

Contemporary
Government

Challenges



Australian Government

Australian Public Service Commission

Smarter Policy:

choosing policy instruments and working with
others to influence behaviour



Commissioner's Foreword

This publication deals with the contemporary government challenge of designing policy that effectively achieves the Government's goals in an environment of increasing complexity and interconnectedness. At times, particularly under time and resource pressures, it is easy to fall back on the same approaches that have been used in a particular policy area in the past. This publication challenges policy makers to think more broadly and inclusively on a number of fronts.

Firstly, it encourages policy makers to consider the full range of policy instruments that could be used to tackle a policy issue (assuming, of course, that a rigorous analysis will also be undertaken to determine whether a policy intervention is justified in the first place).

All too often, the story of the little boy and the hammer remains apposite to policy design.

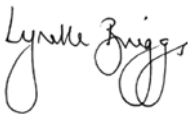
The little boy, having been given a toy hammer as a gift, would use the tool for every task he confronted, regardless of its suitability.¹

The publication also encourages policy makers to use the insight from research at the Australian National University that combinations of complementary policy instruments generally work better than reliance on a single instrument.

Thinking laterally and inclusively about what groups, organisations and individuals might have a convergent interest in achieving particular policy goals is useful in policy design. The publication encourages policy makers to think creatively about how to actively co-opt these parties into the policy framework (including into the design, implementation and compliance processes). Such co-opting can result in better policy outcomes with lower costs to government.

At its heart, policy intervention is about influencing behaviour—of businesses, organisations and individuals. Framing issues in this way can assist policy makers in being open to using the insights from behavioural theory and evidence. A previous publication in the Contemporary Government Challenges series, *Changing Behaviour: A Public Policy Perspective*, has explored this approach from the perspective of influencing the behaviour of individual citizens. This publication takes the analysis further and also looks at how behavioural theory can assist policy makers in influencing the behaviour of organisations.

I am confident that this publication will encourage policy makers to reflect on these issues and assist them in designing smarter policy.



Lynelle Briggs

Australian Public Service Commissioner

1 N. Gunningham & D. Sinclair, 'Instruments for Environmental Protection' in N. Gunningham & P. Grabosky (eds.), *Smart Regulation: Designing Environmental Policy*, Oxford University Press, Oxford, 1998, p. 89.

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Introduction

Governments and public services around the world are grappling with very complex issues—climate change, security concerns, economic disadvantage and lifestyle health challenges such as obesity and diabetes—to name just a few. Making progress in these areas requires, among other things, looking for better and more innovative ways to perform our traditional public service role of providing policy advice to the Government. We need to be able to design smarter policy so that the policy instruments used, including regulation, information strategies, voluntarism, and the range of economic instruments, more effectively change the behaviour of those we seek to influence.

We also need to work increasingly with others to achieve policy outcomes. In many areas, including welfare, health, crime, employment and the environment, achieving significant progress requires the active participation of citizens, the third sector, business and local community groups.

This publication focuses on improving policy design in this environment of increasing complexity and interconnectedness. It looks at issues around choosing policy instruments, involving third parties in policy frameworks, and making use of insights from behavioural theory and evidence, which have not received detailed attention in the available policy guidance material.

The publication aims to broaden the thinking of policy makers so that they consider the full range of policy instruments that influence behaviour, and seek out insights from behavioural theory and evidence which can help to achieve better policy outcomes and avoid unintended consequences. It is not intended to be a comprehensive guide to good policy design. It is also not intended to replace, or be in conflict with, the official guides to best practice policy and regulation making such as the Office of Best Practice Regulation's Handbook, but rather to complement them.

A major impetus for this publication is to encourage policy makers to not limit themselves unnecessarily to the types of policy instruments and policy design that have been used in a particular area in the past. It also encourages policy makers to think laterally about what groups, organisations and individuals might have a convergent interest in achieving the policy goals which they are working towards. There can be significant advantages for policy makers in increasingly looking beyond the traditional model of government as being solely responsible for devising and implementing policy frameworks, to one in which a range of third parties, such as industry associations, financial institutions and non-government organisations (NGOs), play active policy roles in certain circumstances.

The publication also encourages policy makers to seek inspiration for innovative policy ideas from a range of sources, including other jurisdictions, other countries and from the views and experience of stakeholders and those public servants already engaged in implementing and delivering policy in a particular area. It supports, where possible, an adaptive and flexible approach to policy design in order to explore ‘what works in practice’.

Policy makers sometimes find themselves in situations where timeframes, resources and the political environment are not conducive to considering the issues raised in this publication. While this is an inescapable reality at times, a broader knowledge of good practice policy design can assist policy makers in making better policy design decisions even in these difficult circumstances, and better prepare them to resolve future policy issues.

This publication complements other publications in the Commission’s Contemporary Government Challenges series—in particular, *Changing Behaviour: A Public Policy Perspective* and *Tackling Wicked Problems: A Public Policy Perspective*. Together, these publications contribute to the resources available to policy-makers in the APS. Further titles in this series will be available soon. Parts of this publication are based substantially on the work of Neil Gunningham and Darren Sinclair of the Australian National University. They can be contacted via email at neil.gunningham@anu.edu.au and darren.sinclair@anu.edu.au.

Choosing Policy Instruments

This chapter deals with the choice of policy instruments that will achieve the outcomes, in particular the changes in behaviour that the Government is seeking from the policy intervention. Before we examine this topic in detail, it is essential to note that:

- 1) It is assumed that a rigorous analysis will be undertaken to determine whether policy intervention is justified in the first place. This requires an assessment that the policy intervention will achieve net benefits for the community after taking account of all the impacts. The identification of a social, economic or environmental problem and its associated risks does not justify government intervention per se. It is an explicit part of the Government's deregulation agenda that policy makers are being asked to look at policy intervention more rigorously when responding to a perceived risk. Policy makers need to demonstrate that the benefits of intervening outweigh the costs.
- 2) Policy makers do not start with a clean slate. The choice of policy instruments is invariably constrained, to some extent, by the existing array of government interventions. Thus an audit of current policy instruments already operating in the policy space is a prerequisite for a good policy design process. This audit would ideally include interventions by all levels of government and the full range of policy instruments—both regulatory and non-regulatory. In some policy contexts it is also necessary to understand the policy interventions applying in other countries, for example, in areas of national security and financial services.

Such information can be extremely difficult to gather on a comprehensive basis. It requires good working relationships with other Australian Government agencies operating in the sector and with counterparts at other levels of government including, in some cases, overseas government agencies. The Productivity Commission's annual reviews of the stock of regulation in particular industry sectors is useful in the domestic context. Whole of government mechanisms, for example, the Council of Australian Governments (COAG), may provide a valuable means of gathering information, or considering joined up (and alternative) approaches. Broad stakeholder engagement and consultation can also help to identify other government interventions affecting the relevant sector.

Consider the Full Range of Possible Policy Instruments

Consideration of the full range of policy instruments, both regulatory and non-regulatory, is essential if policy makers are to identify the best—most efficient, effective, equitable, acceptable (to government and the community)—instruments of intervention. Beyond the confines of the traditional systems of regulation there exists a large range of policy instruments that may not be fully considered by policy makers who may limit themselves to the types of instruments used in the past.

All too often, the story of the little boy and the hammer remains apposite to policy design. The little boy, having been given a toy hammer as a gift, would use the tool for every task he confronted, regardless of its suitability.²

This chapter briefly reviews the main categories of policy instruments relied on to influence the behaviour of individuals and/or organisations. It is based largely on work at the Australian National University by Neil Gunningham and Darren Sinclair.³ The main characteristics of each category of policy instrument are identified along with their corresponding strengths, weaknesses and the circumstances in which they can be most useful. One of the aims of this chapter is to demonstrate that, while each of the main categories of policy instrument has something valuable to offer, they generally have substantial limitations as a stand alone strategy for government intervention. Further, each category of policy instrument works well in only a restricted range of circumstances—no single instrument type works across-the-board.

1. Direct Government Regulation

Direct government regulation (known also as black letter law or command and control regulation) occurs when the Government formulates and enforces legislation that specifies the behaviour required of organisations or individuals. It is the most commonly used form of regulation.⁴

When is it most useful?

Direct regulation can be appropriate where there is a high risk which could result in a substantial impact on the economy, environment, groups or individuals including, for example, the handling of toxic waste. It is useful where the community and/or industry require the certainty provided by legal sanctions.

It is also applicable when there is little cohesiveness among industry or the community and where there exist no effective, broad-based industry bodies limiting the opportunity for

2 N. Gunningham & D. Sinclair, 'Instruments for Environmental Protection' in N. Gunningham & P. Grabosky (eds.), *Smart Regulation: Designing Environmental Policy*, Oxford University Press, Oxford, 1998, p. 89.

3 N. Gunningham & D. Sinclair, 'Instruments for Environmental Protection' in N. Gunningham & P. Grabosky (eds.), *Smart Regulation: Designing Environmental Policy*, Oxford University Press, Oxford, 1998, pp. 37–93.

4 Office of Best Practice Regulation 2007, *Best Practice Regulation Handbook*, Commonwealth of Australia, Canberra, pp. 66–67, <<http://www.finance.gov.au/obpr/docs/handbook.pdf>>

self-regulation. It may be considered when there have been systematic compliance problems with self-regulation or quasi-regulation and the risks to the community of non-compliance are high.

