

BOOK REVIEW

SMART REGULATION: DESIGNING ENVIRONMENTAL POLICY, by Neil Gunningham and Peter Grabosky (Clarendon Press, Oxford, 1998), ISBN 0-19-826857-2, xi + 494 pp.

In recent years there has been a growing interest in the economic aspects of environmental law, a development that brings research in this field into line with the existing substantial “law and economics” scholarship applied to competition law and social regulation.¹ Ironically, however, just as environmental law appears to be catching up with the more general advances in the economic aspects of regulatory theory, there are now signs that the influence of economic rationalism in policy formation in some countries is waning.² Nevertheless, the role of economic instruments and other alternatives to conventional direct regulation is an issue that will probably increasingly engage policy-makers and academic scholars in the quest for more cost-efficient means to achieve environmental management and protection objectives.

An ambitious contribution to the debates about how environmental law functions between the State and the market is provided by *Smart Regulation: Designing Environmental Policy*. According to the book’s preface, it “explores the potential of ‘smart regulation’, an approach to environmental policy-making which is far more pluralistic, flexible and imaginative than the status quo”. The book is part of the distinguished series of Oxford Socio-Legal Studies that explores the theoretical and empirical aspects of the role of law in society. Both Neil Gunningham and Peter Grabosky have substantial research records in this area, and it is acknowledged that the book draws and builds upon their earlier contributions.³ Neil Gunningham is a Professor of Law and Director of the Australian Centre for Environmental Law (“ACEL”) at the Australian National University. Peter Grabosky is the Director of Research at the Australian Institute of Criminology, Canberra. The book also includes smaller contributions from

- 1 See, eg, Posner, R. A., “Theories of Economic Regulation” (1974) 5 *Bell Journal of Economics* 353; Ogus, A., *Regulation: Legal Form and Economic Theory* (1994); Mercurio, N. & Medema, S. C., *Economics and the Law: From Posner to Post-modernism* (1997).
- 2 Arup, C., “Economic Law and Economic Rationalism” (1997) 13 *Australian Journal of Law and Society* 119–143, at 119.
- 3 For example, Grabosky, P. N., “Green Markets: Environmental regulation by the private sector” (1994) 16(4) *Law and Policy*, 420–448; Gunningham, N. & Young, M., “Toward Optimal Environment Policy: The case of biodiversity conservation” (1997) 24(2) *Ecology Law Quarterly*, 244–297.

Darren Sinclair, a Senior Research Associate at ACEL. Although the book has a substantial Australian content, it contains case studies from Europe and North America that give it a much wider frame of reference. Thus the book builds on other significant studies of environmental regulation in these jurisdictions, such as: Susan Rose-Ackerman, *Controlling Environmental Policy: The Limits of Public Law in Germany and the United States* (1995) and D. Vogel, *National Styles of Regulation: Environmental Policy in Great Britain and the United States* (1986).

Smart Regulation aims to identify and analyse the various instruments available for environmental policy-making, and to consider possible “optimal” mixes of instruments in specific situations. According to the authors:

[t]he central thesis of this book is the recruiting of a range of regulatory actors to implement complementary combinations of policy instruments, tailored to specific environmental goals and circumstances, will produce more effective and efficient policy outcomes. (p 15)

Part I of the book surveys the regulatory terrain, identifying the range of instruments and stakeholders, examining the strengths and weaknesses of available policy tools and potential roles of actors. Part II considers issues of regulatory design and policy mix as they relate to the chemical industry and the agricultural sector. The authors chose to focus on these sectors because they “provide a representative range of regulatory structures, strategies, and actors; of environmental issues and institutional capacities” (p. 20). Part III concludes by extrapolating from the case studies to draw more general conclusions about regulatory and policy design. It identifies a set of processes, principles, and policy prescriptions that are argued could be applied to a wide range of environmental management scenarios.

