

20 ways to influence business behaviour

A short guide to instrument selection
for policy makers and regulators

4th November 2013
Draft for discussion

What's inside?

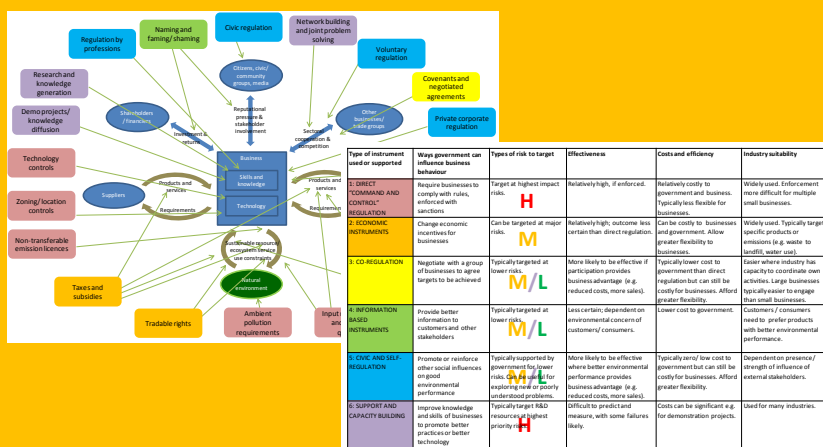
This pack helps policy makers and regulators think of ways to influence business behaviour to achieve environmental objectives

20 different ways to influence business behaviour are described and compared

Step-by-step discussion questions help you think through which options could work for the businesses you are targeting

Cross-cutting themes help you think through effective implementation

Useful models help you analyse businesses and compare options



You could use it to stimulate your own thinking, to spark ideas with colleagues in a workshop, or with external stakeholders

It is structured to read from end to end, but you can also dip in to the most useful bits

Links to more detailed information are provided throughout

About this guide

- The purpose of this guide is to help policy makers and regulators develop ideas for achieving policy objectives that make use of the full range of policy and regulatory instruments at your disposal (e.g. emission licenses, tradable permit schemes, product labelling, voluntary agreements).
- It could be used to design new measures, or to identify better ways than at present to achieve objectives that harness the influence of non-government actors. It is intended to spark thinking and debate. You could use this guide to help stimulate your own thinking, or to support a discussion with your team or other stakeholders.
- The content focuses on describing the range of instruments that could be used and exploring when they are suitable. It focuses on instruments to tackle environmental risks, though many of the approaches described can also be used for other policy objectives.
- It is assumed that the reader already has a good understanding of the policy objectives to be met, the forms of market failure (e.g. polluters not compensating for damage caused) or other policy considerations that lead to the need for intervention, the stakeholders involved and the environmental, social and economic systems that connect them together. It is also assumed that the option of doing nothing has been considered but is unacceptable.
- In line with the Defra Policy Cycle, instrument ideas sparked from this guide will need to be developed into full proposals and their impact assessed. This development process is beyond the scope of this guide.

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1: Instrument options

The main types of instrument

Type of instrument used or supported	Ways government can influence business behaviour	Types of risk to target	Effectiveness	Costs and efficiency	Industry suitability
1: DIRECT "COMMAND AND CONTROL" REGULATION	Require businesses to comply with rules, enforced with sanctions.	Target at highest impact risks. H	Relatively high, if enforced.	Relatively costly to government and business. Typically less flexible for businesses.	Widely used. Enforcement more difficult for multiple small businesses.
2: ECONOMIC INSTRUMENTS	Change economic incentives for businesses.	Can be targeted at major risks. M	Relatively high; outcome less certain than direct regulation.	Can be costly to businesses and government. Allow greater flexibility to businesses.	Widely used. Typically target specific products or emissions (e.g. waste to landfill, water use).
3: CO-REGULATION	Negotiate with a group of businesses to agree targets to be achieved.	Typically targeted at lower risks. M/L	More likely to be effective if participation provides business advantage (e.g. reduced costs, more sales).	Typically lower cost to government than direct regulation but can still be costly for businesses. Afford greater flexibility.	Easier where industry has capacity to coordinate own activities. Large businesses typically easier to engage than small businesses.
4: INFORMATION BASED INSTRUMENTS	Provide better information to customers and other stakeholders.	Typically targeted at lower risks. M/L	Less certain; dependent on environmental concern of customers/ consumers.	Lower cost to government.	Customers / consumers need to prefer products with better environmental performance.
5: CIVIC AND SELF-REGULATION	Promote or reinforce other social influences on good environmental performance.	Typically supported by government for lower risks. Can be useful for exploring new or poorly understood problems. M/L	More likely to be effective where better environmental performance provides business advantage (e.g. reduced costs, more sales).	Typically zero/ low cost to government but can still be costly for businesses. Afford greater flexibility.	Dependent on presence/ strength of influence of external stakeholders.
6: SUPPORT AND CAPACITY BUILDING	Improve knowledge and skills of businesses to promote better practices or better technology.	Typically target R&D resources at highest priority risks. H	Difficult to predict and measure, with some failures likely.	Costs can be significant e.g. for demonstration projects.	Used for many industries.

