. Nevertheless, such cognitive factors are insufficient to explain OXY's intervention in CSIR Arauca. Institutional variables seem to be more important for explaining corporate political activity. Both, the active role of the Colombian state and the type of business-state-civil society relations prevailing in the country are key elements for business participation in public accountability promotion. However, corporate political activities cannot just be understood as a result of external pressures or incentives. Economic or political benefit-maximization rationality behind business intervention is crucial to weigh its scope and impact. In OXY's case, it is clear that CSIR represents a strategy to reduce social but also operational risks. At the same time, it improves reputation and stakeholder management at the local level. In consequence, the simultaneous analysis of different variables contributes to a more nuanced and realistic analysis of business intervention in sustainability. As proposed by Michel Crozier and Erhard Friedberg, these logics could seem opposite and research could tend to define whether the system induces the actor to a certain behaviour or whether the actor's rationality dictates it (Crozier and Friedberg 1977: 233). Instead, as they consider and it is also suggested by our analysis, actors' strategies are rational in relation to the system within they exist (Crozier and Friedberg 1977: 233).

Important questions remain that need to be answered regarding the initiatives analyzed. How are these mechanisms implemented? Which type of business-state-civil society relations are they based in? How are they supposed to transform them and what are the impacts on local governance and development? This chapter has focused on analyzing determinants of business political activities; it would be a matter of future contributions to establish the consequences of business intervention for public accountability itself.

References

Ackerman, J. (2003, April). *State-society synergy for accountability: Lessons for the World Bank*. Civil Society Team, Latin America and the Caribbean Region, The World Bank, Washington.

Behn, R. D. (2001). *Rethinking democratic accountability*. Washington, DC: Brooking Institution Press.

Bjorvatn, K., Reza Farzanegan, M., & Schneider, F. (2012). Resource curse and power balance: Evidence from oil-rich countries. *World Development, 40*(7), 1308–1316.

British Petroleum (BP). (2012). *Building a stronger, safer BP: BP in Azerbaijan*. Baku: BP.

British Petroleum – BP. (2013). Sustainability. Financial Transparency.

Campbell, J. L. (2007). Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. *Academy of Management Review, 32* (3), 946–967.

Capron, M., & Quairel-Lanoizelée, F. (2004). *Mythes et réalités de l'entreprise responsable. Acteurs, enjeux, stratégiques*. Paris: La Découverte.

Carroll, A. B. (2008). A history of corporate social responsibility. Concepts and practices. In A. Crane, A. Mcwilliams, D. Matten, J. Moon, & D. S. Siegel (Eds.), *The Oxford handbook of corporate social responsibility*. New York: Oxford University Press.

Coen, D., & Grant, W. (Eds.). (2006). *Business and government: Methods and practices*. Opladen: Barbara Budrich Publishers.

Crozier, M., & Friedberg, E. (1977). *L'acteur et le système*. Paris: Éditions du Seuil.

Cutler, A. C. (2008). Problematizing corporate social responsibility under conditions of late capitalism and postmodernity. In *Authority in the global political economy* (pp. 189–216). Basingstoke/New York: Palgrave Macmillan.

Demsetz, H. (1968). Why regulate utilities. *Journal of Law and Economics, 11*(1), 55–65.

Easterbrook, F., & Fischel, D. (1991). *The economic structure of corporate law*. Cambridge, MA: Harvard University Press.

El Tiempo. (2008, February 10). *Regalías siguen siendo botín*el tiempo is a newspaper.

Exxon Mobil Corporation. (2011). *Economic development: Transparency*. Corporate Citizenship Report. http://www.exxonmobil.com/Corporate/Files/news_pub_ccr2011.pdf

Flohr, A., Rieth, L., Schwindenhammer, S., & Wolf, K. D. (2010). *The role of business in global governance. Corporations as norm-entrepreneurs*. Basingstoke: Palgrave Macmillan.

Friedman, M. (1970, September 13). The social responsibility of business is to increase its profits. *The New York Times Magazine*.

Goetz, A. M., and Jenkins, R. (2002, April). *Voice, accountability and human development: The emergence of a new agenda*. New York: United Nations Development Programme.

González Espinosa, A. C. (2013a). ¿La sociedad civil como 'conjuro' a la maldición de los recursos naturales? Vigilancia ciudadana a la renta extractiva en Colombia y Perú. In A. C. González Espinosa (Ed.), *Los retos de la gobernanza minero-energética*. Bogotá: Universidad Externado de Colombia.

González Espinosa, A. C. (2013b, September 19). *Empresas y promoción del accountability público para la gestión local de la renta extractiva. Genealogía y dinámicas de la acción política empresarial en Colombia y Perú*. Ph.D. thesis, Institut d'Etudes Politiques de Paris, Paris.

González Espinosa, A. C., & Klein, A. (2013). The EITI transparency standard: Between global power shifts and local conditionality. In J. T. Nem Singh & F. Bourgouin (Eds.), *Resource governance and developmental states in the global south: Critical international political economy perspectives* (pp. 107–124). London: Palgrave Macmillan.

Greer, J., & Bruno, K. (1996). *Greenwash: The reality behind corporate environmentalism*. Penang: Third World Network.