The book is significant because it seeks to move the existing debate beyond the tired “State versus market” dichotomy or single instrument approaches, and instead searches for productive combinations “taking advantage of synergies and complementarities between [instruments]” (p 5). The authors’ approach, as acknowledged, is informed by developments in legal pluralism theory. From this perspective the authors consider the virtues of “developing a broader and more inclusive conception of the regulatory process” (p 12) involving a wider array of instruments and parties. This book takes this approach into environmental law and seeks to “assess the relative advantages of different combinations of mechanisms in different institutional, economic or social contexts” and “addressing specifically environmental issues” (p 13). A variety of criteria are identified for evaluating policy instruments, including effectiveness, efficiency, equity, political acceptability, and accountability. The authors assert that effectiveness and efficiency are the “essence” of the term “optimality”, “which is concerned with whether instruments will do the desired task and at an acceptable

performance level” (p 27). However, they acknowledge that tensions may arise between evaluative criteria, such as efficiency and equity considerations, concluding that “the weightings of different criteria should vary with different environmental problems”. Thus:

... certainty and effectiveness will be more prominent in cases where irreversibility is at stake; transparency and consultation will be highlighted when local communities are put at risk; and efficiency and flexibility will be relatively more important when there are large differences in the capacities of firms to reduce pollution. (p 29)

Against these criteria, the authors, like many other current environmental policy commentators, canvass the limitations of traditional “command and control” regulation, principally its inefficiency and inflexibility and the empirical evidence of failure to achieve intended environmental improvement. These arguments are now well established in the literature but serve as a useful introduction to the book.⁴ The authors accept that conventional regulatory strategies should sometimes retain a place in environmental law systems depending on the interests and issues at stake. Increasingly, however, licensing, sanctions, and other command strategies are giving way to or being synthesised with other policy tools, which are discussed in this book. The new generation of environmental policy instruments includes environmental audits, eco-labelling schemes, liability rules for financial institutions, community right-to-know legislation, and environmental agreements. The authors’ survey of alternative economic, education, and self-regulation instruments sets out succinctly their modalities and strengths and weaknesses. Importantly, the authors acknowledge the quite different nature of economic instruments such as taxes and tradeable permits, which depend crucially for their operation on government administrative support, as against the “free market environmentalism” based on private property rights and contraction of State involvement in resource management. In conclusion, the authors caution that alternative policy instruments are still in “an early stage of development” and that there is often insufficient knowledge about effectiveness and efficiency (p 89).

These emerging environmental policy tool innovations are being matched by a shift from administrative regulation to forms of co-regulation and self-regulation in which an array of parties and interests share or negotiate with government the environmental standards and goals to be implemented. Banks, insurance firms, and institutional investors are among the commercial institutions

4 See further Keohane, N., Revesz, R. L. & Stavins, R. N., “The Choice of Regulatory Instruments in Environmental Policy” (1998) 22(2) *Harvard Environmental Law Review* 313; Hahn R. & Stavins, R., “Incentive-Based Environmental Regulation: A new era from an old idea?” (1991) 18(1) *Ecology Law Quarterly* 1; Stewart, R. B., “Models for Environmental Regulation: Central planning versus market-based approaches” (1992) *Boston College Environmental Affairs Law Review* 547.

that the authors identify as potential “surrogate regulators”. Banks, for instance, are seen as in a position to influence the environmental practices of developers by declining finance to proposals that are environmentally unethical, or could expose the bank to lender liability such as in the clean-up of abandoned contaminated sites. Individual consumers, too, are identified as participants in the new regulatory terrain, able to influence retailers through purchasing decisions that favour eco-friendly products. The argued advantages of using a broader range of institutions are that commercial and non-commercial third parties will often be more effective than governments and because they enable government resources to be “redeployed” in areas where they could be better applied. Nevertheless, reflecting the middle-positions that the authors constantly strive to achieve, it is argued that governments cannot wholly delegate to the market environmental management responsibility. This is because “institutional actors will not necessarily order themselves to meet specific environmental objectives, and in the absence of external intervention, many of the potential opportunities may never be realized” (p 124). Thus, governments are seen as inevitably continuing to play a crucial role in facilitating and shaping market orderings — or what is termed “governing at a distance” (p 123).

The case studies of the chemical industry and agriculture examine the performance of regulation and policy as it relates to each sector, and suggest ways to improve “the design of regulatory policy, harnessing a broader mix of instruments and institutional actors, and tailored to the particular circumstances of the [given] industry” (p 137). The prevailing patterns of regulation of point-source chemical pollution are criticised for relying heavily on technology-based regulatory standards for classes of industries (including prescriptions to use “best practical technology currently available”) coupled with instruments such as prohibitions, permit requirements, and planning obligations. This approach is faulted for its high regulatory costs and for stifling technological innovation and providing little incentive for continuous improvement (p 146). Given the diversity and complexity of chemical industry processes, the authors argue that a more cost-effective approach is to encourage companies to “go beyond compliance” through self-regulation (eg, the United States “Responsible Care Programme”) and system-based approaches based on International Standard Organisation’s environmental management standard, ISO 14001. Extensive analysis is made of these approaches and conclusions are drawn on achieving appropriate “broader policy mixes”.