20 ways to influence business behaviour

1: DIRECT "COMMAND AND CONTROL" REGULATION

Technology controls	Requirements for businesses to use specific technologies in their operations or products e.g. catalytic converters
Zoning/ location controls	Performance requirements linked to a specific geography, e.g. to locate polluters away from sensitive ecosystems
Non-transferable emission licences	Licence to operate according to environmental performance requirements, with compliance monitored and penalties enforced. Inspection requirements could be reduced for good performers through 'earned recognition'
Ambient pollution requirements	Specify required maximum levels of ambient pollution, allowing flexibility to polluters to decide how to achieve
Input restrictions and output quotas	Restrictions are applied in the use or output of products/ resources

2: ECONOMIC INSTRUMENTS

Payments	Conditional payments made to incentivize a particular activity e.g. provision of ecosystem services
Taxes and subsidies	Change the market price of a good or service, changing the quantity demanded and supplied in the market
Tradable rights	Specify a capped quantity of allowances, e.g. to abstract water or to emit carbon, which can then be traded among users

3: CO-REGULATION

Covenants and negotiated agreements	Government makes a contractual agreement with regulated businesses to achieve particular standards
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4: INFORMATION BASED INSTRUMENTS

Targeted information provision	Information provided to enable businesses or individuals to make better-informed decisions that affect the environment
Registration, labelling and certification	Product labelling, and associated standards, enabling consumers to choose products with better environmental performance
Naming and faming/ shaming	Publicising environmental performance information, incentivizing better behaviour to avoid damage to or to enhance reputation

5: CIVIC AND SELF-REGULATION

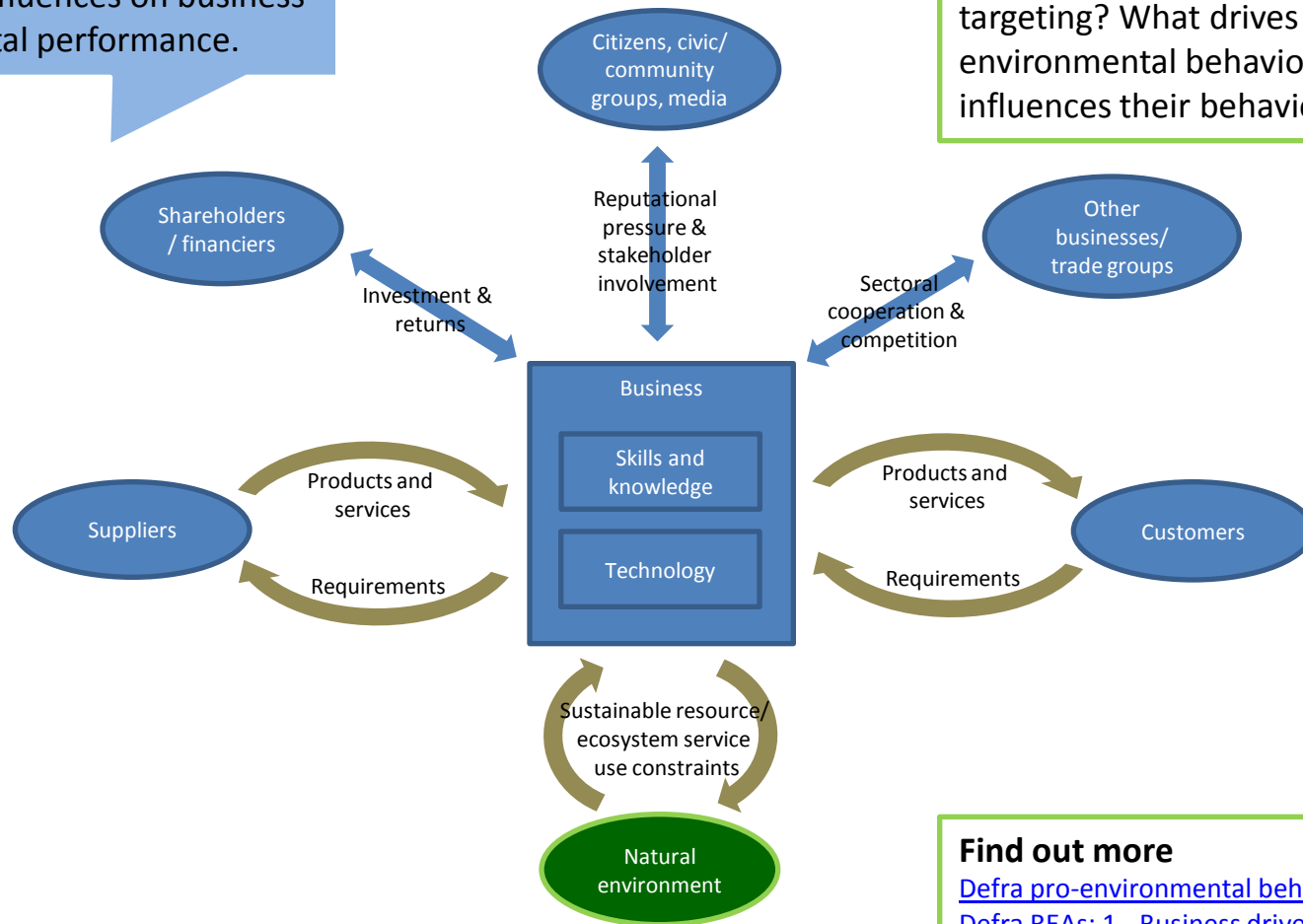
Voluntary regulation	A group of actors agree standards to which individual businesses can sign up. Becomes a form of co-regulation if government involved.
Civic regulation	Community or pressure groups agree performance standards with particular firms
Regulation by professions	A professional body applies standards through conditions of membership
Private corporate regulation	One firm defines standards with which suppliers are required to comply in order to maintain business
Self-regulation	Businesses independently adopt environmental standards, unilaterally or with external verification