Hall, A., & Soskice, D. (2001). *Varieties of capitalism: The institutional foundations of comparative advantage*. Oxford University Press. Recuperado a partir de www.people.fas.harvard.edu/~phall/VofCIntro.pdf

Hart, D. M. (2010). The political theory of the firm. In D. Coen, W. Grant, & G. Wilson (Eds.), *The Oxford handbook of business and government* (pp. 173–190). Oxford/New York: Oxford University Press.

Harvey, D. (2005). *A brief history of neoliberalism*. Oxford: Oxford University Press.

Lagroye, J., François, B., & Sawicki, F. (2006). *Sociologie Politique*. París: Presses de Sciences Po, Dalloz.

Maldonado, A. (2009). *Comités de Seguimiento a la Inversión de Regalías (CSIR)*. Presentation given at Arauca in February 2009.

Mehlum, H., Moene, K., & Torvik, R. (2005). Cursed by resources or institutions? Norwegian University of Science and Technology, Working Paper series.

Ministerio de Ambiente, Vivienda y Desarrollo Territorial. (2010). *Términos de Referencia, Sector hidrocarburos, Estudio de Impacto Ambiental, Proyectos de Explotación de Hidrocarburos*. Bogotá: Ministerio de Ambiente, Vivienda y Desarrollo Territorial.
Nelson, J. (2008). CSR and public policy. New forms of engagement between business and government. Cambridge, MA: Harvard University *Corporate Social Responsibility Initiative – Working Papers*.
Occidental Petroleum Corporation (OXY). (2004, December 7). Occidental adopts human rights policy. http://www.iccr.org/news/press_releases/2004/pr_oxy120704.htm
Occidental Petroleum Corporation (OXY). (2011). *Informe de responsabilidad social empresarial 2010. Crecimiento con responsabilidad*. Los Angeles: OXY.
Palier, B., & Surel, Y. (2005). Les trois «i» et l'analyse de l'État en action. *Revue française de science politique, 55*(1), 7–32.
Peruzzotti, E., & Smulovitz, C. (Eds.). (2002). *Controlando la Política. Ciudadanos y Medios en las nuevas democracias latinoamericanas*. Buenos Aires: Temas Grupo Editorial.
Rettberg, A. (2005). Business versus business? Grupos and organized business in Colombia. *Latin American Politics and Society, 47*(1), 31–54.
Rio Tinto. (2011). Community contributions and activities guidance. http://www.riotinto.com/documents/Community_contributions_and_activities_guidance_2011_2014.pdf
Rival, M. (2002, December 18). *L'action politique des entreprises: Pluralité des stratégies et contribution à la création de valeur pour l'actionnaire. Comparaison France/Grande-Bretagne* (Doctorado en Ciencias de la Gestión). Université de Paris 1 – Panthéon Sorbonne – Institut d'Administration des Entreprises – Ecole doctorale "Sciences de gestion/ED 118", Equipe de recherche "GREGOR/EA 123", París.
Robinson, J. A., Torvik, R., & Verdier, T. (2005). *Political foundations of the resource curse*. Presentado en Conference to celebrate Pranab Bardhan's tenure as editor of the Journal of Development Economics, Oslo. http://www.svt.ntnu.no/iso/ragnar.torvik/bardhanjde.pdf
Rodríguez, G. A., Ardila Ibagon, C., & Puentes Vargas, A. (2010). El Laberinto Jurídico de los U'was en ejercicio del derecho a las resistencia. *Diálogo de Saberes, 32*, 173–193.
Rojot, J., & Bergmann, A. (1989). *Comportement et organisation*. París: Vuibert Gestion.
Ross, M. (2013, October 16). *The politics of the resource curse: A review*. SSRN Working Paper. http://ssrn.com/abstract=2342668 or http://dx.doi.org/10.2139/ssrn.234266
Schedler, A. (2004). *Qué es la rendición de cuentas?* México: Instituto Federal de Acceso a la Información Pública, IFAI. http://inicio.ifai.org.mx/Publicaciones/cuadernillo3.pdf
Schmitter, C. (1974). Still the century of corporatism? *The Review of Politics, 36*(01), 85–131.
Schmitter, C., & Streeck, W. (1985). *Private interest government: Beyond market and state*. London: Sage. Recuperado a partir de http://ceses.cuni.cz/CESES-118-version1-2_1_3_Streeck_and_Schmitter.pdf
Schneider, B. R. (2004). *Business politics and the state in twentieth-century Latin America*. Nueva York: Cambridge University Press.
Skippari, M. (2005, enero 14). *Evolutionary patterns in corporate political activity. Insights from a historical single case study*. Thesis for the degree of Doctor of Philosophy, Tampere University of Technology, Finland.
Surel, Y. (2006). Trois i. En *Dictionnaire des politiques publiques* (2.ª ed), (pp. 454–461). Paris: Sciences Po Le Presses.
Swenson, P. (2002). *Capitalism against markets. The making of Labor markets and welfare states in the United States and Sweden*. New York: Oxford University Press.
Taylor, F. W. (2003). *Scientific management* (K. Thompson, Ed., Vol. 1). New York: Routledge.
Thorp, R. (1991). *Economic management and economic development in Peru and Colombia*. Pittsburgh: University of Pittsburgh.
Thorp, R., & Durand, F. (1997). A historical view of business-state relations: Colombia, Peru and Venezuela compared. In S. Maxfield & B. R. Schneider (Eds.), *Business and the state in developing countries* (pp. 216–236). Ithaca/Londres: Cornell University Press.