In the agricultural industry, the authors focus on the threats to biodiversity on privately farmed land and the more specific hazards posed by use of pesticides and other agricultural chemicals. They review the traditional means by which farming practices are regulated (eg, provision of information and persuasion by government authorities, subsidies, and restrictions on land clearing and availability of dangerous substances) and identify their shortcomings in terms of promoting

sustainable agriculture. A core problem identified is the lack of “incentives” for “positive environmental stewardship” coupled with the traditional antagonism of farmers to government intervention in private land management (pp 287–289). The authors propose that a more efficient and effective agricultural policy lies in utilising a broader range of instruments including education strategies to improve land-holders’ awareness of environmental threats, voluntary agreements, and fiscal incentives (eg, tax concessions for landcare). In designing an optimal strategy the authors stress the importance of context and content of the specific problem to be addressed. Thus, they note:

... the sorts of combinations of instruments and parties, that may work best in curbing the use of agricultural chemicals, may be very different from those which are optimal for addressing the challenge of land-based biodiversity conservation. For example, while there is very considerable potential to enable commercial third parties to act as surrogate regulators in the case of agricultural pesticides, much less opportunity exists with regard to biodiversity conservation. (p 369)

The most useful material in the book is the discussion in Part III of regulatory design processes and principles and the review of different instrument mixes. The authors’ proposals are guided by the belief that policy mixes incorporating a broader range of instruments and parties, and using “the least interventionist measures *that will work*”, should be preferred (p 452). This is because highly interventionist approaches tend to breach efficiency, effectiveness, and political acceptability criteria. The authors differentiate between three broad classes of instrument mixes: “inherently complementary combinations”; “inherently counterproductive instrument combinations”; and “sequencing instrument combinations”. Thus, information instruments, such as audits and full cost accounting, are claimed to complement well economic incentive instruments, which depend on economic actors being able to make rational decisions based on environmental costs and benefits. On the other hand, command and control instruments that impose technology and performance-based standards on industry are seen as incongruous to economic instruments designed to promote innovation in pollution control technology. The authors suggest that one way to avoid dysfunctional results from combining incompatible instruments is to “sequence” their introduction — that is, to hold instruments in reserve, to be applied when existing ones have failed to meet environmental objectives.

In summary, Gunningham and Grabosky offer a clear, principled approach to environmental policy design. They present an attractive case for integrating a range of instruments and parties into conventional administrative regulatory regimes. Much of the empirical justification for their thesis is based on case studies in the agricultural sector and the chemical industries. There should be caution, however, in attempting to extrapolate these findings to other policy sectors. Certain established forms of environmental policy-making are likely to

continue to provide the mainstay of environmental law regimes; in particular, the need for environmental planning and environmental impact assessment systems which provide much of the framework for resource allocation and development control. There is a limited role for economic instruments here, although the involvement and co-operation of business and community groups is crucially important.

The analysis and conclusions of *Smart Regulation* are also largely confined to the experience of advanced developed economies. Gunningham and Grabosky make little reference to developing countries, but it is not clear whether this stance is a deliberate discriminatory omission or one resulting from ignorance or indifference to the non-Western world. Surprisingly, there is also scant reference to environmental policy in the more advanced South-East Asian economies that are closer to Western patterns of industrialisation and their concomitant environmental problems. Certainly the authors recognise that “what works and what does not work is usually highly dependent on the particular characteristics of the industry or environmental threat at issue” (p 32) and that “generalizations are extremely hazardous” (p 32). Care must be taken to avoid the privileging of Western models and experiences with environmental law. Environmental legal regimes in many postcolonial states seem to be in a state of crisis.⁵ Environmental legislation based on foreign models cannot be effectively implemented because developing countries often lack the necessary administrative, judicial or technical resources, which are available in Western nations.⁶

The issues raised by *Smart Regulation* are, however, ones that are acutely relevant to New Zealand reformers today. Various amendments are now proposed to the foundational Resource Management Act 1991 (“RMA”)⁷ following a series of government studies and reports that examined inefficiencies in implementation of the statute’s planning and resource consent processes.⁸ New Zealand is a leading example of “free market” economic reforms⁹ and this illustrates well the tensions