In relation to business regulation the clear standards of direct regulation can best be enforced against firms that are readily identifiable and accessible—Kagan refers to the difference between regulating elephants and foxes: it is harder for elephants to hide.⁵ It is not as effective in dealing with transitory, mobile and/or remote firms.

Advantages

Its major strength is its dependability—provided there is adequate monitoring and enforcement. In such circumstances, the behaviour expected of regulatees can be specified with considerable clarity, thereby making it relatively straightforward to identify breaches of the legal standard and to enforce the law. This provides regulators with defined operational standards and individuals and firms with a clear understanding of their regulatory obligations.

Disadvantages

- Direct regulation requires regulators to have comprehensive and accurate knowledge of the workings and capacity of the industry sector or group in question. For example, if regulators are required to set targets for, say, pollution reduction they may need to engage in lengthy and intricate information gathering exercises. Even assuming regulators do get it right they can only ever provide transitory solutions because populations, technology and economic activity change and grow.⁶
- It can take significant time to make and amend.
- It may be standardised and inflexible, for example, the use of uniform standards or targets does not take into account variations in the cost of compliance among firms, thus causing economic inefficiencies. In contrast, market-based instruments such as emissions trading allow those industries for whom it is more costly to reduce emissions to buy credits from lower cost industries.
- Direct regulation can be costly to enforce effectively and its effectiveness can be significantly reduced if not enforced effectively.
- It can elicit defiance and resistance; Anderson has used the expression ‘shoot, shovel and shut up’ to describe the response of some USA farmers to federal endangered species legislation.⁷ Legal challenges to regulatory actions by those resisting regulation can also be a significant drain on the resources of regulator (and regulatee).

5 R. Kagan, ‘Regulatory Enforcement’ in D. Rosenbloom & R. Schwartz (eds.), *Handbook of Regulation and Administrative Law*, Dekker, New York, 1994, quoted in N. Gunningham & D. Sinclair, ‘Instruments for Environmental Protection’ in N. Gunningham & P. Grabosky (eds.), *Smart Regulation: Designing Environmental Policy*, Oxford University Press, Oxford, 1998, p. 43n.

6 N. Gunningham & D. Sinclair, ‘Instruments for Environmental Protection’ in N. Gunningham & P. Grabosky (eds.), *Smart Regulation: Designing Environmental Policy*, Oxford University Press, Oxford, 1998, p. 44.

7 T. Anderson, ‘At Home on the Range with the Wolves: Making a Liability into an Asset’, *Ecoworld.com*, Vol. 2, June 1995, quoted in N. Gunningham & D. Sinclair, ‘Instruments for Environmental Protection’ in N. Gunningham & P. Grabosky (eds.), *Smart Regulation: Designing Environmental Policy*, Oxford University Press, Oxford, 1998, p. 45n.

- In some instances of direct regulation there can be an absence of incentives for firms to go beyond minimum standards. ‘The inability to encourage firms to go “beyond compliance”, through a process of continuous improvement and cultural change, is one of the most serious failings of command and control in its traditional forms.’⁸

2. Self-Regulation, Quasi-Regulation and Co-Regulation

Self-regulation is generally characterised by industry formulating rules and codes of conduct with industry being solely responsible for enforcement. Further categorisation of industry self-regulation can be done in terms of the degree of government involvement because pure self-regulation without any form of external intervention is uncommon.

Quasi-regulation includes a broad range of arrangements whereby governments influence or secure compliance by businesses. These include industry codes of practice developed with government involvement, guidance notes, industry-government agreements and accreditation schemes. A good example is the Electronic Funds Transfer Code of Conduct. It is a voluntary code developed in 1986 by industry, consumer and government representatives. The Code has wide industry coverage and has evolved to encompass an expanding range of electronic funds transfers. It has also been endorsed by the Australian Government and State and Territory Governments.

Co-regulation typically refers to the situation where industry develops and administers its own arrangements but government provides legislative backing to enable the arrangements to be enforced. An example is the telecommunications consumer protection regime. Telecommunications legislation provides that industry may have responsibility for codes of practice designed to protect consumers. However, if the industry fails to develop adequate codes, the Australian Communications and Media Authority has the power to request that industry develop a code within a given timeframe or devise a standard that is binding on industry.

When are they most useful?

- Self-, quasi- and co-regulation work best when there is a degree of coincidence between the self-interest of the individual company or industry and the wider public interest.
- Where a substantial gap exists between the public interest and the private interest it would be naïve to rely upon a firm or industry taking steps voluntarily in the public interest unless there is some external pressure to do so. This pressure can come from a variety of sources. The threat of direct government intervention is usually the most important, although the activities of interest groups such as environmental and consumer organisations coupled with industry concerns to maintain credibility and legitimacy (and through this commercial advantage) can also be effective.

⁸ N. Gunningham & D. Sinclair, ‘Instruments for Environmental Protection’ in N. Gunningham & P. Grabosky (eds.), *Smart Regulation: Designing Environmental Policy*, Oxford University Press, Oxford, 1998, p. 45.

- Where a ‘community of shared fate’⁹ exists, that is, where the poor performance of one firm can reflect badly on and jeopardise the interests of other firms in the same industry. This is strongest when: firms are aware of each other’s behaviour and can detect non-compliance (difficult in an industry with many smaller firms); the industry sector has a history of effective co-operative behaviour, as evidenced in an existing industry association; there is a means of punishing non-compliance (as in many co-regulation schemes where sanctions are underwritten by the Government); and where consumers or other interest groups can identify compliant firms, thereby enabling market or moral pressure to be exerted.
- In addition to the above considerations, the level and impact of risk is also relevant, for example, self-regulation with no or very limited government involvement should be considered where both the risks and impacts of a breach are low.

Advantages

Self-regulation, quasi-regulation and co-regulation offer the potential for greater speed, flexibility, sensitivity to market circumstances, efficiency and less government intervention than direct government regulation. Because standard setting and identification of breaches involve practitioners who have detailed knowledge of the industry, this can lead to more practicable standards, with greater industry commitment resulting in more effective policing. There is the potential to use peer pressure to successfully internalise responsibility for compliance. Often, self-regulation involves the application of ethical standards that extend beyond the letter of the law, and which may significantly raise standards of behaviour.

Disadvantages

Despite the potential advantages of self-regulation discussed above, quasi-regulation and co-regulation have a somewhat tarnished image. ‘Self-regulation is frequently an attempt to deceive the public into believing in the responsibility of an irresponsible industry. Sometimes it is a strategy to give the government an excuse for not doing its job.’¹⁰ There is potential for these forms of regulation to affect competition adversely. The regulatory framework, for example, can be captured by industry and may be designed to benefit incumbents at the expense of possible new entrants or consumers. The extent that self-regulation, quasi-regulation and co-regulation have been successful has depended very much on the social and economic context within which they have operated and the particular characteristics of the scheme itself.

9 J. V. Rees 1994, *Hostages of Each Other: The Transformation of Nuclear Safety Since Three Mile Island*, University of Chicago Press, Chicago, quoted in N. Gunningham & D. Sinclair, ‘Instruments for Environmental Protection’ in N. Gunningham & P. Grabosky (eds.), *Smart Regulation: Designing Environmental Policy*, Oxford University Press, Oxford, 1998, p. 54.

10 J. Braithwaite, ‘Responsive Business Regulatory Institutions’ in C. Cody & C. Sampford (eds.), *Business, Ethics and Law*, Federation Press, Sydney, 1993, quoted in N. Gunningham & D. Sinclair, ‘Instruments for Environmental Protection’ in N. Gunningham & P. Grabosky (eds.), *Smart Regulation: Designing Environmental Policy*, Oxford University Press, Oxford, 1998, p. 53.

3. Voluntarism

In contrast to self-regulation, which entails social control by an industry association, voluntarism is based on the individual or firm undertaking to commit to the desired behaviour. Commonly, voluntarism is initiated by the Government playing the role of coordinator or facilitator.

A good example is Australia's Landcare movement, which aims to improve natural resource management by landholders and community groups. The Australian Government and State Governments provide some administrative support to Landcare groups and the National Landcare Programme makes project funds and/or grants subject to a range of conditions such as matching financial contributions from farmers. However, involvement in a Landcare group is completely voluntary.

When is it most useful?

Its greatest strength is where individuals or businesses perceive their self-interest to be consistent with the broader public interest. While it is impossible to engage all members of a group or industry through voluntarism, it can be a very useful first step where achieving a threshold of cultural change is required before other policy instruments can be contemplated, and/or where active participation by a large number of individuals is required to solve a problem (such as reducing water usage or the adoption of better natural resource management techniques). It is not, by itself, a suitable means of addressing short-term, high-risk, high-impact policy problems.

Advantages

Voluntarism has the advantage of being non-interventionist, with high levels of industry and community acceptability. It can result in people (or businesses) internalising the motivation for the desired behaviour and achieving sustainable, long-lasting behavioural change.

Disadvantages

It can have significant limits to its effectiveness depending on the motivation to participate. Using voluntarism can make it difficult to target and monitor outcomes without incurring high administration costs, and generational change or new circumstances can lower its effectiveness over time.

4. Education and Information Instruments

The range of educational and information-based instruments is broad and can involve varying degrees of compulsion by government. They include the following major categories:

- education and training, including media and targeted information campaigns
- corporate reporting requirements such as full cost accounting

- community right to know laws, that is, laws compelling disclosure of something, for example, pollution and chemical hazards or executive remuneration
- public information registers such as those for registered builders or health practitioners
- product certification and labelling, and
- awards schemes.