Thorp, R., & Durand, F. (2004). Colombia, Perú y Venezuela: Una revisión histórica de las relaciones Estado-empresa. In *El poder incierto. Trayectoria económica y política del empresariado peruano*. Lima: Fondo Editorial del Congreso del Perú.

Vogel, D. (2008). *Le marché de la vertu. Possibilités et limites de la responsabilité sociale des entreprises*. París: Economica.

Wilson, G. K. (2006). Thirty years of business and politics. In D. Coen & W. Grant (Eds.), *Business and government: Methods and practices* (pp. 33–50). Opladen: Barbara Budrich Publishers.

Wilts, A., & Skippari, M. (2007). Business–government interactions in a globalizing economy. *Business and Society, 46*(2), 129–135. doi:10.1177/0007650307301385.

Windsor, D. (2007). Toward a global theory of cross-border and multilevel corporate political activity. *Business and Society, 46*(2), 253–278.

Woll, C. (2007). From national champions to global players? Lobbying by network operators during the WTO's basic telecommunication negotiations. *Business and Society, 46*(2), 229–252.

Part V
Conclusions

Business and Sustainability: A Synopsis

Achim Lang

1 Introduction

The chapters in this edited book investigated how business deals with different issues of sustainability. The aim of achieving sustainability seems to be widely accepted. However, Aysnley Kellow reminds us that the sustainability discourse has taken several turns and thus far is still contested in the academic and business community. Aynsley Kellow gives a critical and detailed account of the history of the concepts “sustainable development” and “sustainability” and highlights their contested nature. In citing Worster, Kellow argues that the concept of sustainable development was established to blur the environmentalism of the Northern hemisphere with the development needs of the South. However, clear definitions and operationalisations of the concepts are still missing. According to Kellow, it is still unclear what exactly should be sustained, where it should be sustained and for how long. The underlying assumption is that of a balanced nature in which biodiversity has reached an equilibrium. The demands to sustain biodiversity are frequently raised by environmentalists and activists who attribute any change in the level of biodiversity to choices made by humans. While Kellow takes up several streams of criticisms to the concept of sustainability, he also concedes that business has accustomed itself with these new concepts. He identifies basically three approaches to the sustainability discourse. First, business has put innovation at the forefront of its activities. New and more environmentally-friendly products and productions processes help aligning business activities with demands for more sustainability. Third party product certification programs, often coordinated by NGOs, are another instrument to counter critics. Thirdly, some business interest profit form policies designed to sustain biodiversity. These interests lobby for more sustainability

A. Lang (✉)
Department of Politics and Public Administration, University of Konstanz, Universitätsstr. 10, 78464 Konstanz, Germany
e-mail: achim.lang@uni-konstanz.de

A. Lang, H. Murphy (eds.), *Business and Sustainability*,
Sustainability and Innovation, DOI 10.1007/978-3-319-07239-5_10

related government programs and regulations, while other business interests defend the status quo.

In this book, the authors investigated business self-regulation and corporate commitments geared towards more sustainable environments. In the introduction, four dimensions of sustainability were outlined that, at their heart, share the assumption that it is necessary and worthwhile to preserve the current level of environmental, economic, social and cultural capital as well as their internal diversity. Environmental sustainability demands the responsible extraction of natural resources as well as the conservation of biodiversity. Economic sustainability requires a diversity of industry structure and consumption patterns. Social sustainability demands increases in quality of life, social justice, and social coherence. Cultural sustainability requires the preservation of cultural artefacts, traditions and rituals.

The demands for sustainability have set new challenges for business behaviour and collective action. The most frequently mentioned challenge is that business activities related to sustainability issues have no direct or positive impact on the corporate balance sheet. Furthermore, business activities directed towards long-term business prospects often collide with expectations and demands of more short-term oriented investors and shareholders. Often, demands for sustainability require business collective action and governance over a wide range of organizations: governments, international organizations, NGOs or industry associations.

In his chapter on the politics of sustainability, Schmitter elaborates on a comprehensive set of dimensions and propositions about the political sphere of sustainability. Although his arguments remain essentially prescriptive, they may also serve to guide the empirical chapters and to put these into perspective. His starting point is that the Brundtland report identified a novel set of problems, but also came up with a conventional political problem solving strategy. Schmitter argues that the report demanded a fundamental reform of the economic system without requiring a complete overhaul of the political system as well. Schmitter suggests that initial steps to reform the politics of sustainability include four dimensions.

The first dimension comprises of the structural component which he dubs governance rather than government. Problem solving continuously takes place in informal, often transnational, policy networks in which many actors exert some degree of authority or possess important resources. These actors might be public, private, non-profit or private for-profit. The common denominator is their awareness of mutual interdependence.