6: SUPPORT AND CAPACITY BUILDING

Research and knowledge generation	Governments or other actors undertake research to increase knowledge that informs better environmental decision making
Demonstration projects/ knowledge diffusion	Governments invest in projects to demonstrate feasibility, raise awareness and reduce risks of new technologies or processes
Network building and joint problem solving	Initiatives designed to encourage people to exchange ideas and learning to improve environmental performance

How instruments influence business behaviour (1 of 2)

This simple model illustrates important influences on business environmental performance.



Key questions

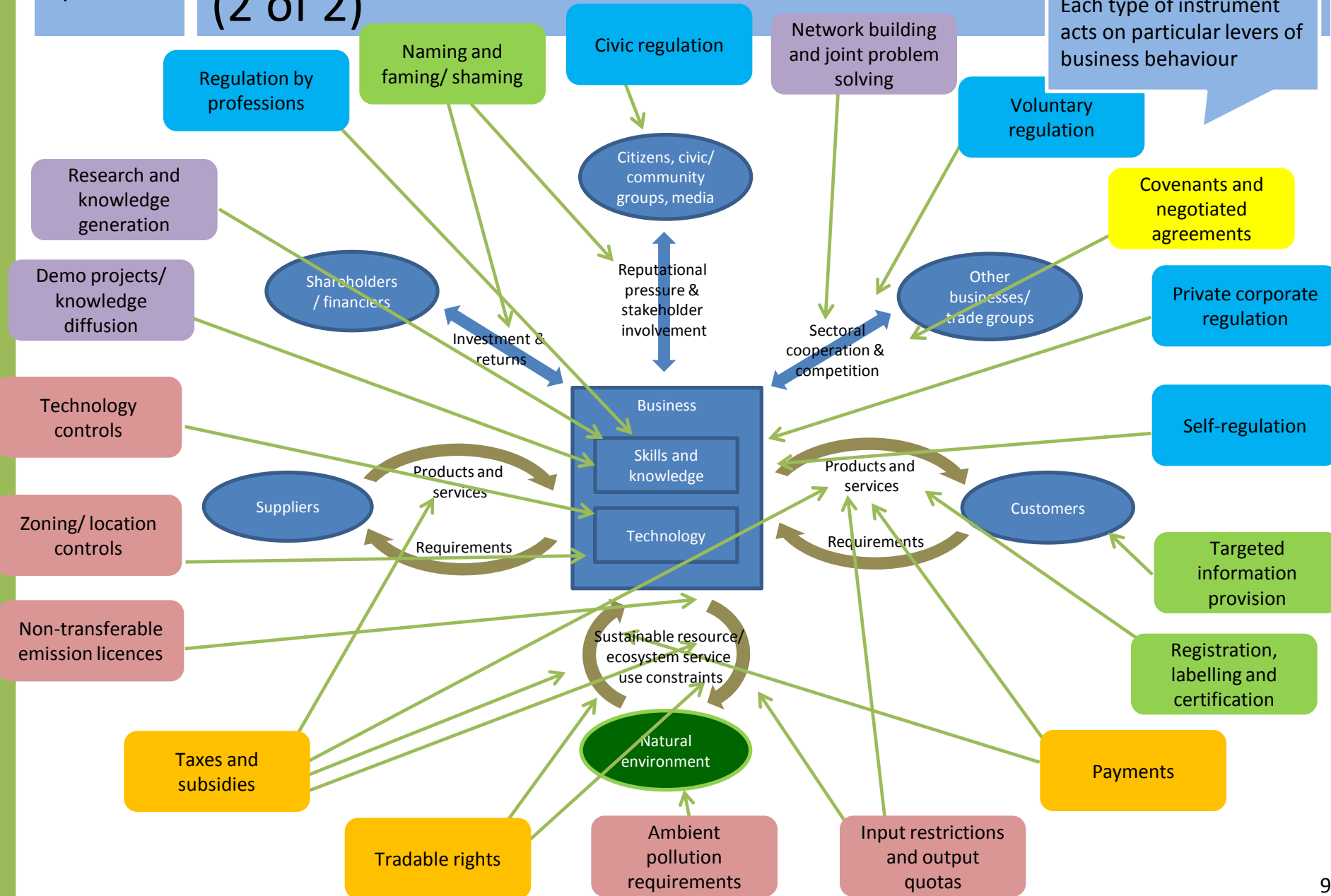
Who are the businesses you are targeting? What drives their environmental behaviour? Who influences their behaviour most?

Find out more

[Defra pro-environmental behaviours framework](#)
[Defra REAs: 1 - Business drivers for alternatives to regulation and 6 - Economic impacts of environmental regulatory policy](#)

How instruments influence business behaviour (2 of 2)

Each type of instrument acts on particular levers of business behaviour



2: Instrument selection questions

How strongly do instruments need to influence business behaviour?

Regulation should be targeted according to risk. Direct regulation provides strong controls and a level playing field, but can be costly

In general, direct regulation is expected to provide the strongest controls on environmental risk, but is also costly to the regulated and government. It can provide a level playing field between competing firms, and tackle illegal behaviour. Direct regulation should be targeted at the highest risk activities, to provide the strongest controls where they are needed most. Other forms of regulation (see later slides) generally provide weaker controls and therefore are suitable for tackling smaller risks or to enhance the effectiveness of direct regulation.

