UK resource governance for the 21st century

green alliance...

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by Jonny Hazell

Green Alliance
Green Alliance is a charity and independent think tank focused on ambitious leadership for the environment. We have a 35 year track record, working with the most influential leaders from the NGO, business, and political communities. Our work generates new thinking and dialogue, and has increased political action and support for environmental solutions in the UK.

This report is published under Green Alliance's Resource Stewardship theme, which is focused on achieving a more circular economy where resources are sourced sustainably and kept productive for longer.

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This is the third report of the Circular Economy Task Force, a business led group convened by Green Alliance. It is a forum for policy innovation which aims to disseminate information and recommendations on the best responses to sustainable resource security.

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Executive summary

High and volatile resource prices have been identified as one of the key macroeconomic trends of the 21st century. Such was the success of resource production in the 20th century that, in the standard theory of economics, resource availability is simply assumed. But the sharp rise in resource price volatility since 2000 is a significant threat to economic and environmental stability, undermining businesses' ability to plan ahead. The price inflation it causes also filters down to consumers, affecting the cost of living.

The government can help to mitigate these risks and departments have the necessary policy levers at their disposal. But there has been a conspicuous lack of support to improve resource security in the UK, compared with other major manufacturing economies. This has led to questions about whether there is an effective framework for developing resource policy within central government, especially in the light of other high profile government decisions which undermine resource policy objectives. Perhaps most damning of these is the Treasury's lack of support for a review of resource risk following a National Security Council discussion in 2012.

Parliamentarians, business groups and NGOs have all put forward proposals for new government institutions to improve the management of resource policy as a strategic priority. The cross-party political interest in this issue raises the stakes for the next government, so it's important to understand the different options for better governance of resource policy.

In this report, we analyse the range of potential institutional arrangements available and we assess their strengths and weaknesses. Our conclusions draw on the results of published research and our own programme of expert interviews and discussions.

Well formulated institutional structures would decrease the likelihood of unforeseen crises and hasty, poorly thought through policy responses. In a political context characterised by the need to reduce government expenditure and deliver growth, better institutions can help politicians to balance long term challenges and short term priorities. The right governance framework is a necessary condition for the development and delivery of effective resource policy. The economy will benefit from higher productivity and job growth. Businesses will benefit from new opportunities and improved competitiveness in the global market. And we will all benefit from the preservation of natural capital.

To develop effective resource policy, the government needs institutions with dedicated information gathering and analytical capabilities, and effective co-ordination across a wide range of policy areas and instruments. But, above all, strong political support is necessary. We therefore propose that a National Resources Council (NRC) is set up to channel political interest into cross-government action. This would bring together ministers from relevant departments across government, supported by a parallel working group of officials. This approach works well for defence in the form of the National Security Council (NSC).

As current information on resources is dispersed and poorly collated, an early act of the NRC should be to institute an independent review of the UK's exposure to resource risks. This would draw upon expertise from business and academia to identify where the government should prioritise action. It would determine where further information is required and how to secure it, and it should develop a framework for assessing when and what future interventions are needed.

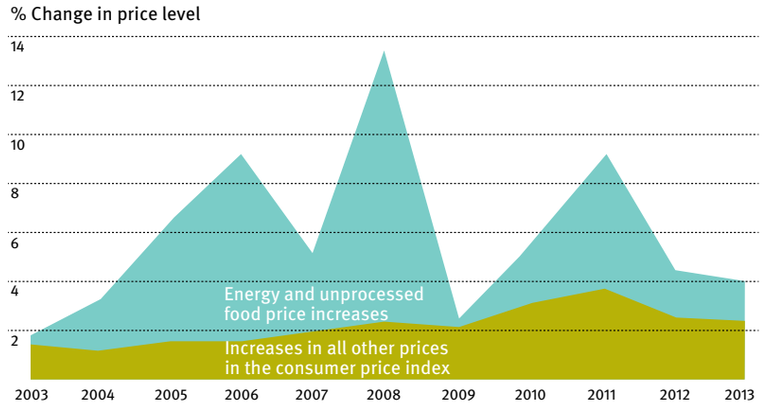
Other options considered in this report have the potential to play a useful role, especially for detailed analysis and policy development. But the combination of a standing committee and independent review of resource risk has the greatest potential to translate the current political interest in resources into an enduring and strategic approach to developing resource policy.