This dimension may serve as an empirical guideline for a comparison of the book chapters. Accordingly, governance in sustainability issues should involve a variety of actors, among them companies and industry associations. Schmitter furthermore stipulates that such governance arrangements should be self-enforcing. However, he asserts that the complete voluntariness of self-regulation is rather utopian, since most arrangements obtain support from governments which monitor and eventually enforce agreements. This normative prescription lends itself for empirical testing. Accordingly, one would assume that business self-regulation is the exception and co-regulation is the norm.

The second dimension is the level of comprehensiveness which calls for the coordination of a huge variety of actors among multiple, autonomous and sometimes nested domains. According to Schmitter, governance arrangements are more effective and efficient when they are partial, meaning few involved actors and high levels of interdependence. This might lead to the paradoxical situation that partial efforts at functional problem-solving aim to reach a comprehensive objective. This dimension could also be transferred into a testable proposition: Partial efforts to sustainability are more likely and successful than comprehensive efforts.

The third dimension is related to the comprehensiveness dimension in that it requires regional solutions that transcend nation states but below the global level. Although there is just one earth, one ecosystem and an increasingly integrated world economy, global efforts are more prone to defection than agreements on the regional level such as the European Union, NAFTA, MERCOSUR, ASEAN, etc. This intermediate level between the global and nation state is more suited to lead to continued cooperation than global arrangements. Again, one might test the argument that the regional level is more fruitful for industry cooperation and public-private coordination than the global arena.

The fourth dimension involves a plea for less technocratic problem solving and instead, more humanist action. Schmitter argues that technological innovation must be accompanied by social and cultural changes as to ensure a more long-term perspective on the politics of sustainability. Again, an empirical testable proposition can be derived: technological change requires new forms of cooperation and coordination.

This chapter provides a comparative assessment of the previous empirical chapters and relates their empirical findings to the propositions put forth by Schmitter. Futhermore, the motivations of business to join the collective action and self-regulatory regimes are taken into account. The argument proceeds as follows. The next section describes the dimensions of sustainability that were analysed in the empirical chapters. Then, the different forms of business participation are compared. The final section provides a comparative assessment of enabling factors which either nudge or enforce business participation in sustainability policies.

2 Perspectives on Sustainability

The chapters in this edited book address different dimensions of sustainability (see Table 1). The chapter of Karsten Ronit on business self-regulation in consumer policy highlights the economic dimension of sustainability. As we have outlined in the introductory chapter, economic sustainability denotes viable business strategies and the functioning of markets (Dyllick and Hockerts 2002). Dyllick and Hockerts argue that sustainable business strategies meet “the needs of a firm’s direct and indirect stakeholders (such as shareholders, employees, clients, pressure groups, communities etc.) without compromising its ability to meet the needs of future

Table 1 Dimensions of sustainability

	Chapter	Environmental sustainability	Economic sustainability	Social sustainability	Cultural sustainability
Karsten Ronit	"Global Business Associations, Self-Regulation and Consumer Policy"		●		
Tony Porter	"The Political Economy of Private Management of High Impact Low Probability Risks in Finance and the Environment"	●	●		
Wyn Grant	"Environmental and Regulatory Sustainability of Biopesticides"	●	○		
Achim Lang, Thomas Malang, and Volker Schneider	"Product Labelling and Standards: Business Participa tion in Energy Efficiency Regimes"	●	○		
Harvey Feigenbaum	"Sustaining Cultural Diversity when Faced with Changing Technologies"		○		●
Ana Carolina González	"The Business Pursuit of Local Governance: Extractive Industry and Civil Society for Public Accountabil ity in Colombia"		○	●	

Note: Black circles mean primary, empty circles secondary issue stakeholders as well" (Dyllick and Hockerts 2002: 131). In his chapter on consumer policy, Karsten Ronit focuses on the aspect of sustainable markets which includes the position of consumers as a kind of countervailing power against privileged companies manipulating market signals.

As can be seen from Table 1, Ronit's chapter is the only chapter that exclusively deals with the economic dimension of sustainability. Other chapters consider the economic dimension as a secondary issue. Tony Porter focuses on economic sustainability in the finance sector and the automobile industry. In both cases, current business operations threaten future operations since these may result in High Impact Low Probability (HILP) risk events such as the global financial crisis. Apart from economic consequences for the industries under study, the automobile sector also has some tremendous effects on environmental pollution and the extraction of non-renewable resources. These effects are clearly situated within the environmental sustainability dimension, which includes the preservation of biodiversity with reduction and management of waste emissions and higher rates of renewable sources. Additionally, sink capacities to absorb outputs and wastes are also part of the environmental sustainability agenda (Goodland 1995; Sands and Podmore 2000).

Other chapters also explore the viability of business strategies and link these to their primary dimension of sustainability. Wyn Grant analyzes the regulation of biopesticides in Britain and the Netherlands. Biopesticides are plant protection products which are necessary to guarantee the food supply but, in contrast to chemical products, pose significantly less strain on biodiversity. The issue of economic sustainability plays a vital role in Grant's chapter since the newly established biopesticide industry struggles to survive in an environment that is dominated by multi-national companies.