When are they most useful?

Instruments within this category will be more effective in some circumstances than in others, for example:

- Community Right to Know legislation relies heavily on the energies of local communities in using the information and pressuring firms to improve their performance. Similarly, corporate reporting is dependent upon public interest groups to both shame bad performers and praise good ones. If these are missing such instruments are generally not useful.
- Instruments such as product certification, labelling and public registers are only useful if consumers are able and willing to utilise this information in their purchasing behaviour—something that needs to be investigated before these instruments are applied. Investment in compliance with labelling and certification standards is also required but in some cases can be achieved via private accreditation schemes with appropriate safeguards.

Advantages

The viability of many other policy instruments is often substantially dependent on the availability and quality of relevant information. Hence, this type of policy instrument frequently is beneficial as part of a broader package of measures. A key function of these types of instruments is to internalise the desired behaviour into corporate and individual decision-making. This is often vital if governments are to successfully address a range of complex policy problems such as climate change, water conservation and challenging public health issues like obesity. They work best when they can exploit the self-interest of the target audience, although self-interest is not a prerequisite for the success of education and information campaigns—there is evidence that some people are willing to sacrifice their own financial interests for the broader public interest if education campaigns are well-targeted and designed.¹¹

In most circumstances, educational and informational instruments can be implemented with modest administrative burdens, thus increasing their cost effectiveness.

Disadvantages

This category of instruments cannot usually be relied upon in isolation, particularly where there is a substantial tension between public and private interests.

¹¹ See, for example, A. Bennett, G. Backhouse & T. Clark (eds.) 1995, *People and Nature Conservation: Perspectives on Private Land Use and Endangered Species Recovery* quoted in N. Gunningham & D. Sinclair, 'Instruments for Environmental Protection' in N. Gunningham & P. Grabosky (eds.), *Smart Regulation: Designing Environmental Policy*, Oxford University Press, Oxford, 1998, p. 68.

5. Economic Instruments

Economic instruments may take a wide variety of forms, some providing positive incentives and others negative ones. They include the following categories:

- property rights (e.g. fishing quotas, water quotas)
- market creation (e.g. emissions trading schemes)
- fiscal instruments and charge systems (e.g. taxes, fines, charges, licence fees, subsidies, grants, tax credits)
- financial instruments (e.g. soft loans, revolving funds)
- liability instruments—using the threat of legal action to recover the cost of damages to provide firms with an incentive to internalise the costs associated with the risk (e.g. environmental damage, health or property damage to consumers)
- performance bonds—this requires regulatees to post a security deposit which is redeemable on satisfactory completion of a task (e.g. when a mining company has undertaken rehabilitation of the land), and
- deposit refund systems (e.g. deposit refund system for used beverage containers).

When are they most useful?

This is difficult to generalise about as it depends on the type of economic instrument and the particular context in which it may be used. Market creation is useful, for example, where the use of permits can be monitored and verified easily and where there are good trading prospects, whereas taxes and charges can be used in a much broader range of circumstances. It is beyond the scope of this paper to discuss the appropriate selection of the range of economic instruments in more detail except to say that policy makers will need to assess the suitability of each type of instrument in the more particular context in which the issue arises.

Advantages

The virtue of economic instruments is that they seek to influence behaviour through price signals or market systems without the need for direct intervention in the affairs of individuals or firms. Individuals and firms can seek out the most cost-effective solutions for their individual circumstances. Many economic instruments encourage firms and individuals to go beyond minimum levels of compliance. Their use may reduce government's enforcement costs (although some economic instruments such as an emissions trading scheme still require significant control costs because the Government has to establish a market to internalise the true cost of the activities of enterprises and individuals) as well as individuals' or firms' compliance costs.

Property rights, for example, can address the externalities associated with the 'tragedy of the commons' without significant levels of ongoing government intervention. If clear and enforceable property rights are created for water with commercial value, for instance, then an incentive exists for those holding the property rights to conserve water or sell to more efficient producers.

Market creation, as in the case of an emissions trading scheme, is one means of making firms internalise the cost of the externalities of pollution but in a way that allows flexibility in how individual firms respond. Those firms able to reduce their pollution levels at less cost can sell their excess permits to those that find it more expensive to cut their emissions. Thus it is a more flexible way of achieving a given emissions reduction target than direct regulation imposing the same target across all firms regardless of their individual circumstances.

Market Creation—Hunter River Salinity Trading Scheme

In the environmental context the NSW Government claims that its Hunter River Salinity Trading Scheme 'leads the world in using economic instruments for the effective protection of waterways'. The scheme (trialled in 1995–1996 and made permanent by regulation in 2002) involves the use of tradeable credits to manage saline discharges into the Hunter River. The scheme identified different flow conditions in the river. During periods of low flow (90% of the time in an average year) the river is most vulnerable to the effect of discharges of saline water and none are allowed. During high flow or flood conditions the river is at its least vulnerable, and at such times participants are able to release saline water into the river, provided they hold enough credits to cover the amount discharged. If a participant wishes to discharge more than their credit holding permits, they must acquire credits from others who do not need to discharge during that period. According to the NSW Department of Environment and Climate Change, the scheme has been responsible for 'significantly reducing river salinity at a time when there has been considerable growth in industry. The river now has less salt than many bottled mineral waters', it says, allowing 'agriculture, mining and electricity generation to operate side by side, sharing the use of the river'.¹²

Disadvantages

On the downside, however, individuals and businesses do not always act in an economically rational way, which can make economic instruments less dependable than direct regulation. Similarly, taxes and subsidies can restrict innovation and efficiency in certain circumstances and may not operate equitably across different levels of industry and the community. Some economic instruments can generate significant direct costs to government, for example, subsidies and grants.

Each particular category of economic instrument also has its own relative disadvantages. In the case of the instrument of market creation for trading emissions, for example, it can be difficult to find a rational basis for allocating permits. Simply allocating them to existing polluters, for instance, can create a barrier to new market entrants.

Using the threat of legal liability as a means of internalising risk also has disadvantages such as high transaction costs and inevitable inequities between different litigants.

¹² NSW Department of Environment and Climate Change 2009, 'Hunter River Salinity Trading Scheme' and NSW Department of Environment and Conservation 2003, *Auctioning Hunter River Salinity Trading Scheme Credits*, p. 1, <<http://www.environment.nsw.gov.au>>

Combinations of Policy Instruments May Work Better

The above section illustrates that each main category of policy instrument has something valuable to offer but that they generally have substantial limitations as a stand alone strategy for government intervention. Further, each category of policy instrument works well in only a restricted range of circumstances—no single instrument type works across-the-board.

Properly monitored and enforced command and control regulation, for example, has the advantages of dependability and predictability, but it can be inflexible, time consuming to make and amend, costly to enforce and inefficient if not enforced properly. Economic instruments, on the other hand, are often efficient but their actual impact can be uncertain. Information-based strategies and self-regulatory measures are less coercive and intrusive than command and control regulation and generally cost-effective, but they tend to be unreliable when used in isolation.

In most cases, the best way of overcoming the deficiencies of individual instruments, while taking advantage of their strengths, is by designing a combination of instruments instead of relying on a single type (provided the ‘smorgasbord’ approach of using every available instrument, rather than the minimum necessary to achieve the desired result, is avoided).

The following discussion is concerned with using combinations of policy instruments to address the same policy issue rather than employing multiple measures to address multiple problems. The *Australian National Tobacco Strategy 2004–2009*, for instance, uses a comprehensive range of policy tools to reduce tobacco consumption, resulting in the effectiveness of the whole package being significantly greater than the sum of its parts.¹³ For example, the strategy includes command and control regulation introduced by the Australian Government, and State and Territory Governments, that regulates the promotion, sale, place of use, and packaging of tobacco products. It also includes economic instruments such as an excise tax on tobacco aimed at consumers. The resistance that may be generated by these measures (perceptions of curbing personal freedoms, intrusion by the ‘Nanny State’) is offset by a mix of instruments designed to promote attitudinal and behavioural change, including mass media messages encouraging people to quit smoking and advertising the benefits of being smoke-free. These employ sophisticated social marketing techniques, targeted community support and education measures designed to create negative attitudes towards smoking.

All instrument mixes, however, will not automatically be complementary. Some may actually be counterproductive and the outcomes of others will depend on the specific context in which they are applied. The task is made more difficult when different measures are introduced over a period of time.

13 Australian Public Service Commission 2007, *Changing Behaviour: A Public Policy Perspective*, Commonwealth of Australia, Canberra, p. 29, <<http://www.apsc.gov.au>>

Identifying which combinations are complementary, which are counterproductive, and which are context-specific, is not always easy. There are a large number of possible instrument combinations and their interactions are complex. In their work on instrument combinations, rather than exploring all the possible combinations in detail, Gunningham and Sinclair¹⁴ attempt to provide policy makers with an overview of potential mixes that would illustrate the importance of choosing judicious combinations. This is done in the context of environmental policy, but their ideas are applicable to policy making in general. The following is based on their work.¹⁵

Inherently Complementary Combinations

Information and all other instruments

While information strategies are unlikely to be effective on their own, in most circumstances they are important and complement other instruments. Command and control regulation, for example, depends on information flowing from the regulator to the regulated and vice versa. Information provided by a regulator to industry or individuals can help to reduce resistance to regulation and facilitate good practice, and regulators rely on information provided to them by regulatees in order to monitor compliance.