Forms of direct regulation	When they are used
<u>Technology controls</u>	Better performing technology exists but businesses are unwilling to adopt, typically due to additional costs. Can force a transition to wider adoption e.g. Energy saving lightbulbs; catalytic converters
<u>Zoning/ location controls</u>	Specific geography needs additional protection e.g. for unusual or fragile ecosystems; to prevent pollution hotspots. Typically linked to other instruments for that area e.g. vehicle technology controls in low emission zones.
<u>Non-transferable emission licences</u>	Specific business operations sites present risks to the environment e.g. through emissions to air or water. Operations are monitored and sanctions may be imposed for failure to meet requirements.
<u>Ambient pollution requirements</u>	Pollution typically arising from multiple sources must be kept within limits. An overall requirement is set requiring other instruments to be deployed to ensure it is met.
<u>Input restrictions and output quotas</u>	Natural resources are not being used sustainably (e.g. over-fishing; over abstraction of water), or use of specific materials present risks to the environment (e.g. Polychlorinated biphenols).

Key questions

What environmental risks need to be managed?
 What are their expected impact and probability?
 To what extent can risk occurrence be tolerated?

Find out more

[Defra Guidelines for environmental risk assessment and management: Green leaves III](#)
[SNIFFER ER30: 4 – Promote Compliance and 6 - Regulatory Strategy](#)
[Defra REAs: 4 – Earned Recognition](#)

Could government negotiate targets with a group of businesses?