Achim Lang, Thomas Malang, and Volker Schneider analyse business participation in energy-efficiency programs, namely labelling and standards. Their analysis covers the reduction of the non-renewable resource dimension of environmental sustainability. If more energy-efficient household appliances are used, less non-renewable energy resources are consumed. The industry perspective again is related to economic sustainability. The dominant business model of low energy-efficient household appliances is considered to be unsustainable. As a result, business initiatives to implement new and more environmentally-friendly products have to be set up.

Harvey Feigenbaum covers the cultural dimension of sustainability, referring to the diversity of national audiovisual media and content which has come under strain from technological change. National culture, transported via radio and television, has increasingly been challenged by U.S.-dominated broadcasting content that is now distributed via various communication channels. As a result national policies that aim to conserve national broadcasting content are circumvented.

Ana Carolina González Espinosa focuses on the social sustainability dimension, which basically refers to the diversity and maintenance of social values, identities, relationships, equity and institutions (Dempsey et al. 2011; Moldan et al. 2012). She analyzes the adverse effects of resource abundance on social and political practices and institutions. In particular, she investigates efforts by business to make government more accountable. She asks whether the participation of business in policy dialogues, arenas and advocacy platforms helps to strengthen public and societal institutions and, as a result, deliver better policy outputs and outcomes.

3 Forms of Business Participation

The introductory chapter of this edited book discussed two main routes of business participation in sustainability issues. First, the most prominent business strategy regarding issues of sustainability has long been pressure politics to avoid governmental action. Second, when business does participate in sustainability policy-making or governance, one speaks of company or industry self-regulation. In cases where governmental action is guaranteed to occur, business might also set up voluntary instruments to avoid direct governmental interference.

Pressure politics and business self-regulation are still the prevalent forms of business participation in sustainability issues. However, the empirical chapters reveal that business participation differs substantially across dimensions of sustainability (see Table 2).

Karsten Ronit reports several forms of business participation in the international arena. He argues that the scope of consumer issues is at least partly determined by the scope of business collective action. Industry initiatives usually issue sectoral guidelines such as marketing principles (beverage industry) or safety audits (airline industry) that provide benchmarks for companies. Sectoral business associations play a vital role in the establishment of these guidelines as they provide forums for dialogue between member companies as well as a means to monitor compliance within these guidelines.

Tony Porter details several governance arrangements that include business. In the automobile sector, business takes part in several co-regulatory regimes. In 1998, the European Commission and the European automobile manufacturer branch association signed a voluntary agreement to reduce carbon emissions by 25 % until 2008. Furthermore, industry representatives and representatives from oil companies joined the WBCSD-led Sustainable Mobility Project. Apart from these programs, there are also numerous governmental interventions that mandated innovation in automobile energy consumption. The finance sector, as Porter argues, is relatively void of hybrid regimes. The oldest regulatory regime regarding the capital base of banks is the Basel capital adequacy standards. The Basel regime consists of representatives from central banks.

Wyn Grant argues in his paper on the biopesticide industry that the establishment of a more diverse pesticide market involved the development of a policy network that provides links between actors of the industry and between the industry, regulatory and government bodies. In particular, the establishment of collective forms of interest representation and subsequent improvements in organizational

Table 2 Forms of business participation in sustainability policies

Authors	Chapter	Firm level	Collective action level
Karsten Ronit	"Global Business Associations, Self-Regulation and Consumer Policy"	–	Sectoral guidelines and monitoring by (multi-)branch associations
Tony Porter	"The Political Economy of Private Management of High Impact Low Probability Risks in Finance and the Environment"	–	Voluntary agreements
Wyn Grant	"Environmental and Regulatory Sustainability of Biopesticides"	–	Capacity development of the European and the international branch association, establishment of national policy networks, lobbying by branch associations
Achim Lang, Thomas Malang, and Volker Schneider	"Product Labelling and Standards: Business Participation in Energy Efficiency Regimes"	Voluntary labelling schemes set-up by private organizations	Branch association product standards
Harvey Feigenbaum	"Sustaining Cultural Diversity When Faced with Changing Technologies"	Co-productions of audiovisual content	Industry lobbying for quotas and subsidies
Ana Carolina González	"The Business Pursuit of Local Governance: Extractive Industry and Civil Society for Public Accountability in Colombia"	Responsibility for oversight of governmental spending; committee participation; information dissemination; training of civil society	

capacity and lobbying activities are the main forms of industry participation of the still young biopesticide industry.

In energy-efficiency labelling and standards, business participates in voluntary labelling schemes and self-regulatory standard setting. However, as Achim Lang, Thomas Malang, and Volker Schneider point out, business participates in one or another but not both. Participation depends on the type of capitalism. Liberal market economies typically combine voluntary labels with compulsory standards while coordinated market economies developed basically compulsory instruments. However, standard-setting in coordinated market economies is delegated to the

European branch association. In more etatist and developing countries, such as China, business has no active role in standard-setting and labelling activities.

Harvey Feigenbaum highlights political and economic measures to combat U.S. dominance in audiovisual media content. In most instances, national industry representatives lobby for quotas of nationally-produced media content or for subsidizing the national film and audiovisual industry. This strategy has been successful in that EU member states agreed to reserve 50 % of primetime for European-produced television shows. Additionally, subsidies have led to a steady increase in film production trends in the EU. Another issue that is raised by Feigenbaum is co-production by national film producers. This strategy is particularly prevalent in the EU in that it encourages film production that involves film companies from various member states.