Introduction

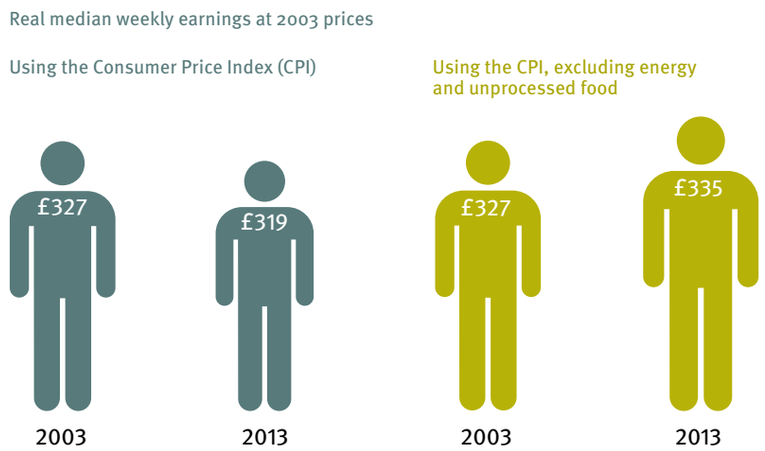
"Profit warnings, excessive inflation and falling real wages have all been connected with the fluctuating cost of resources in the 21st century."

Profit warnings, excessive inflation and falling real wages have all been connected with the fluctuating cost of resources in the 21st century. These threats are motivating businesses and countries to reduce the quantity of resources they use and increase their productivity, to stay competitive in the global market.

Prices paid by UK households for food and energy have been going up faster than the cost of other items



Earnings could have risen rather than fallen if it wasn't for food and energy price rises



In the UK, politicians from across the spectrum are interested in the government's role in reducing resource use. Ahead of publishing their manifestos, both Labour and the Liberal Democrats have committed to analysing resource risks along the lines of 2010's *Stern review on the economics of climate change*, whilst the Conservatives' 2020 Commission sets out measures to deliver a more resource resilient and productive economy.

"Frustration is growing amongst business groups and NGOs over the pace and scale of government action on resources."

But frustration is growing amongst business groups and NGOs over the pace and scale of government action on resources. The UK provides information, analysis and support for resource efficient business models and natural capital (see page 33 for a fuller account of these). But these initiatives are fragmentary and there are many examples of departments choosing not to exercise their powers to support resource security and productivity. Among these is the Treasury's unwillingness to support a review of resource depletion, climate change and growth, proposed after a discussion of the issues at the National Security Council, or to provide any support for more resource efficient products or business models.[1] Also the Department for Business Innovation and Skills' (BIS) decided not to adapt producer responsibility legislation for better designed electronic and electrical equipment, despite advice from its own working group.[2] The Department for Communities and Local Government (CLG) continues to support weekly rubbish collections. And the Department for Environment Food and Rural Affairs' (Defra) has announced that it is "stepping back" from various areas of waste policy where there is no clear market failure, especially commercial and industrial waste; this is despite widespread concern that the data is too poor to identify market failures and many opportunities are being missed due to a lack of policy support.

There have been growing calls for a change in the government response and for the institutions charged with developing and delivering resource policy to be improved. Prominent amongst these is the proposal to move waste management responsibilities from Defra to BIS, or at least to develop more joint working between them.[3] There are also calls to consolidate responsibility into one government institution, such as a new office for resource management or a commission to assess resource risk.[4,5]

Given the macroeconomic threats and opportunities, and the pre-manifesto commitments, there is a strong possibility that the next government will respond to these calls.