Negotiation can be used to design interventions tailored to characteristics of particular sectors

Negotiating with a group of businesses to achieve environmental objectives may provide a relatively quick way to bring about change, that is tailored to the specific characteristics of a sector. The target industry needs to have a representative body (e.g. a trade association, or a specially formed group) that can negotiate on its behalf and monitor compliance, which may be easier to achieve in sectors with a few large businesses than those with many small businesses.

Voluntary regulation may prove effective where participation provides business and environmental benefits, for example cost reductions through resource efficiency. WRAP have established agreements e.g. for waste reduction.

Covenants and negotiated agreements offer stronger assurance that objectives will be met, as targets are contractually binding. For example, Climate Change Agreements are agreed between DECC and industry bodies to allow a reduction in Climate Change Levy in return for reaching emissions reduction targets. The Law Commission is considering how 'conservation covenants', which involve landowners making an agreement a conservation organisation or a public body to protect the conservation value of a site, could be enabled through law.

Businesses may prove more willing to participate in these forms of regulation when there is a credible threat of harder regulation (e.g. through a new tax or direct regulation) being introduced if the instrument proves ineffective.

Key questions

Do businesses have representative bodies that can coordinate joint action? How much of the sector can they represent? Can government present a credible threat of harder regulation to incentivise participation?

Find out more

[Defra REAs: 2 – Voluntary Agreements and other business designed approaches](#)

[Waste and Resources Action Plan voluntary agreements](#)

[Climate Change Agreements](#)

[Law Commission consultation on Conservation Covenants](#)

Could signals about customer preferences be strengthened?

Businesses may be driven to improve environmental performance by their customers

Customers may be concerned about the environmental impact of the products and services that they buy, so they buy better performing products in preference to poorer performing products. Their suppliers therefore have an incentive to differentiate their products and services on this basis. For example, in the UK many consumers are concerned about the environmental impact of food, and food products that claim better environmental performance have been developed in response to this demand.

Registration, Labelling and Certification schemes (e.g. Forest Stewardship Council, Roundtable on Sustainable Palm Oil, EU Ecolabel) improve the ability of customers to buy in response to environmental performance, providing incentives for businesses to improve the environmental performance of their products. These approaches can be encouraged and supported by government. In some markets (e.g. construction) the government is a major buyer, so it may be possible to bring about change along supply chains by changing environmental standards required by government procurement.

However, customer concern for environmental performance is much less evident for some products than others. For example, in the UK few cosmetics brands make explicit claims about environmental performance. So the strength and therefore relevance of customer-driven instruments depends strongly on levels of customer concern for a given product.

Key questions

Do customers choose between the products of target businesses on the basis of environmental performance?
Is government a major buyer in the target sector?

Find out more

[Defra REAs: 2 – Voluntary Agreements and other business designed approaches](#)
[Forest Stewardship Council](#) , [Marine Stewardship Council](#)
[EU Ecolabel](#)
[Assured Food Standards Red Tractor](#)

Could community/civic group or other stakeholder influences be strengthened?

Local community or civic groups can have a significant influence on the behaviour of some businesses, as can other stakeholders including individual citizens and the media

Community and civic groups, ranging from international NGOs to small local community groups, can play a role in influencing business environmental behaviour. For example, WWF initiated international action with major businesses to establish the Roundtable on Sustainable Palm Oil. At a more local level, the Wildlife Trusts have worked with businesses to restore biodiversity for land affected by industrial activity. These kinds of activities can be broadly described as 'civic regulation'.

Government can act to strengthen the influence of such groups. For example, Defra is currently piloting Local Nature Partnerships, which give formal recognition to groups of public, private, NGO and local community organisations to influence local decision-making relating to the natural environment and its value to social and economic outcomes.

Government may be able to gather, share or publicise information directly or to be used by other stakeholders. There may be scope to make publically available useful information currently held within government, as outlined in Defra's Open Data Strategy, or to encourage or require disclosure of environmental performance by businesses. Individual citizens may be able to help to monitor business performance, for example by reporting apparent bad behaviour to regulators (e.g. reporting flytipping) or helping to monitor environmental conditions (e.g. spotting the presence of non-native species).

Key questions

Do local community groups or civic groups have a significant influence on business behaviour? What should government do to strengthen their influence? Which other stakeholders could assist, and how?