Ana Carolina González Espinosa focuses on the participation of the U.S.-based oil company *Occidental Petroleum de Colombia* (OXY) in a committee that promotes the better use of oil revenues (royalties) by local governments in the Colombian region Arauca. OXY finances the activities of the royalties committee whose members include, among other organizations: university representatives, the regional chamber of commerce, business interest associations, and civil society organizations. The main objective of the committee is to provide oversight of spending and information dissemination activities related to local governmental spending. Furthermore, the committee organizes accountability audiences where public authorities must account for their spending of oil royalties. The dissemination of knowledge and training activities for citizens and civil society organizations regarding royalty spending is another activity that is carried out.

4 Factors Facilitating and Constraining the Participation of Business

Business participates in sustainability politics and regimes for various reasons (Garriga and Melé 2004; Melé 2008). First, the firm is an instrument for wealth creation. Its activities, either business or social, are a means to achieve its economic goals. Business therefore contributes to CSR if profit and shareholder-value-maximization are compatible with social investments. Second, the increasing political power of corporations should be equal to their responsibility for political institutions and processes. Here, CSR means supporting and defending democratic institutions, as well as engaging in community activities as a corporate citizen. Third, social integration theorists argue that business should socially integrate and satisfy societal demands because business depends on the functioning of society.

While CSR theories focus on the internal motivations of business to participate in CSR activities, political science perspectives underscore the importance of action by governments and other political actors that trigger business self-regulation. It is argued that third parties intervene in the establishment of business self-regulatory schemes either by coercing private actors to take part, by delegating authority to private actors, or by providing incentives for participation or collective action.

In his chapter on consumer policy, Karsten Ronit reports several factors that facilitate business self-regulation or co-regulation. Regarding the beverage industry, he notes that the International Chamber of Commerce (ICC) is involved in the regulation of marketing and advertising, setting standards for all industries. Karsten Ronit states that there is a complex division of labour concerning business self-regulation of marketing and advertising. Sectoral guidelines are adopted under the auspice of sectoral business initiatives (beverage) or multi-sectoral initiatives as in the case of marketing and advertiser associations. In turn, the ICC receives backing by international organizations such as the United Nations Global Compact. Other facilitating factors are demands voiced by consumer organizations which put pressure on the industry to change their code of conduct.

Tony Porter distinguishes two dimensions that affect business motivations to participate in efforts to mitigate HILP risks in the finance and automobile industry. The first dimension is the source of risk which may be internal or external to the company. The second dimension includes the effects of risk which might also be internal or external to the firm. According to Porter, if the source of the risk is internal to the company and the effect of the risk is external, government interventions are needed since companies have no incentive to correct their behavior. If the source of the risk is external but effects are felt within the company, then Porter stipulates that companies have a strong incentive to collectively reduce the risk. However, four challenges constrain the ability of business to cope with HILP risks. Measurement and awareness refers to the low frequency of risk events and the resulting lack of data. Complexity and scale means HILP risks involve numerous interdependent subsystems. Risk mitigation is supposed to be expensive and collides with the firm's daily operations. Temporality refers to the remoteness of the event and the rapidness which is required once the event has taken place. The last challenge includes governance of complex actor networks.

Wyn Grant analyzes the driving forces behind the establishment of the biopesticide industry, which consists of small enterprises that have to compete against multi-national producers of chemical pesticides. The smallness of individual firms and the entire industry poses challenges on the industry's ability to set up collective action. His analysis suggests that the quest for environmental sustainability is ultimately linked to the sustainability of the small biopesticide industry. Grant states that basically four factors have been important in sustaining the industry. First, interventions by national governments in support of the biopesticide industry aim to reach targets set by sustainability goals. Such interventions include, according to Grant, the regulation of chemical pesticides, the funding of research and the support of biopesticides in the agricultural sector. Second, regulatory agencies backed the government's strategy to increase the use of biopesticides. Third, consultants specializing in biopesticides provided services in the registration of biopesticides as well as served as intermediaries between different parts of the industry. Lastly, the improved organizational capacities of the European as well as the international branch associations resulted in more effective lobbying at the European level.

In energy-efficiency labelling and standards, governments and the European Commission (EC) are the main drivers of business participation in voluntary labelling schemes and self-regulation of standard-setting. Liberal market economies (LMEs) typically rely on competition and price effects and therefore, prefer voluntary schemes over compulsory ones. Furthermore, they lack encompassing and resourceful business associations that are able to set up, monitor and enforce binding agreements. As a result, voluntary labelling programs are the preferred mechanism in LMEs. However, even in LMEs, governments play a vital role in administering these voluntary programs and in providing mandatory minimum efficiency standards which business usually tries to avoid. Coordinated market economies, in contrast, prefer compulsory instruments, either compulsory labels or standards, over voluntary ones. Both types of instruments are backed by EC legislation. An important aspect of European energy-efficiency programs are voluntary standards that are set up by the European branch association CECED. However, these voluntary standards are also backed by the European Commission (Table 3).