Information is similarly important to self-regulation. The credibility of self-regulatory measures depends largely on stakeholders and the broader community being confident that the measures are accountable and transparent, which depends in turn on access to independent performance information. For voluntarism to be effective, information needs to be provided to alert organisations or individuals to their own self-interest or to the wider merits of a particular course of action. Farmers are only likely to modify destructive agricultural practices voluntarily, for example, if they are informed about the benefits to themselves and the environment of new natural resource management practices, and are provided with the knowledge and skills to apply them. Market mechanisms, such as economic incentives, also rely heavily on the availability of sufficient information to enable organisations or individuals to make decisions about whether it is in their interest to respond to such incentives. Grant programmes only work if target groups and/or individuals are aware of the potential for funding under the particular programme.

Voluntarism (or self-regulation) and command and control regulation

Voluntarism complements most forms of command and control regulation, particularly where standards of performance beyond compliance are desired. Performance-based command and control regulation typically establishes a performance benchmark, with voluntary measures encouraging firms to achieve further improvements. For example, in addition to administering

14 N. Gunningham & D. Sinclair, 'Designing Environmental Policy' in N. Gunningham and P. Grabosky (eds.), *Smart Regulation: Designing Environmental Policy*, Oxford University Press, Oxford, 1998, especially pp. 428–429.

15 N. Gunningham & D. Sinclair, 'Designing Environmental Policy' in N. Gunningham and P. Grabosky (eds.), *Smart Regulation: Designing Environmental Policy*, Oxford University Press, Oxford, 1998, pp. 422–448.

command and control regulation, the United States Environmental Protection Agency (EPA) runs various partnership programmes with industry aimed at improving environmental performance. One of the first such initiatives, which operated from 1991 to 1996, was the 33/50 programme, which encouraged firms to reduce levels of toxic chemical releases on a voluntary basis. The programme set targets for reduction that were exceeded a year ahead of schedule.¹⁶

The combination of the two instruments meant that firms which did not participate in the voluntary scheme still had to meet the baseline set by regulation while firms that did participate went beyond it. Had the voluntary measure been introduced alone, there would have been nothing to prevent some firms increasing the release of toxic chemicals, thus countering the efforts of those committed to reducing them. Combining both instruments produced better results than if either had been used independently.¹⁷ Voluntarism can also work with process-based command and control regulation, for example, where companies are required by regulation to adopt internal decision-making processes designed to improve performance, as in the case of environmental management systems (tools that provide a structured approach to planning and implementing environmental protection measures). However, voluntarism is unlikely to produce results when used with regulation that prescribes the use of an approved technology, as there is little opportunity in such cases to go beyond compliance.

As with voluntary measures, self-regulation that targets performance beyond minimum mandatory standards can complement certain types of command and control regulation.

Command and control regulation (or self-regulation) and supply side incentives

Economic instruments in the form of supply side incentives, such as tax breaks or soft loans (loans with a below market rate of interest) for preferred technologies, complement command and control regulation related to those technologies. Regulation that requires a reduction in greenhouse gas emissions, for example, will be assisted by incentives for firms to purchase more energy efficient technologies, as long as these incentives are not too prescriptive.

Command and control regulation (or self-regulation) and broad-based economic instruments (that target different aspects of the same problem)

Although the underlying rationale of command and control regulation is quite different to that of broad-based economic instruments, applying them in tandem may be complementary if they target different aspects of an issue. An example is the phasing out of leaded petrol in Australia.¹⁸ After 1985 all vehicles in Australia were required to be fitted with catalytic converters, which could not operate with leaded petrol (a technology-based command and control measure). The Government also introduced measures to make leaded petrol more

16 United States Environmental Protection Agency (EPA) 1999, *33/50 Program: The Final Record*, <<http://www.epa.gov>>

17 N. Gunningham & D. Sinclair, 'Designing Environmental Policy' in N. Gunningham and P. Grabosky (eds.), *Smart Regulation: Designing Environmental Policy*, Oxford University Press, Oxford, 1998, p. 433.

18 N. Gunningham & D. Sinclair, 'Designing Environmental Policy' in N. Gunningham and P. Grabosky (eds.), *Smart Regulation: Designing Environmental Policy*, Oxford University Press, Oxford, 1998, p. 435.

expensive than unleaded petrol (a broad-based economic instrument in the form of a tax). The two measures were complementary because they addressed different aspects of the same problem—the technology-based standard was aimed at the manufacturers, while the tax was directed at consumers.

Inherently counterproductive combinations

Command and control regulation and broad-based economic instruments (that target the same aspects of a particular problem)

As mentioned above, the rationale behind command and control regulation is different to that behind economic instruments. Most command and control instruments, particularly performance- and technology-based instruments, seek to impose predetermined outcomes on industry. Economic instruments, on the other hand, aim to maximise the flexibility of firms to make choices about their levels of performance (and how they achieve those levels) in response to economic incentives. Performance- or technology-based command and control instruments and economic instruments that target the same behaviour are therefore unlikely to be complementary.

In the case of environmental regulation, for example, economic instruments are typically designed to increase the costs associated with polluting activities, encouraging firms to choose the most economically efficient pollution reduction measures available, thus allowing them to save money and placing a lower burden on the economy as a whole. Such measures also encourage innovation aimed at finding less expensive ways of reducing pollution. If a prescriptive performance-based command and control instrument were applied at the same time as an economic instrument, for example, mandated levels of energy efficiency for firms, together with a broad-based carbon tax, market choices would be constrained by the command and control regulation, which would undermine the basic rationale for the economic instrument.

Self-regulation and broad-based economic instruments

To the extent that self-regulation replicates the effects of command and control regulation, it is also unlikely to be compatible with broad-based economic instruments.

The phasing out of ozone depleting substances in Australia (particularly chlorofluorocarbons (CFCs)) provides a good example.¹⁹ The *Strategy for Ozone Protection 1989* (revised in 1994) set a target of 95% phase out in CFC consumption by 1995. As part of the strategy the Government introduced a transferable licensing quota system for the import, export and manufacture of CFCs. Allowing firms—regardless of industry sector—for whom CFC consumption would be costly, to purchase quotas should have forced up the market price of the tradeable quotas, so that those firms for whom the cost of reduction was lower would be encouraged to reduce their consumption of CFCs. Subsequently, however, the Australian

¹⁹ N. Gunningham & D. Sinclair, 'Designing Environmental Policy' in N. Gunningham and P. Grabosky (eds.), *Smart Regulation: Designing Environmental Policy*, Oxford University Press, Oxford, 1998, pp. 441–442.

Government and State Governments negotiated various sector-specific self-regulatory agreements designed to phase out CFCs. The imposition of pre-determined outcomes on various industry sectors through these measures effectively prevented the market operating to force up prices for the tradeable quotas and this was one of the factors that resulted in the scheme's lack of success, with few trades occurring.²⁰

Technology-based standards and performance-based standards

Much environmental command and control regulation (particularly in the United States) has been in the form of technology-based standards, such as BAT (best available technology) standards under Clean Water and Clean Air legislation. The practical result of such regulation is that firms are forced to adopt particular technologies. Regulators maintain a high degree of control over the way firms run their industrial processes. Performance-based standards, on the other hand, aim to avoid prescriptive technological solutions, leaving it up to firms to choose how they meet regulated standards.

Given the fundamental difference between these two approaches, they are unlikely to be complementary. For example, the United States Environmental Protection Agency's Project XL initiative,²¹ which ran from 1995 to 2003, was designed to promote better industry performance in exchange for a regulatory approach focused more on results than means. However, it did not attract a substantial number of participants, partly because firms were concerned that pre-existing technology-based BAT standards still applied. This meant that, even if participating firms agreed to put in place a performance-based environmental management strategy, they were still at risk of prosecution if they failed to meet the technology-based BAT standards.²²

Introducing instruments in sequence

Introducing policy instruments sequentially can be pursued to enhance the effectiveness of compatible combinations. A sequential approach is also one way of avoiding the less favourable outcomes that can arise if inherently incompatible instruments are implemented simultaneously. Certain instruments might be held in reserve, for example, and only be applied if and when other instruments had demonstrably failed to meet pre-determined objectives. The credibility of self-regulation, for instance, is often strengthened if it is backed up by command and control regulation, that is, if it can be shown that an industry has failed to deliver on its voluntary commitments, a regulator can then impose mandatory requirements.

This approach may also prepare the ground for introducing measures likely to prove unpopular initially with certain stakeholders. In the early 1990s, for example, there was considerable public debate in Australia about the possible introduction of a carbon tax. Against this

20 Overall, the regulatory framework used to phase out ozone depleting substances has been successful in Australia, which has met or exceeded all phase out targets set through the international *Montreal Protocol on Substances That Deplete the Ozone Layer*.

21 eXcellence in Leadership, <<http://www.epa.gov/projctxl>>

22 N. Gunningham & D. Sinclair, 'Designing Environmental Policy' in N. Gunningham and P. Grabosky (eds.), *Smart Regulation: Designing Environmental Policy*, Oxford University Press, Oxford, 1998, p. 443.

background, in 1995 the Australian Government launched the *Greenhouse Challenge* (expanded in 2004 to the current *Greenhouse Challenge Plus*), a joint voluntary initiative between the Government and industry aimed at reducing greenhouse gas emissions. The scheme involved voluntary reporting of emissions with provision for independent verification. At June 2008, over 700 businesses and industry bodies were members of the programme. For the majority of participants membership remains voluntary, but from 1 July 2006, participation in *Greenhouse Challenge Plus* became a requirement for companies receiving fuel excise credits of more than \$3 million. The self-regulatory measures paved the way for the introduction of a mandatory national framework for corporations to report greenhouse gas emissions and energy consumption and production under the *National Greenhouse and Energy Reporting Act 2007* (effective from 1 July 2008).²³ The scheme may also have gone some way towards softening industry and community resistance to the idea of an emissions trading scheme.