- 5 By way of introduction, see Biswas M. & Biswas, A. K., “Environment and Sustained Development in the Third World: A review of the past decade” (1982) 4 *Third World Quarterly* 472; Biswas, A. K., “Environmental Law: A perspective from developing countries” (1986) 13(1) *Environmental Conservation* 61; Eröcal D. (ed.), *Environmental Management In Developing Countries* (1991).
- 6 Recent research points to different institutional approaches for environmental management in developing countries, drawing upon the land tenure and local government: see Richardson, B. J., “Environmental Law in (Post) Colonial Societies: Straddling the Local — Global Institutional Spectrum” (1999) *Colorado Journal of International Environmental Law and Policy*, forthcoming.
- 7 Ministry for the Environment, *Proposals for Amendment to the Resource Management Act* (1998).
- 8 See *Resource Management Act 1991: Report of the Minister for the Environment’s Reference Group* (Ministry for the Environment, 1998); McShane, O., *Land Use Control under the Resource Management Act: A “Think Piece”* (Ministry for the Environment, 1998).
- 9 See generally Bollard, A. & Buckle, R. (eds), *Economic Liberalisation in New Zealand* (1987).

between a deregulated economic system and the maintenance of a strong system of environmental law oriented to “sustainable management”. Reflecting such tensions, the RMA is an amalgam of economic and regulatory instruments, epitomised by the differences between the Act’s extensive public participation clauses¹⁰ and the references to cost-effective decision-making.¹¹ In recent years private developers have increasingly expressed concern about the apparently high costs and excessive information requirements for resource consent approvals, and the consequential impacts on economic enterprise.¹² Clearly, there are some serious questions of environmental policy (re)-design to be faced by governments and interest groups in New Zealand.

Finally, one dimension of current regulatory pressures largely ignored by *Smart Regulation* is the impact of international environmental law and international institutions on national environmental policy-making. Increasingly, international obligations and pressures shape government policy choices. Certainly the trends towards diversification of policy tools canvassed in the book is mirrored at a global level, with economic instruments now increasingly featuring in environmental treaties. The most substantial example is the mandate for trading in greenhouse gas emission entitlements under the 1997 Kyoto Protocol to the Framework Convention on Climate Change.¹³ Given the global dimensions to so many of our contemporary environmental problems, the challenge for national administrators is to design policies that effectively integrate local, national, and global issues and interests. This is an area that awaits further substantial research.

On the whole, *Smart Regulation* is a significant contribution to the literature on environmental regulation and policy design. The authors have made a strong

- 10 This participation would be ensured, for example, through rights to make submissions and objections in relation to proposed plans/policies and resource consent applications, participation rights in public inquiries and greater access to the Environment Court and High Court to challenge inappropriate decisions: ss 49(1), 57(1), 60, 64(1), 65(1), 73(1) (public submissions); ss 120, 299, 301 (rights of appeal). See further Palmer, K. A., “Opportunities for Public Participation Under the Resource Management Act” (1994) 1(1) *New Zealand Environmental Law Reporter* 6 at 17.
- 11 For example, s 7(b) RMA requires those administering the Act to “have particular regard to the efficient use and development of natural and physical resources”. Also important is s 32, which requires councils to carry out a cost-and-benefit analysis of proposed policies, plans, and rules, and to examine alternatives to the use of direct regulation for achieving the purpose of the Act.
- 12 See, eg. Malcolm, B., “Watch Out for the Highwaymen of the Environment” *New Zealand Herald* (5 Aug. 1997) A11; Pfahlert, J., “The Cost of RMA Processes — Are They Sustainable? Business Compliance Costs” *Third Annual Conference of the Resource Management Law Association* (Christchurch: Oct. 1995); Pillay, S., “The Cost of Compliance” (Aug. 1998) *New Zealand Retail* 34; Gautier, A., “A Licence to Delay? Business Battles the Resource Management Act” (1997) 11(3) *New Zealand Business* 12; McShane, *supra* note 8.
- 13 (1998) 37 *International Legal Materials* 22; (1992) 31 *International Legal Materials* 849.

case for the failure of current policy tools and the need for more flexible combinations of instruments and parties. The book should appeal to a wide audience, including government policy-makers and planners, and scholars in law, economics, and political science. The clear structure and index makes the book easy to follow, and the thirty-two page bibliography provides an excellent tool for researchers wishing to explore in greater detail environmental policy and regulatory theory.

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