Harvey Feigenbaum argues that subsidizing national audiovisual industries have established vibrant although commercially not very successful industries (at least in the European Union). Quotas also helped protect national industries from U.S. dominance. However, through rapid technological change in ICT infrastructure and services, traditional channels of communication such as radio and broadcasting have lost their significance. At the same time, some policy instruments such as quotas of nationally-produced content became inefficacious. As a result, national audiovisual industries have to lobby (again) for subsidies and have to change their business models.

Ana Carolina González Espinosa identifies several factors that led to the participation of the U.S.-based oil company OXY in a government oversight committee despite initial reluctance to take up responsibility in that area. The first reason includes an instrumental motivation. According to González Espinosa, OXY thought that government mismanagement and corruption might be attributed to the company and thus, might lead to resistance by the local populace. Nudging by national fiscal control agencies to participate in an oversight committee made a strong impact on OXY's decision makers. Additionally, the traditionally strong cooperation between business interest and government in Columbia also paved the way for OXY to take up more responsibility in local political and social matters. The Columbian oil producers association promoted these kinds of activities since they are in-line with traditionally cooperative state-business relations.

Linking theoretical expectations to empirical evidence, the previous chapters make clear that social integration and political theories of CSR are normative prescriptions rather than causal models of business participation. Economic self-interest still remains prominent among motivations to get involved in sustainability politics. However, this only explains why business often opts for self-regulatory arrangements rather than leave regulation to public authorities. In any case,

Table 3 Enabling factors for business participation in sustainability policies

Authors	Chapter	Government	Others
Karsten Ronit	"Global Business Asso ciations, Self-Regulation and Con sumer Policy"	International backing by IOs	Norm creation by encompassing business actors (ICC); consumer demands
Tony Porter	"The Political Economy of Private Manage ment of High Impact Low Probability Risks in Finance and the Environment"	Government interven-tion when the effects of risk are external to the firm (regulations or incentives)	Measurement and awareness of risks; complexity and scale; temporality; governance challenges
Wyn Grant	"Environmental and Regulatory Sustain ability of Biopesticides"	Interventions by national govern-ments; commitment by regulatory agen-cies to bio pesticides	Consultants both as a resource for the industry and as intermediaries
Achim Lang, Thomas Malang, and Volker Schneider	"Product Labelling and Standards: Business Participation in Energy Efficiency Regimes"	Administering volun-tary programs; backing collective agreements by producers	Sectoral standards defined by branch associations; capacities to set up collective agreements
Harvey Feigenbaum	"Sustaining Cultural Diversity When Faced with Chang ing Technologies"	Subsidies to national media industry; quotas for nationally-produced content	Technological change in the production of media content
Ana Carolina González	"The Business Pursuit of Local Gover nance: Extractive Industry and Civil Society for Public Accountability in Colombia"	Nudging by national fiscal authorities	Nudging by national business associa-tions; risk analysis demands more participation

business at least needs some nudging in order to get involved in sustainability issues and regimes. Backing by public authorities is a prevalent phenomenon in all empirical chapters. Thus, Schmitter's assumption that business self-regulation is the exception and co-regulation the norm, can be confirmed. Additionally, encompassing measures are rare. Most business efforts regarding sustainability take place in manageable settings and are still confined to sectoral and national politics. Again, these findings are in line with Schmitter's assumptions mentioned in the introduction and with work on interest groups and interest intermediation.

5 Comparative Assessment of Business Participation

The previous sections summarized the forms and enabling factors for business participation in sustainability politics. A comparative assessment that links these two analytical dimensions will be unfolded in this section.

Voluntary sectoral guidelines are the instrument of choice in business self-regulatory arrangements. Gupta and Lad define industry self-regulation as “a regulatory process whereby an industry-level, as opposed to a governmental- or firm-level, organization (such as a trade association or a professional society) sets and enforces rules and standards relating to the conduct of firms in the industry” (Gupta and Lad 1983). Sectoral guidelines have been established in the automotive industry, in consumer politics and in energy-efficiency policies. All these sectoral guidelines involve the establishment of norms and procedures regarding the production of private goods to which companies have to comply. Sectoral guidelines are designed under the auspice of sectoral business associations that provide a platform for consultation and negotiation among member companies. This finding is in line with neo-corporatist reasoning on the delegation of public authority to private actors and on the leading role of organized business interests in this process (Hollingsworth et al. 1994; Streeck and Schmitter 1985).

All sectoral guidelines identified in the empirical chapters are voluntary in nature, but are backed by a third authority. Thus, all sectoral guidelines fall under the mandated self-regulation type identified by Gunningham and Rees (Gunningham and Rees 1997). Backing authorities are international organizations such as the UN, national governments or encompassing peak associations such as the International Chamber of Commerce. Backing comes in different fashions. In energy-efficiency policy, backing means either the direct involvement of the European Commission or the U.S. Department of Energy in working out the guidelines or in administering them (see the chapter by Lang, Malang and Schneider). In a similar fashion, the European Commission negotiated sectoral guidelines with the European auto manufacturers association which involved a 25 % reduction in carbon emissions (see the chapter by Porter). Similar regulatory efforts by encompassing business associations or amendments to such efforts have been identified as backing instruments (see the chapter by Ronit). Sectoral guidelines are instruments that are typically applied in mature industries where business associations have acquired sufficient governance capacities to handle negotiations, implementation and monitoring.