An alternative approach to sequencing, proposed by Gunningham and Sinclair, is a two track regulatory system. Instead of responding to individual enterprises by being more (or less) punitive, depending on their previous actions, the regulator offers different but standardised regulatory paths. The path offered to best practice performers is more flexible and uses a combination of instruments such as self-regulation and independent third party audit, while the alternative is more conventionally prescriptive and coercive. This approach is responsive in that a failure to live up to the requirements of the best practice path will lead to demotion to the conventional one.

Combinations where the outcome will be context-specific

Although it is possible to identify certain inherently compatible and incompatible instrument combinations, there are other mixes where the outcome will depend on the particular context in which the two instruments are combined. For example, the boundary between voluntarism and self-regulation is blurred, the main distinction being that self-regulation usually involves oversight by an industry association, whereas voluntarism is based on individual firms undertaking to do the correct thing without any coercion. There is no inherent reason why these two instrument categories should, or for that matter should not, be used in combination—it would depend on the specific context.

It is important for policy makers to distinguish between different instrument combinations that are inherently incompatible, and those which do not work well together because of the context. In the latter case, the cause will often be competing policy goals, rather than any inherent incompatibility between the instrument combinations themselves. The introduction of measures under legislation designed to protect endangered species in Australia, for example, has in the past been undermined by incentives for clearing native vegetation on private land, such as agricultural price supports and other subsidies which encouraged farmers to maximise production, including by clearing more land for cultivation.²⁴

²³ See <<http://www.climatechange.gov.au/reporting>>

²⁴ N. Gunningham & D. Sinclair, 'Designing Environmental Policy' in N. Gunningham and P. Grabosky (eds.), *Smart Regulation: Designing Environmental Policy*, Oxford University Press, Oxford, 1998, pp. 446–447.

Multi-instrument combinations

In the above examples combinations of only two instruments have been used, as it would not be practical in this context to deal with the large number of possible permutations of multi-instrument mixes. In practice, of course, policy mixes often involve the combination of more than two instruments, particularly given existing policy interventions in an area by other government agencies or levels of government. The bipartite examples used are intended to illustrate the principle that by judiciously selecting complementary combinations of instruments, policy makers can build on the strengths of individual measures while compensating for their weaknesses. A good starting point, however, is always to consider what tools and/or instruments may already be in place.

Empowering Third Parties

There are significant potential advantages for policy makers in looking beyond the traditional model of government as being solely responsible for devising and implementing policy frameworks, to one in which a range of third parties, for example, industry associations, financial institutions and NGOs, play active policy roles in certain circumstances.

Consultation and engagement is the starting point for empowering third parties. As the OECD has outlined, such engagement contributes to the quality of policy design by:²⁵

- (i) bringing into the discussion the expertise, perspectives and ideas for alternative actions of those directly affected
- (ii) helping policy makers to balance opposing interests
- (iii) identifying unidentified effects and practical problems
- (iv) providing a quality check on the assessment of costs and benefits, and
- (v) identifying interactions between any existing policy instruments from various parts of government.

Actively recruiting third parties into the policy process can provide further benefits. And, in some cases, action by third parties may have a greater impact than government intervention. A bank threatening to foreclose on a loan to a firm with low levels of liquidity, for instance, is likely to have a greater impact than any government instrument.

Third party intervention may also be perceived as more legitimate by some regulatees. Farmers, for instance, may be more inclined to accept commercial imperatives to change practices than mandated government requirements to do so. In the United States, for example, the Bailey

²⁵ OECD 1995, *Recommendation of the Council of the OECD on Improving the Quality of Government Regulation*, p. 18, <<http://www.oecd.org>>

Wildlife Foundation Wolf and Grizzly Compensation Trusts, founded in 1987 by a conservation group called the Defenders of Wildlife, draw on private donations to compensate ranchers in areas in and around the Northern Rockies for verified livestock losses to wolves and grizzly bears. This compensation programme has been credited with a significant role in forging more positive attitudes towards native wildlife in the relevant US States.²⁶

Participation by third parties can also be more cost-effective, in that it allows government to focus its resources, which are always under pressure, on those areas in which there is no viable alternative to direct regulation. As well, there are areas of commercial activity in which direct government influence is impractical, for example, in sectors where there are a very large number of small players, making it difficult for government to identify, let alone influence them all effectively.

In Australia, the approach to biodiversity conservation provides a good example of the benefits of recruiting third parties into the policy process. In the past, the response to calls for conservation in Australia was generally to declare protected areas—principally, national parks. Over the past decade or so there has been a recognition that while national parks are important, with much of the country privately-owned, an expanded approach to protecting the nation's biodiversity is required.

Policy makers have had to look beyond government for other players and partnerships in conservation, for example, with Indigenous people, local government, private trusts, landowners and resource-based industries. The Government now works in partnership with a range of third party organisations to protect Australia's biodiversity. Bush Heritage Australia, for example, a non-profit organisation funded mainly by donations (although it also receives some government grants), purchases land on the open market that it manages, in cooperation with government agencies and a range of other interested stakeholders, as protected reserves. The organisation currently manages 30 reserves throughout Australia, covering almost one million hectares.

Policy makers can do a range of things to engage third parties in the relevant policy frameworks, beginning with the provision of adequate information. For example, in the 1990s, it was decided that the most effective way of targeting the disparate users of ozone depleting substances in commercial refrigerators in Australia was to train and certify the private contractors who regularly serviced the refrigerators. This led not only to improved environmental work practices on the part of the service contractors, but also to the delivery of dependable information about the process of phasing out ozone depleting substances, such as CFCs, to otherwise difficult to reach small and medium sized businesses.

In the commercial sphere, reliable information on the performance of firms enables influential third parties, such as large and small investors, and banks, to make objective decisions about the relative merits of different companies. For example, in the 1980s the United States Government introduced a law requiring firms in industries which manufacture, process or use significant amounts of toxic chemicals to report annually on their release.²⁷ This has allowed financial markets to factor such information into share prices; it also enables interest groups to bring pressure to bear on those firms who report the release of high levels of toxic chemicals.

²⁶ 'Defenders of Wildlife', <<http://www.defenders.org>>

²⁷ *Emergency Planning and Community Right to Know Act 1986*.

The Government can facilitate the quasi-regulatory activities of non-commercial third parties, such as NGOs, by providing funding support and/or establishing their legal standing. The Government might also facilitate quasi-regulatory activity by commercial third parties such as banks or insurance companies by, for example, making insurance a condition of a licence, or a condition of authorisation to engage in certain activities.

A good example of the quasi-regulatory power of commercial third parties is provided by the Equator Principles²⁸ initiative (introduced in 2003 and revised in 2006), a voluntary scheme involving a set of 10 principles, based on the policies and guidelines of the World Bank and its private sector investment arm, the International Finance Corporation. It aims to ensure that projects financed by financial institutions are developed in a socially and environmentally responsible manner. By adopting these principles, banks and other financial institutions agree not to finance projects that endanger communities or the environment. The Westpac Banking Corporation was one of 10 banks who first adopted the principles in 2003. The National Australia Bank and ANZ have since signed on. To date, more than 60 leading financial institutions around the world have adopted the principles, covering more than 80% of the global project financing market.

The Government can also make use of supply chain pressure, whereby large firms put pressure on their smaller suppliers and customers to improve their performance. This might require firms over a certain size not only to adopt particular management systems (process-based regulation) but also to ensure that others in the supply chain conform to related systems requirements. Alternatively, such a requirement could be included in a sector-wide self-regulatory scheme, such as the chemical industry's international *Responsible Care* initiative, which includes a 'Product Stewardship' programme, whereby participating companies work with their suppliers, customers, distributors and user groups to implement practices for improving the health, safety and environmental performance of their products throughout the supply chain. In this example, supply chain pressure can be enhanced when complemented by either process-based regulation or self-regulation.

Policy makers can aim to create the right preconditions for other players to assume a greater share of the policy burden, rather than necessarily intervening directly. The Government can act as catalyst and facilitator, in particular by enabling a co-ordinated and gradual escalation of policy instruments, thus filling any gaps that may exist. Insurance can be a useful instrument in this context. Insurers can visit company sites, engage independent auditors, vary premiums and if need be, cancel policies. They rely, however, on reliable information on which to make assessments of companies' performance, and typically have some difficulty in obtaining relevant information. There is therefore a role for government in ensuring that the information is accessible, possibly through community right-to-know legislation. Insurers can also advise government regulators if companies are non-compliant, inviting the application of enforcement measures by government. In this way a combination of third party and government action provides the opportunity for enforcement escalation.