Find out more

[Defra information on Local Nature Partnerships](#)

[Roundtable on Sustainable Palm Oil](#)

[Surrey Wildlife Trust manages Nutfield Marsh](#)

[Reporting flytipping with a smartphone at Birmingham City Council](#)

[Reducing the Impact of Non-native Species in Europe \(RINSE\) app](#)

Could shareholder influence be strengthened?

For some sectors, shareholders may prove an important influence on business environmental behaviour

Shareholders in publically listed businesses can influence business behaviour through their investment decisions. Investors may prefer businesses with better environmental performance because, for example, they believe they are less likely to be affected by surprises that affect share value e.g. environmental accidents, or winning new work.

Many businesses do not have external shareholders. Nevertheless, their customers or suppliers may do, in which case their behaviour may be influenced indirectly along their supply chain.

Regulators can publicise information about good or bad business environmental performance through **Naming and shaming/faming** with the intention of influencing shareholders. Some non-government bodies develop indices to help inform shareholders e.g. Carbon Disclosure Project. Government may be able to gather, share or publicise information directly or to be used by other stakeholders. There may be scope to make publically available useful information currently held within government, as outlined in Defra's Open Data Strategy. Legislation could also be used to increase transparency of business environmental performance, e.g. as required for UK listed companies' greenhouse gas emissions reporting under the Companies Act 2006 (Strategic Report and Directors' Report) Regulations 2013.

Key questions

Do target businesses, or their customers or suppliers, have external shareholders? Are shareholders likely to change their investment behaviour on the basis of environmental performance of their investments?

What information could government gather or share that would enhance this effect?

Find out more

[Defra Open Data Strategy](#)

[Carbon Disclosure Project](#)

[Defra environmental impact measuring and reporting guidance](#)

Could private business initiatives be encouraged or strengthened?

Government can encourage good environmental management approaches developed by the private sector

Businesses may decide independently of government to pursue better environmental performance, for example to achieve improvements in resource efficiency, or to attract customers who are concerned about environmental performance.

Under **self-regulation** businesses may choose to develop their own environmental management strategies and procedures, often implemented through an environmental management system (EMS). They may choose to adopt an externally verified standard such as ISO14001, to assist in setting it up and to provide reassurance about its quality to customers or other stakeholders. In addition, a business may choose to impose good environmental performance requirements on its suppliers, described as **private corporate regulation**. This could include requirements to comply with bespoke standards developed by the business, or to adopt externally-verified standards such as ISO14001.

Policy makers and regulators can encourage these approaches where they already exist, for example simply by publicising good performers (**Naming and faming/shaming**). Where they are confident that these initiatives are providing sufficient controls, government may choose to reduce its own direct regulatory effort e.g. by reducing the number of inspections, an approach sometimes known as '**earned recognition**'.

Key questions

Are businesses exhibiting self-regulation or private corporate regulation?

What evidence exists that these approaches are delivering sufficient controls on environmental risk?

Find out more

[Defra REAs: 2 – Voluntary Agreements and other business designed approaches](#)

[Defra REAs: 4 – Earned Recognition](#)

[Defra research on benefits of environmental mgmt systems for SMEs](#)

[Earned recognition and Red Tractor Assurance](#)

Are better business skills or knowledge required?

Some instruments are specifically designed to improve business skills and knowledge

The effectiveness of businesses in protecting the environment is affected by the skills and knowledge of the people who work in them. Government measures to increase skills and knowledge can help to improve the effectiveness of other forms of regulation:

During inspections: Inspectors can provide advice to businesses on good practice while checking compliance e.g. with non-transferable emissions licences or as part of registration, certification and labelling schemes.

Targeted information provision: Marketing campaigns can increase general awareness of environmental issues. e.g. Love Food Hate Waste

Regulation by professions: People can learn skills through professional accreditation e.g. Chartered Environmentalist. Government can support this, e.g. by requiring professional accreditation as a condition of permits.

Network building and joint problem solving: Government can support professional networks that provide training or work jointly on problems e.g. WRAP

Demonstration projects and knowledge diffusion: Where uncertainty about new technologies is inhibiting business adoption, government can support projects that demonstrate them working in practice.

Key questions

How well do businesses understand the environmental impact of their operations and how they could improve?
Who can help transmit this knowledge to them; who would they trust to do so?

Find out more

[Love Food Hate Waste](#)

[Chartered Environmentalist](#)

[Waste and Resources Action Programme](#)

[DECC activities to support development of carbon capture & storage](#)

Could economic incentives/ prices be altered to change business behaviour?