Relatively new or small-scale industries face challenges of collective action. As Grant and Feigenbaum point out, the establishment of interest groups that represent the collective interest of the industry is a necessary condition for the promotion of sustainability. Several supportive instruments have been identified. Subsidies for the industry increase the number of firms and thus make collective action more likely and renders established business associations more resourceful. Recognition by public authorities also provides another asset that can be “sold” to potential

Table 4 Business participation and enabling factors

Authors	Business Participation	Enabling factors
Karsten Ronit, Tony Porter, Achim Lang, Thomas Malang, and Volker Schneider	Voluntary sectoral guidelines	Backing by IOs, national government or encompassing business associations
		Governance capacities
Wyn Grant, Harvey Feigenbaum	Establishment of interest groups and lobbying efforts	Subsidies for the industry
		Recognition by public authorities
		Support by experts
Ana Carolina González	Participation and financing of civil society committee for the oversight of government	Nudging by national public authorities

members (Salisbury 1969; Schmitter and Streeck 1999) which enhance the influence of the small-scale industry (Table 4).

Backing of sectoral guidelines and establishment of sectoral collective action takes place in all industries under scrutiny. Surprisingly, the type of sustainability – environmental, economic, cultural or social – has no impact on the form of business participation. Industry characteristics seem to matter the most. They pose differing demands on sustainability policies (Dempsey et al. 2011; Goodland 1995; Moldan et al. 2012; Vallance et al. 2011). This theme on sustaining current levels of diversity of capitals has impacts on the choice of self-regulatory arrangement and third party support. In the case of a mature industry, as in energy and automotive branches, modes of production have to be changed in order to make products or production more sustainable. The establishment of sectoral guidelines codifies these new production and product standards. However, in the case of small or newly established economic branches, existing mature industries are unable or unwilling to provide goods related to sustainability issues, as is the case of the pesticide industry or the U.S. film industry. At this point, economic sustainability, or the "business of staying in business" of the new/small-scale industry becomes the vital objective. Only when the new/small-scale industry is able to survive and offer its products can environmental, social or cultural sustainability be achieved. As a result, most governmental interventions focus on the sustainability of business operations rather than on promoting standards or best practices.

A somewhat different case is provided by González Espinosa. Her treatment of the oil company OXY provides an example of economic self-interest and nudging by public authorities as driving forces of business participation in sustainability issues. At first, OXY was unwilling to participate in government oversight of (oil) royalty investments but when it became clear that OXY would be held responsible for widespread corruption, OXY eventually participated in the Colombian Royalties Investment, Evaluation and Follow-up Committee and in the training of civil society organisations.

References

Dempsey, N., Bramley, G., Power, S., & Brown, C. (2011). The social dimension of sustainable development: Defining urban social sustainability. *Sustainable Development, 19*(5), 289–300.

Dyllick, T., & Hockerts, K. (2002). Beyond the business case for corporate sustainability. *Business Strategy and the Environment, 11*(2), 130–141.

Garriga, E., & Melé, D. (2004). Corporate social responsibility theories: Mapping the territory. *Journal of Business Ethics, 53*(1–2), 51–71.

Goodland, R. (1995). The concept of environmental sustainability. *Annual Review of Ecology and Systematics, 26*, 1–24.

Gunningham, N., & Rees, J. (1997). Industry self regulation: An institutional perspective. *Law & Policy, 19*(4), 363–414.

Gupta, A. K., & Lad, L. J. (1983). Industry self-regulation: An economic, organizational, and political analysis. *Academy of Management Review, 8*, 416–425.

Hollingsworth, J. R., Schmitter, P. C., & Streeck, W. (Eds.). (1994). *Governing capitalist economies: Performance and control of economic sectors*. New York/Oxford: Oxford University Press.

Melé, D. (2008). Corporate social responsibility theories. In A. Crane, D. Matten, A. McWilliams, J. Moon, & D. Siegel (Eds.), *The Oxford handbook of corporate social responsibility* (pp. 48–82). Oxford: Oxford University Press.

Moldan, B., Janouskova, S., & Hak, T. (2012). How to understand and measure environmental sustainability: Indicators and targets. *Ecological Indicators, 17*, 4–13.

Salisbury, R. H. (1969). An exchange theory of interest groups. *Midwest Journal of Political Science, 13*, 1–32.

Sands, G. R., & Podmore, T. H. (2000). A generalized environmental sustainability index for agricultural systems. *Agriculture, Ecosystems & Environment, 79*(1), 29–41.

Schmitter, P. C., & Streeck, W. (1999). *The organization of business interests*. Köln: MPIfG.

Streeck, W., & Schmitter, P. C. (1985). *Private interest government*. London: Sage.

Vallance, S., Perkins, H. C., & Dixon, J. E. (2011). What is social sustainability? A clarification of concepts. *Geoforum, 42*(3), 342–348.