28 The Equator Principles, <<http://www.equator-principles.com>>

East Lake Urban Renewal Project—Using Third Parties Innovatively

East Lake is a region within the inner southern suburbs of Canberra. It has a wide variety of uses although until recently its character was predominantly light industrial. It also includes the ecologically significant Jerrabomberra Wetlands. The ACT Government identified the area as being suitable for redevelopment but wanted to achieve world class environmental standards for urban renewal. This is being achieved via the East Lake Urban Renewal Project. It is one of a number of projects around Australia in which the Commonwealth Scientific and Industrial Research Organisation (CSIRO) is involved, as part of its *Sustainable Communities Initiative* (SCI).

A wide range of stakeholders are involved in the project, namely, six ACT Government departments at the local level (with the ACT Planning and Land Authority having the central role) as well as various community stakeholder groups. Third parties participating in the East Lake Project through the SCI include: Westpac (financing models); the International Council for Local Environmental Initiatives (sustainability programmes); the Department of Agriculture, Fisheries and Forestry (Catchment Management Authority input); the World Wildlife Fund ('One Planet Living' programme); Delfin Lend Lease (property development expertise); The Natural Edge Project (engineering options and holistic approaches to development); and Parsons Brinckerhoff (railway plan).

In relation to urban planning regulation the East Lake project has adopted an innovative principles-based approach. The project has drawn on the expertise of a range of these third parties to formulate and implement the planning regulation framework.

The SCI grew out of CSIRO's experience in researching systems-based approaches to regional scale sustainable development. It is premised on the recognition that sustainability involves complex interrelationships between economic, social and environmental factors, and that although scientific research has an important role to play in shaping new thinking and behaviours, no one organisation can have all the answers. The SCI model brings together relevant knowledge, competencies and resources from across the public, private and non-government sectors in a holistic approach to planning and development.

When making decisions about the parties who might be co-opted into the policy framework, it is important for policy makers to have a good understanding of the particular sector or industry with which they are engaging, and to think laterally about what groups, organisations and individuals might have a convergent interest in achieving the policy goals towards which they are working. Policy makers aiming to reduce tobacco consumption, for example, have engaged with a wide range of third parties, including NGOs such as the Heart Foundation, educational institutions, health professionals and institutions, and retailers in order to discourage the use of tobacco products. In the United States, it has become standard practice,

for example, for hospitals to offer smoking cessation advice or counselling to smokers admitted for certain conditions (based on research indicating that illness, especially if smoking-related, increases smokers' motivation to attempt to quit and that hospital-based tobacco treatment services can reach smokers at this 'teachable moment'). Hospital regulatory organisations and Medicare monitor and publicly report this information. This has been credited with stimulating widespread interest by American hospitals in addressing smoking-related issues.²⁹

29 N. Rigotti, 'Smoking Cessation with Hospital In-Patients', Address to the UK National Smoking Cessation Conference, 15 June 2007, <<http://www.uknsc.org/2007>> Dr Rigotti is Associate Professor of Medicine at Harvard Medical School and Director, Tobacco Research and Treatment Centre, Massachusetts General Hospital.

Using Insights from Behavioural Theory

Public servants can design better policy frameworks by using the additional insights available from behavioural theory and empirical evidence. The assumptions made regarding the behaviour of individuals and firms have important implications for policy analysis and the options that are preferred and explored. The implicit model of behaviour that underlies much traditional policy analysis is the rational choice model from neoclassical economics, which assumes that individuals and organisations seek rationally to maximise their welfare and respond to price signals and information in self-interested and predictable ways.

The rational choice model is both very useful and a fundamental building block for policy making and regulation. However, it tends to ignore the wider environmental influences on human behaviour such as the power of peer pressure, family and societal expectations, organisational culture and key motivators other than self-interest. It can also be difficult for individuals, and to some extent for organisations, to estimate future costs and benefits accurately, particularly if relatively high levels of uncertainty surround them.

The concept of ‘bounded rationality’ was introduced around 50 years ago to focus attention upon the discrepancy between the perfect human rationality that is assumed in classical and neoclassical economic theory and the reality of human behaviour as it is observed in economic life. The point is not that people or firms are consciously or deliberately *irrational*, although they sometimes are, but that neither their knowledge nor their powers of calculation allow them to achieve the high level of optimal adaptation of means to ends that is posited in neoclassical economics.³⁰

30 H. Simon *et al* 1992, *Economics, Bounded Rationality and the Cognitive Revolution*, Edward Elgar, Brookfield, VT, p. 202.

A relaxation of the assumption that people and organisations are always rational, calculating, utility maximisers opens up a raft of challenges for policy analysis. It means that ‘most people do not always act in their own interests ... [they] are subject to judgement biases and self-control problems. They may have imperfect memories, discount the future excessively, make erroneous calculations, hold mistaken beliefs and be influenced by how questions are framed’.³¹

The 2007 APS Commission publication, *Changing Behaviour: A Public Policy Perspective*, describes in more detail some of the behavioural theories and evidence that are relevant for those seeking to influence public behaviour via regulatory or other policy tools. Using these insights can lead to better policy outcomes. One good example in a regulatory context is the use by the Australian Taxation Office (ATO) of the insight that behaviour is strongly affected by default options.

The Australian Taxation Office and Tax File Numbers³²

ATO was tasked with assisting in the implementation of major changes to superannuation arrangements. One crucial element of the new arrangements was that people must provide their tax file number to their superannuation fund. The penalty for not providing a tax file number is substantial—the person suffers a significantly higher tax rate plus more limited contribution opportunities. ATO identified around four million accounts without tax file numbers. Letters urging them to correct this were sent to people who did not have tax file numbers with their superannuation funds. ATO recognised, however, that most people were unlikely to respond in time despite the financial damage involved. So it turned this behavioural insight to advantage. Where a ‘hard’ match could be made by ATO between a superannuation fund and a person’s tax file number the letter sent to the individual stated that they had 28 days from the date of the letter to contact ATO if they did *not* want their tax file number passed on to their superannuation fund by ATO itself. As expected, most people did not respond to this letter and ATO was able to supply millions of tax file numbers to superannuation funds.

The concept of bounded rationality and much of the behavioural theory and empirical evidence relates to both individual and organisational behaviour. This is because, in one sense, organisations are simply groups of individuals. But, in addition, we know that institutional factors in organisations crucially affect the way decisions are made. Organisational systems and culture (that are often hierarchical) shape information flows, decision-making and the behaviour of individuals operating within the organisation. This can add a further layer of complexity for policy makers tasked with influencing the behaviour of organisations rather

31 M. Harrison, quoted in Productivity Commission 2008, *Behavioural Economics and Public Policy*, Roundtable Proceedings, Melbourne, 8–9 August 2007, Commonwealth of Australia, Canberra, p. 60.

32 L. Sylvan, quoted in Productivity Commission 2008, *Behavioural Economics and Public Policy*, Roundtable Proceedings, Melbourne, 8–9 August 2007, Commonwealth of Australia, Canberra, p. 111.

than individuals' behaviour. However, in either case a consideration of the insights from behavioural theory and empirical evidence can assist in designing smarter policy that will achieve better outcomes and avoid unintended consequences.

Some examples relevant for those designing policy frameworks illustrate this point well, for instance, the issue of consumer disclosure laws in the finance sector. Governments in many industrialised countries, including Australia, have introduced consumer protection regulation which requires firms to provide detailed information to consumers about their financial products. Such policy is designed to assist consumers in making informed decisions about complicated products that often require understanding and calculations concerning future gains and costs. The policy was formulated in response to the market's failure to provide adequate information for informed decision-making.

However, a behavioural change perspective has revealed that consumers suffer from 'disclosure fatigue'. Poorly-designed policy resulting in lengthy treatises of disclosure that create information overload or focus attention on less crucial information to the detriment of the consumer's attention to more important information, can produce a lose-lose scenario—one that is costly for business and bad for consumers.³³ Behavioural economics research shows that how information is presented ('framing') and other techniques of information disclosure can be improved in many instances so that consumers can absorb information more effectively and thus make better decisions on their own behalf and play their part in driving competition and greater efficiency in the market.

Another example of an unintended consequence relates to regulations that require health professionals in the ACT to report notifiable diseases to the relevant health authorities, so as to assist in preventing the spread of infectious disease. Initially, the regulatory framework was designed to rely on the payment of a small fee to compensate doctors for administrative costs and to reinforce the behaviour of reporting. A standard neoclassical analysis would always assume that financial rewards would encourage the rewarded behaviour. However, because the fee was set at a very low (token) level and never increased, the 'professional insult' of the low fee 'crowded out' the motivation to 'do the right thing'. The existence of the fee had changed the nature of the activity from the moral sphere to the commercial sphere (for example, as would happen if dinner guests offered to pay friends for their meal). Following the removal of the fee the rate of reporting went up. It appeared that health professionals were happy to do the reporting for nothing simply because it was the 'right thing to do' in promoting the health of the community.

The behavioural economics insight in this area of intrinsic and extrinsic motivation is that policy makers should consider how people perceive the behaviour they are trying to influence. If it is normally considered the right thing to do, it might be counterproductive to introduce financial rewards and conversely if it is normally considered shameful, it might be

33 L. Sylvan, quoted in Productivity Commission 2008, *Behavioural Economics and Public Policy*, Roundtable Proceedings, Melbourne, 8–9 August 2007, Commonwealth of Australia, Canberra, pp. 103–115.

counterproductive to introduce fines.³⁴ The size of any financial (dis)incentives should also be carefully considered—a large enough fine may be a disincentive and paying a volunteer a high enough fee may be an incentive.