Creating a market for or changing the prices of business inputs or outputs can drive significant behaviour change

While direct regulation can provide strong controls for environmental risks, it may offer limited flexibility for businesses to choose the most efficient way to achieve a given environmental objective for their specific circumstances. Economic instruments work by changing prices for business inputs or outputs (including pollution) to alter their demand or supply. Businesses can decide the most efficient way to respond to these signals, so some may choose to absorb price changes without changing behaviour, while others may change rapidly in response. Economic instruments therefore generally provide less certainty about how a given business will behave compared to direct regulation.

Types of economic instrument	When they are used
<u>Taxes and subsidies</u>	Specific inputs (e.g. solar panels for energy production) or outputs (e.g. waste to be put to landfill) which are traded and closely linked to environmental impact can be taxed or subsidised to alter demand/supply.
<u>Tradable rights</u>	Rights to use quantities of specific of inputs (e.g. water) or produce quantities of specific outputs (e.g. carbon dioxide) are issued and then traded among businesses. Total quantity used/produced is capped by size of rights issue.
<u>Payments</u>	Businesses are paid in proportion to their provision of goods or services that are environmentally beneficial e.g. For maintaining woodland that provides flood protection, recreational value and habitat for biodiversity.

Key questions

Can environmental impacts be linked to specific traded business inputs or outputs? Will businesses change use in response to changed prices?
If a market does not exist, could one be created?

Find out more

[OECD work on market based instruments for environmental policy](#)
[Defra payments for ecosystem services research pilots](#)

Is scientific knowledge of problems and solutions lacking?

Some instruments are specifically designed to generate new scientific knowledge about environmental impacts and the solutions to reduce them, while others can have built-in features to improve knowledge

In some areas of environmental policy, scientific knowledge to inform the design of environmental regulation is lacking. **Research and knowledge generation**, for example through government funding of university research programmes, is an instrument that can be used to address such areas of uncertainty. Government may choose to adopt a precautionary approach where potentially large risks have been identified, for example by not allowing an activity to be pursued until sufficient research has been undertaken to demonstrate that it is safe.

Some instruments can have built-in features that help to improve knowledge. For less severe environmental risks, **Voluntary Regulation** may provide a useful platform for government and businesses to work together to improve shared understanding. For example the Courtauld Commitment, a voluntary agreement focused on reducing packaging waste, has included research to examine how the environmental impact of packaging can be measured and reduced. This has allowed government and participating businesses to agree better objectives for successive phases of the programme, as shared knowledge has increased.

Direct regulation can also be designed to gradually improve understanding of environmental impacts, for example by requiring businesses to undertake environmental risk assessments to allow products to be marketed (e.g. REACH).

Key questions

Which aspects of environmental problems or their solutions are well understood?

Where is knowledge weaker?

Who is best placed to improve understanding?

Find out more

[Defra Guidelines for environmental risk assessment and management: Green leaves III](#)

[Defra's evidence investment strategy](#)

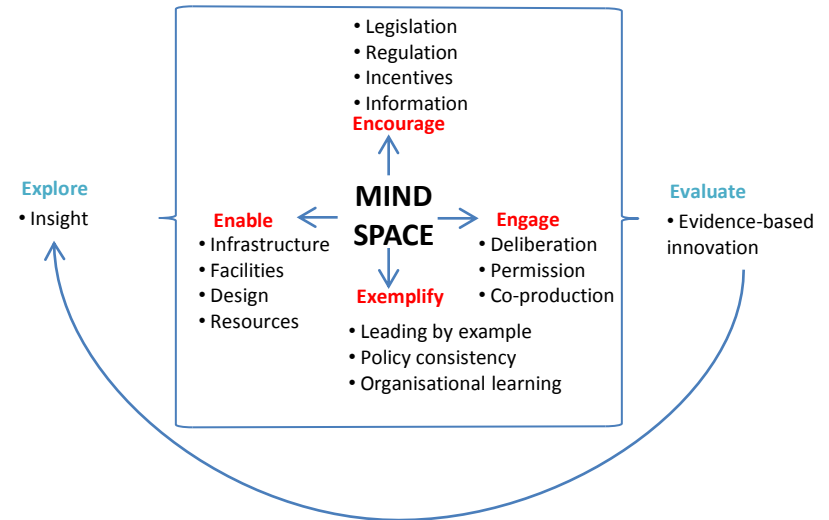
3: Cross-cutting themes

Enhancing instrument effectiveness

Research, including from behavioural economics, provides insights into the drivers of human behaviour, which can be incorporated into the implemented design of all instruments to ensure they are effective in practice

The MINDSPACE mnemonic provides prompts for how people may respond to the design of regulation. For example, ensuring information is provided by a source trusted by the intended audience, or publicising commitments made, may improve effectiveness. Government can design interventions that engage, enable, encourage and exemplify (the '4Es') good environmental performance. Regulatory officers are most effective when they have the skills and experience to put these and other insights into practice when they interact with regulatees.