This report presents the conclusions of our discussions with experts on what the objectives for resource policy should be and how different institutional arrangements will work with political ambitions to deliver better outcomes.[6]

What we mean by resources

In this report we use the term 'resources' to mean all the things grown or extracted from the environment with the exception of energy resources, as the Department of Energy and Climate Change (DECC) already provides a clear and effective framework for managing these.

We also refer to renewable or biological resources, which comprise those that are grown or caught and can be replenished; and non-renewable, finite materials that are mined, quarried or extracted.

1
Why resource supply issues matter

High and volatile resource prices have been identified as one of the key macroeconomic trends of the 21st century.[7] Demand will rise as the global population grows and becomes more prosperous and there are genuine concerns over how well supply will keep up with this demand.

In some cases this is simply due to the pace of change. For example, consumption of the rare earth metals in consumer electronics, renewable energy technologies and a host of other modern applications doubled between 1980 and 1995 and doubled again between 1995 and 2010.[8] The lag between demand and new, often more expensive supply leads to price rises. And price spikes can be caused by sudden supply shocks like export bans or military conflict.

"Resource productivity will be a key determinant of European industrial competitiveness."

The environmental pressures and social impacts of resource production are a further constraint on supply. In some cases, environmental changes make production either very expensive or impossible. For example, water availability is a great concern, especially in the context of growing food or other biological resources. Recent research by ASDA revealed that 95 per cent of its fresh produce supplies are at risk from climate change, largely driven by changes in water availability.[9] Water crises were considered the third greatest risk in the 2014 Global Risks report from the World Economic Forum.[10]

There are inevitable trade-offs between the natural environment and resource production: opening up new sources of supply requires new infrastructure; getting metals out of poorer quality ores takes more energy and water; and growing more food, cotton or energy crops requires more land and more inputs.

In other cases the impacts of new production breach the limits of social acceptability. Concerns about deforestation to produce soya, damage to coral reefs from tin mining or the potential impact on fisheries from gold mining have all led to the curtailment or cancellation of production for particular sources of these resources[11] Global and local impacts from the disposal of products and materials are also proving increasingly socially unacceptable.

All of these factors are raising questions about the continuing viability of the take, make, dispose model of resource use. They demand new approaches to resource policy that can weigh up the impacts of production and reduce demand.

The economic benefits of good resource policy

There are big opportunities for those businesses and economies that can successfully minimise resource supply risks and maximise productivity. Resource productivity will be a key determinant of European industrial competitiveness, given low labour costs in Asia and the very low likelihood of Europe enjoying a competitive advantage on energy costs. Resource costs typically account for 40 per cent of European manufacturers' total cost base, whereas labour accounts for 20 per cent and energy ten per cent.[12]

If the UK were to provide strong policy support for resource productivity it would help to attract those multinationals able to choose where they locate their manufacturing. It would also help to level the playing field for UK SMEs in a market where their international competitors are receiving state support for access to resources in their home countries.

Increasing international competitiveness could also address some of the structural challenges in the UK labour market. Recent analysis by Green Alliance and WRAP suggests that the continued development of a resource efficient circular economy in Britain could contribute 205,000 jobs by 2030, of which 54,000 could be net jobs, providing work in areas of high unemployment.[13] Support for the growth of remanufacturing can also help to tackle the decline in mid-level occupations that has accompanied manufacturing's shrinking share of the UK economy.

2
The role and responsibility of government

The world's leading industrialised economies all have active resource policies, including China, Germany and the US.[14] These interventions are intended to ensure that their manufacturers and citizens do not suffer any disadvantage in their access to resources, or the price they pay for them. Their areas of active policy are summarised opposite, alongside those of the UK.

Taking account of this international activity, and the opportunities provided by resource policy, we asked experts what the objective of UK resource policy should be. Their answers fit into two broad categories: security of supply and resource productivity.