The above point illustrates a broader principle—that it is important to understand the relevant characteristics and culture of the demographic group or industry sector in question. This is because the policy design process should be fundamentally shaped by the defining characteristics and culture of the particular industry sector or group with whom the policy problem resides. Gunningham and Sinclair compare the relevant characteristics and culture of the chemical industry with the agricultural sector, for example, as follows:

... in addressing chemical industry pollution, there are large, highly visible players, vulnerable to public pressure from local communities and national environmental groups, both of whom have a strong interest in the industry's environmental performance. The sources of pollution are readily identifiable, easily monitored and regulated, and there is considerable potential for supply side pressure exerted by large [chemical] manufacturers on their smaller buyers and suppliers.

In contrast, in confronting agricultural run-off, there are many geographically isolated small rural producers, whose activities are not easily monitored or policed. There is considerable cultural resistance to regulation amongst those producers, who form a significant political lobby. While environmental NGOs have relatively little influence ... the range of instruments and strategies that has been, and is likely to be, valuable in regulating the two groups [the chemical industry and the agricultural sector] is very different.³⁵

Another relevant example is based on insight from behavioural research that the behaviour of other people (and organisations) matters,³⁶ for example, we look to others to see how we should behave and we show strong bias in favour of the views and actions of groups that we identify ourselves as belonging to. One of the contributing factors to the sub-prime credit crisis in the United States, for example, appears to be the spillover of the looser lending standards of the non-prime (non-bank) lenders into the more mainstream financial sector. The banks were eventually influenced to accept lower credit standards—relying less on documentation and caring less about someone's capacity to pay—partly because 'everyone' else was doing it. It appeared to be not only that banks were influenced by losing a competitive edge because of tighter credit standards but that lower credit standards became the industry norm.

Another key behavioural insight is that people are bad at computation, for example, we overestimate the likelihood of something that is easy to imagine, we are irrationally loss averse and we often underestimate the importance or relevance of something that might happen in the future.³⁷ This bounded rationality can help to explain the failure of businesses to adopt

34 New Economics Foundation 2005, *Behavioural Economics: Seven Principles for Policy-Makers*, NEF, London, p. 7, <<http://www.neweconomics.org>>

35 N. Gunningham & D. Sinclair, 'Designing Environmental Policy' in N. Gunningham and P. Grabosky (eds.), *Smart Regulation: Designing Environmental Policy*, Oxford University Press, Oxford, 1998, p. 383.

36 New Economics Foundation 2005, *Behavioural Economics: Seven Principles for Policy-Makers*, NEF, London, p. 3, <<http://www.neweconomics.org>>

37 New Economics Foundation 2005, *Behavioural Economics: Seven Principles for Policy-Makers*, NEF, London, p. 10, <<http://www.neweconomics.org>>

proactive environmental policies even when it is in their economic interests to do so. For example, it is argued that there are substantial energy efficiency improvements which industry could profitably adopt.³⁸ And yet, most firms fail to take advantage of them. Only where energy is a large component of business input costs have substantial investments in energy efficiency been made.

The factors contributing to this bounded rationality include middle management inertia, lack of information and an absence of competitive pressures because energy costs are not considered to be core business and competitors are also not investing in energy efficiency. 'Crucially, most environmental investments will only pay off in the medium to long term, while the up-front investment is primarily short-term. Because corporations are judged by markets, investors, and others principally focussing on short-term performance, if they cannot demonstrate tangible economic success in the here and now, there may be no long term to look forward to.'³⁹

The key message from behavioural theory and empirical evidence for those designing policy frameworks is that changing behaviour through policy intervention is complex and that the predictions from the rational choice model of neoclassical economics may not always be accurate. The complexity of human behaviour makes generalised policy prescription more difficult. It is a warning to proceed cautiously so as to avoid policy failure and unintended consequences:

Public servants, as the key policy advisors to elected governments, need to be able to argue effectively, with elected officials, that ... citizen responses to policy initiatives or interventions are more complex and unpredictable than had been assumed, and that it is important to get it as right as possible. It will often be necessary to test policy interventions because policy makers in the public service and politicians are subject to exactly the same biases as others—they are overconfident, they overestimate the efficacy of the policies they are proposing, and so on.⁴⁰

In the area of consumer regulation, for example, it has been argued that insights from behavioural theory indicate that 'Consumer policy needs to be conducted very differently from how we have conducted it in the past. Perhaps a quite fundamental change is required: to provide for adequate research into the problems; to ascertain how people are likely to respond; and to test what we are about to do before we do it—and perhaps not do it.'⁴¹

This approach of research and field tests has been adopted as the fundamental approach to consumer policy by the United States Federal Trade Commission (FTC).

38 N. Gunningham & D. Sinclair, 'Designing Environmental Policy' in N. Gunningham and P. Grabosky (eds.), *Smart Regulation: Designing Environmental Policy*, Oxford University Press, Oxford, 1998, p. 416.

39 N. Gunningham & D. Sinclair, 'Designing Environmental Policy' in N. Gunningham and P. Grabosky (eds.), *Smart Regulation: Designing Environmental Policy*, Oxford University Press, Oxford, 1998, p. 416.

40 L. Sylvan, quoted in Productivity Commission 2008, *Behavioural Economics and Public Policy*, Roundtable Proceedings, Melbourne, 8–9 August 2007, Commonwealth of Australia, Canberra, p. 112.

41 L. Sylvan, quoted in Productivity Commission 2008, *Behavioural Economics and Public Policy*, Roundtable Proceedings, Melbourne, 8–9 August 2007, Commonwealth of Australia, Canberra, p. 110.

The US Federal Trade Commission's Use of Behavioural Research⁴²

The FTC's jurisdiction is a broad one, allowing the agency to challenge practices such as fraud, deceptive advertising, unilateral breach of contract and unauthorised billing. It also enforces a number of laws, including credit privacy and 'do not call'.

Starting in the 1970s, the FTC began to utilise insights from the marketing literature on consumer research which in turn was heavily influenced by developments in cognitive and social psychology. The end product of developments over the ensuing decades is the 'present eclectic mix of economic theory and behavioural research at the FTC that shares important similarities with the behavioural economics paradigm, but also reveals important differences as well'.⁴³

The FTC starts from the neoclassical economic tenet that competition among producers coupled with accurate information for consumers will result in the best products at the lowest prices but, crucially, its policies are also shaped by behavioural research. FTC policy is driven as much by what the field research indicates will work as it is by what is predicted by theory.

FTC research relies heavily on the use of surveys to identify how consumers perceive information. The chief instrument used is the 'copy test' in which consumers are shown hypothetical or actual advertisements in order to determine the types of messages they take away from them. Copy tests are used to identify the kinds of claims being made in an advertisement, to evaluate the effectiveness of proposed wording designed to qualify an advertised claim, and to test the effectiveness of proposed disclosures to be mandated in an advertisement or in other marketing documents.

This publication cannot present all the behavioural research and evidence that public policy analysts need to be aware of. Useful summary references which are a good starting point for further information include the Commission's publication, *Changing Behaviour: A Public Policy Perspective*, and the UK New Economics Foundation paper, *Behavioural Economics: Seven Principles for Policy-Makers*.

The main reason for raising the issue, albeit briefly, is to alert APS policy makers to the need to take account of the insights from behavioural theory when designing and implementing policy interventions. After all, many of the major issues facing government today, for example, climate change, will require significant alterations in behaviour to ensure that progress is made.

42 Based on J. P. Mulholland, 'Behavioural Economics and the Federal Trade Commission' in Productivity Commission 2008, *Behavioural Economics and Public Policy*, Roundtable Proceedings, Melbourne, 8–9 August 2007, Commonwealth of Australia, Canberra, pp 67–80.

43 J. P. Mulholland, 'Behavioural Economics and the Federal Trade Commission' in Productivity Commission 2008, *Behavioural Economics and Public Policy*, Roundtable Proceedings, Melbourne, 8–9 August 2007, Commonwealth of Australia, Canberra, p. 72.

Behavioural insights can help us to analyse problems better and design more effective and efficient ways of achieving particular goals. The complexity this perspective adds to the standard neoclassical model of rational choice supports an adaptive and flexible approach to policy interventions. Where possible, field research, pilots and trials can add valuable information about what works in practice as opposed to what is predicted to work from economic theory. Learning from the experience of other jurisdictions and listening to, and engaging with, stakeholders are other sources of information on 'what works in practice'. Policy development and evolution needs to be informed by evidence derived from on-the-ground intelligence about operational issues and the views of those being regulated and those implementing the regulation. In turn, this requires better links and communication between policy makers and designers and those implementing the regulation or other policy intervention. New technology can facilitate these links and thus enhance information sharing.

Improving APS Capability to Design and Support Smarter Policy

Designing smarter policy raises a range of capability issues for the APS.

Smarter policy involves:

- good analytical, and big picture thinking skills
- the ability and willingness to think more laterally and inclusively in order to align different players and policy tools in a unified and coherent strategy
- high-level connecting, communication and facilitation skills to work across levels of government and organisational boundaries effectively and to engage stakeholders in tackling policy issues co-operatively
- technical skills in order to understand fully the industry characteristics and the issues that policy makers need to grapple with. Policy interventions in relation to climate change or gene technology, for example, require high levels of specialist knowledge
- an awareness of, and willingness to apply, the insights from behavioural theory in policy design and implementation, including a recognition that changing behavior through policy intervention is complex and that the predictions from the rational choice model may not always be accurate, and
- an organisational culture that supports an adaptive and flexible approach to policy interventions. Where possible, field research, pilots, trials and evaluations can add valuable information about what works in practice as opposed to what is predicted to work from economic theory. This will involve investment in research and evaluation skills and a willingness to adapt policies and implementation in light of new evidence.