Messenger	we are heavily influenced by who communicates information
Incentives	our responses to incentives are shaped by predictable mental shortcuts such as strongly avoiding losses
Norms	we are strongly influenced by what others do
Defaults	we "go with the flow" of pre-set options
Saliency	our attention is drawn to what is novel and seems relevant to us
Priming	our acts are often influenced by sub-conscious cues
Affect	our emotional associations can powerfully shape our actions
Commitments	we seek to be consistent with our public promises, and reciprocate acts
Ego	we act in ways that make us feel better about ourselves



Key questions

Does the design of implemented instruments enable, exemplify, encourage and engage?
Should the skills and experience of regulatory officers/ inspectors be enhanced?

Find out more

[Guidance from Institute for Government – MINDSPACE](#)
[SNIFFER ER30: Better Regulation evidence](#)

Providing flexibility and certainty

Instrument design needs to balance long-term certainty with flexibility to change

Environmental regulations can have a significant effect on business investment decisions. For example, the Landfill Tax has created incentives for waste management companies to invest in alternative waste processing technologies as alternatives to putting waste to landfill. Unpredicted changes to regulation can undermine business willingness to invest in technologies that could improve environmental performance, and businesses prefer less regulatory uncertainty.

However, environmental, social and economic conditions change over time, and regulation may need to change to reflect this. A balance needs to be struck between providing certainty in regulations, and accommodating change through flexibility.

Certainty and flexibility can be accommodated in many forms of regulation. The Building Regulations (**direct regulation**) incorporate a 3-yearly review of standards, allowing product innovation and some stability in requirements. The Landfill Tax (an **economic instrument**) has a variable rate which can be adjusted from year to year, and has followed a consistent upwards trajectory over recent years. **Voluntary regulation** can offer opportunities for rapid adaptation to changing circumstances, negotiated with participating businesses.

Key questions

What flexibilities need to be accommodated by the mix of regulations for target businesses?

How much certainty can be provided?

Find out more

[Defra REAs: 3 - Results orientation, timeframes and stability in regulatory policy](#)

Providing a good user experience

Instruments should be designed to minimize administrative costs for businesses

Administrative processes associated with any regulatory instrument should be designed to make them as easy to use as possible for participating businesses. Many businesses are now accustomed to using email and internet to communicate and share information, and well designed web-based processes can significantly reduce costs for businesses compared to paper-based approaches. Businesses can struggle to find out about and keep up to date with their environmental obligations, so it is key to ensure that information is provided in forms that are easy to find and easy to understand.

The single government website, www.gov.uk, is becoming the one-stop-shop for citizens and businesses seeking to interact with government on the internet, so guidance and other web-based materials need to be designed to fit this approach. Registration and reporting processes should also be designed to minimise the administrative burdens on participating businesses, making use of modern web-based technologies wherever appropriate.

Key questions

How would target businesses prefer to interact with government? How smoothly does this work at present? How could it be improved?

Find out more

[Defra Smarter Environmental Regulation Review phase 1 report](#)
[Government Digital Service Design Principles](#)
[Defra REAs: 5 – Environmental policy integration](#)
[SNIFFER ER30: 3- Deliver Interventions](#)

Piloting, testing and assessing

Wherever possible, changes to the regulatory framework should be piloted . Effective measurement of outcomes is essential for ongoing improvement

Pilots provide opportunities to try out changes on a small scale, to test their effectiveness and identify unanticipated consequences. Learning from pilots can then be incorporated into larger scale implementation.

Irrespective of the form of regulation adopted, it is essential that the impact of any given regulation is measured so that its effectiveness and efficiency can be assessed and learnt from. This will require a set of performance indicators to be monitored across the chain cause and effect from regulatory instrument, through changes to business and citizen behaviour, to the resulting impact on environmental quality.

Key questions

How could you test your ideas for improvement through piloting?

How will the effectiveness of implemented instruments be measured?

Find out more

[HM Treasury guidance on evaluation – the Magenta Book](#)

[BIS Better Regulation Framework Manual](#)

[SNIFFER ER30: 5 - Evaluate](#)

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