Security of supply

For most resources, most of the time, supply is a function of the free market forces of supply and demand. But there are concerns that market mechanisms will not always be able to ensure supply keeps up with demand.

"The world's leading industrialised economies all have active resource policies, including China, Germany and the US."

Most of the experts we consulted believe that resource policy should aim to mitigate supply risks. They suggested that the major role for government should be in providing information and forecasts to identify potential pinch points in supply and assess risks, including the environmental constraints on supply.

To do this effectively, it is necessary to understand which resources come into the economy and from where, and what happens to them, ie how much is consumed, added to stocks or exported, and what gets thrown away and where. Whilst some data is available for some materials, there are big gaps in our understanding.

Having developed better material flow data, risk then needs to be assessed, combining analysis of demand with analysis of any potential supply disruptions. In some cases, the knowledge of potential disruptions is already available eg from military or Foreign Office assessments of political risks in resource supply countries. In others, it needs to be developed.

Understanding the potential tipping points within ecosystems should also be a priority. One such tipping point was the sudden collapse of Newfoundland cod fisheries in the 1990s, which led to £1.5 billion in federal assistance to the individuals and communities affected and contributed to a ten per cent decline in the Newfoundland population within a decade.[16,17] The shock of this experience prompted extensive research into fish stocks and their ability to regenerate. But research and policy on other areas of vulnerability in relation to natural capital, such as the availability of pollinators or the ability of uplands to limit flooding, is still in its infancy.

For resources with specific political risks to their supply, potential interventions include promoting free trade through a resource specific international forum, as well as building on World Trade Organisation agreements and support for the development of substitutes.[18]

International policy responses to security of supply and resource productivity, adapted from analysis by EEF [15]

	China	USA	Germany	Japan	South Korea	EU	UK
Political strategy							
Vision	■	■	■	■	■	■	■
Political support	■	■	■	■	■	■	■
Diplomacy	■	■	■	■	■	■	■
New institutional arrangements	■	■	■	■	■	■	■
Spatial and infrastructure planning	■	■	■	■	■	■	■
Strategy development	■	■	■	■	■	▲	■
Information provision							
Material risk assessments	■	■	■	■	■	■	■
Metrics on resource flows	■	■	■	■	■	▲	■
Information provision on security of supply	■	■	■	■	■	■	■
Information provision for productivity	■	■	■	■	■	■	■
Incentives							
Incentives to encourage use of secondary materials	■	■	■	■	■	■	■
Incentives for business investment in productivity	■	■	■	■	■	■	■
Support for resource efficient business models	■	■	■	■	■	■	■
Support and focus on remanufacturing	■	■	■	■	■	■	■
Public procurement and standardisation	■	■	■	■	■	■	■
Innovation							
Researching substitutes for 'at risk' materials	■	■	■	■	■	■	■
Process efficiency	o	■	■	■	■	■	■
Product design	o	■	■	■	■	■	■
Recycling and recovery technologies	o	■	■	o	■	■	■

KEY

▲ in development

o no information found

■ active policy

■ little active policy

Resource productivity

Our expert interviewees were unanimous in their support for resource productivity as a policy goal. Different business models, based on redesign, reuse, remanufacturing and recycling, and those that offer services instead of products, help people and businesses to use resources more efficiently by using less and wasting less. In some cases these changes can be delivered by individual businesses; in others it will require collaboration across sectors. To make the most of these new business models, collection systems need to be harmonised and optimised so that the quality of materials and products are maintained for reuse, repair and remanufacturing.

Better resource productivity also improves resource security by reducing the demand for virgin materials but, as increased productivity also has economic benefits, the objective to improve productivity should apply to all materials, not just to those with security concerns.

3
Why isn't the government taking more action?

Given the threats and opportunities, it is reasonable to question why government is not already doing more to improve resource security and productivity.