The APS employee survey conducted for the Public Service Commissioner's annual State of the Service Report provides insights into some of these issues. The focus in this section is on policy employees who currently comprise 10% of the APS workforce.

The data presented is the latest available. Generally, the data is from the 2007–08 employee survey, but for some indicators the latest data is from the 2006–07 survey.

Demographic Characteristics

Table 4.1 presents data on the demographic characteristics of policy employees in the APS.

Policy employees have a slightly younger profile than all APS employees, although both groups have high proportions of employees aged over 45 years, reflecting the general ageing of the APS workforce. A slightly higher proportion of policy employees are male compared to the APS average.

The majority of policy employees are located in the ACT (80%) while the opposite is true of APS employees as a whole. The classification structure for policy employees is significantly different from the APS average—there is a substantially larger proportion of policy employees at the higher classification levels, especially at the EL 1 and EL 2 classifications.

Policy employees have tertiary level qualifications (bachelor degree/vocational/diploma) at a slightly higher level than the APS average; however, they are twice as likely to have postgraduate qualifications.

Table 4.1: Demographic characteristics, 2007–08

Employees	APS employees involved in Policy (%)	All employees (%)
Age		
< 25	7	6
>45	35	41
Male	48	44
Female	52	56
Classification		
APS 1–6	44	75
EL	50	24
SES	6	2
Qualifications		
Bachelor degree/vocational/ diploma	50	47
Postgraduate	41	21
Location		
ACT	80	37
Not in ACT	20	63

Source: State of the Service employee survey, 2007–08

Whole of Government

Table 4.2 presents some indicators of whole of government activity given the importance of working co-operatively with other levels of government in devising smarter policy. Over half of policy employees reported having dealings with other Australian Government agencies or state and local government and they are more likely to have formal rather than informal dealings with other government organisations.⁴⁴ However, for policy employees the level of formal and informal contact is less than the APS average—particularly so in the case of informal contact. These lower levels of contact are somewhat surprising in view of the importance of working co-operatively across government organisations. The level of these activities may increase as a result of the COAG reform agenda.

A majority of policy employees at the SES and EL classifications agreed that their agency’s culture encourages a constructive approach to collaboration with other public service agencies (82%)—much the same as the APS average (79%). Public service agencies therefore have the opportunity to build on an already strong organisational culture in pursuing more constructive whole of government collaboration.

Table 4.2 Whole of government indicators, 2006–07

	SES and EL employees involved in Policy (%)	All SES and EL employees (%)
Formal dealings with Commonwealth, state and local governments in the last 12 months	57	59
Informal dealings with Commonwealth, state and local governments in the last 12 months	43	57
To what extent does your agency’s culture encourage a constructive approach to collaboration with other public service agencies	82	79

Source: State of the Service employee survey, 2006–07

⁴⁴ Formal contact relates to engaging with stakeholders via taskforces, interdepartmental committees and joint teams.

Working with External Stakeholders

Table 4.3 presents data on working with external stakeholders. The data in Table 4.3 indicates that policy employees undertake these activities at a significantly higher level than the APS average.

Table 4.3 Working with external stakeholders, 2007–08

	APS employees involved in Policy (%)	All employees (%)
My agency builds internal teams who have the skills, knowledge and ability to collaborate effectively with stakeholders	61	55
During the last 12 months, to what extent were you involved in liaising with stakeholders (e.g. arranged meetings, provided or collected information, answered inquiries)	63	50
During the last 12 months, to what extent were you involved in negotiating with stakeholders to develop mutually agreed policy positions or shared understanding of issues	47	27

Source: State of the Service employee survey, 2007–08

Regarding the quality of stakeholder engagement, 61% of policy employees agreed that their agency builds internal teams who have the skills, knowledge and ability to collaborate effectively with stakeholders. While the result for policy employees was above the APS average (55%), these results indicate scope for further investment in the skills of those policy and regulatory employees who work collaboratively with other organisations.

Learning and Development

Will the type of learning and development that policy makers are pursuing assist in the design of smarter policy? The top three priorities that policy employees identified for themselves in the next 12 months were leadership training (including in whole of government approaches) 62%, people management skills 50%, and policy skills 47%. For all APS employees the top three were technical skills relevant to jobs (e.g. knowledge of specialist areas) 53%, and leadership and people management (nominated by 45% and 44% respectively). The focus on leadership and people management skills is positive given the importance of senior leaders in creating a workplace culture that encourages innovation and adaptability and working co-operatively with other organisations.

Table 4.4 Learning and development, 2006–07

Priority areas identified for skills development	APS employees involved in Policy (%)	All employees (%)
Technical skills	44	53
Policy skills	47	26
Leadership training	62	45
People management skills	50	44

Source: State of the Service employee survey, 2006–07

Views on Ethical Behaviour

Maintaining a focus on ethical behaviour and the APS Values and Code of Conduct is important within an environment that encourages greater stakeholder participation in policy design and more creative and innovative approaches. In this regard, it is heartening to report that most policy employees agree that their ‘organisation actively encourages ethical behaviour by all its employees’ (77%), although this is slightly below the 84% of all employees. In relation to whether workers agreed that ‘in general employees in their agency effectively manage conflicts of interest’ most policy employees agreed (68%) but again at slightly lower levels than all employees (71%).

Table 4.5 Views on ethical behaviour, 2007–08

Risk and ethics	APS employees involved in Policy (%)	All employees (%)
Believe their organisation actively encourages ethical behaviour by all employees	77	84
In general, employees in my agency effectively manage conflicts of interest	68	71

Source: State of the Service employee survey, 2007–08

An Adaptive, Learning Culture

There appears to be considerable room for agencies to foster more open and learning cultures in their workplaces. Only around half of policy employees agreed that their agency encourages employees to examine what they do and to find ways of doing it better, and that their agency encourages innovation and the development of ideas. While these findings are slightly above the APS-wide results, such employee perceptions are a real barrier to fostering an organisational culture that supports an adaptive and flexible approach to policy interventions.

Table 4.6 Indicators of an adaptive, learning culture, 2007–08

	APS employees involved in Policy (%)	All employees (%)
My agency encourages employees to examine what they do and find ways to do it better	56	52
My current agency encourages innovation and the development of ideas	51	46

Source: State of the Service employee survey, 2007–08

In promoting more open, innovative workplace cultures, agencies need to foster a ‘bottom up’ approach to innovation which harnesses the insights from public servants at the frontline of service delivery and the consumers of government services to feed into the policy making process. Ideally, the process of policy development should be continually open to new evidence and insights. Policies should be monitored and evaluated and, over time, corrected—for example, by adjusting the mix of policy instruments—or even terminated if they turn out not to be working as expected.

The capabilities required for smarter policy design are clearly not all going to be found within any one individual employee or even within a small policy team of ongoing employees. Agencies need to look for ways of developing or obtaining the range of capabilities, including through recruitment, contracted labour, outsourcing particular research, analysis or consultation processes, formal learning programmes, and encouraging employees to undertake a relevant range of work to broaden their experience.

Conclusion

The focus of this publication is on improving policy design in an environment of increasing complexity. It identifies considerations around choosing policy instruments, involving third parties in policy frameworks and using insights from behavioural theory and evidence—considerations that are important to good policy design, but have tended to receive less detailed attention in the available guidance material.

Key points in relation to these three issues are:

- Combinations of policy instruments are generally preferred over single instruments. While each of the main categories of policy instruments has something valuable to offer, they generally have substantial limitations as a stand alone strategy for government intervention. In most cases, the best way to overcome the deficiencies of individual instruments, while taking advantage of their strengths, is by designing a combination of instruments instead of relying on a single type.
- There are significant potential advantages for policy makers in looking beyond the traditional model of government as being solely responsible for devising and implementing policy frameworks, to one in which a range of third parties, for example, industry associations, financial institutions and NGOs, play active policy roles in certain circumstances.
- Insights from behavioural theory should be used in designing regulation or other policy interventions. The key message is that changing behaviour through policy intervention is complex and that predictions based on the rational choice model from neoclassical economics may not always be accurate. The complexity of human behaviour makes generalised policy prescription more difficult. It is a warning to proceed cautiously to avoid policy failure and unintended consequences. It supports an adaptive and flexible approach to policy interventions in order to explore 'what works in practice'. Where possible, field research, pilots and trials can be used. Learning from the experience of regulators in other jurisdictions and listening to and engaging with stakeholders are other valuable sources of information and guidance.

Designing smarter regulation and policy interventions raises a range of capability issues for APS agencies. There is evidence that progress is being made in fostering the skills and structures required to work across organisational boundaries and in gaining the technical skills required. There appears to be considerable scope, however, for agencies to foster more innovative and learning cultures in their workplaces. Only around half of policy employees agreed that 'my agency encourages employees to examine what they do and find ways to do it better'.

Another major barrier to fostering an innovative and adaptive culture can be the expectations of government and industry that 'quick fixes' are possible. Creating an environment conducive to innovation and evidence-based policy requires a broad acceptance and understanding on the part of governments, Ministers and industry that knowing the 'right' policy solution upfront will often not be possible. It also requires an acceptance that adopting innovative and learning approaches is likely to result in the need for policy adjustment and the occasional failure.