As the table on page 13 shows, the UK has implemented some initiatives, most recently under the banner of the *Resource security action plan*, published in 2012. Whilst policy support and effective delivery saw recycling rates quadruple between 2000 and 2010, momentum has since stalled and the level of activity on every other area of resource policy has been disappointing.

"Lack of comprehensive UK government policy is in contrast to action being taken by the Scottish and Welsh governments."

Numerous reports, enquiries and calls for action highlight the widespread perception that greater government intervention is needed, but uptake of recommendations has been patchy. For example, the government's response to the Environmental Audit Committee's report *Growing a circular economy: ending the throwaway society* so frustrated the committee's chair, Joan Walley MP, that she accused them of "having their heads in the sand".

Insufficient political interest is a problem. Political concern over resources was triggered by the rapid rise in prices between 2009 and 2011. This coincided with an over-riding focus on restoring financial stability, reducing government expenditure and securing jobs and growth, following the financial crisis. But resource risks tend to be long term and, with evidence on the employment benefits of resource productivity only recently emerging, the issue has struggled to attract political attention.[19] This is compounded by a business context where the majority of large manufacturing companies operating in the UK have their headquarters elsewhere. They have lobbied their home governments for support with resource security and productivity, but the same pressure has not been applied in the UK. SMEs based in the UK are too small to ask for or attract similar support from the UK government, putting them at a comparative disadvantage.

Lack of comprehensive UK government policy is in contrast to action being taken by the Scottish and Welsh governments. These have set waste reduction and recycling targets that go far beyond the EU minimum, and have collection system requirements and incentives to recover more material at higher quality.

4
Institutional options for resource policy

"Political support is a necessary condition for any institution to be effective."

Institutions need to have a range of abilities to develop effective resource policy. At a high level, political support is a necessary condition for any institution to be effective, and the UK's reliance on global resource markets means all effective institutions need to engage constructively with EU and multilateral resource policy.

There are five core requirements for good resource policy that an effective institution should meet:

Policy co-ordination

Resource policy is a complex area. Effective institutions will need to co-ordinate between the various national bodies responsible for resources to improve action on productivity and security.

Strategy development

An institution will need to develop strategy in the light of a clear political direction on the respective roles of government and the market. In particular, it will need:

- a framework for analysis and building consensus on where lack of resource availability might constrain industrial development, including natural capital valuations and assessment of the consequences of substituting one resource with another;
- a clear vision of the industrial future of the economy and how that relates to resource use;
- to be receptive to all types of intervention, as appropriate, ie using voluntary agreements where they will work, but using regulations and standards where they are needed.

Policy development

A comprehensive understanding of the resource base that underpins the economy is essential to creating good policy. Developing this understanding requires:

- data on current resource flows, scenarios for future resource supply and demand, and agreement on the uncertainties of these projections;
- expertise on the functioning of, and business interactions with, global and regional resource markets;
- expertise on environmental and social impacts through the supply chain.

Political patronage

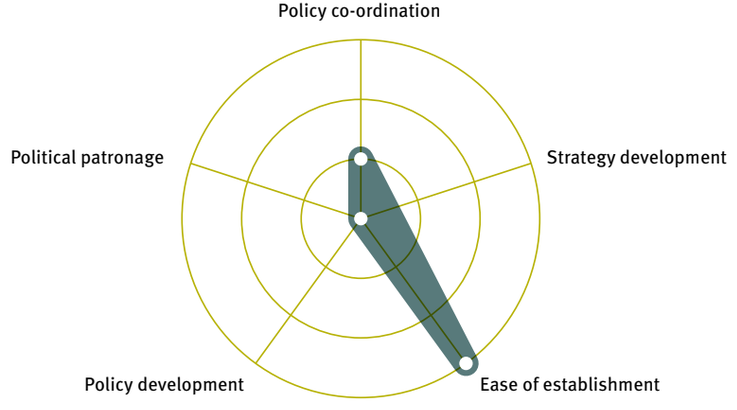
Every institution requires political direction. Effective institutions will take their lead from politicians but not depend too heavily on continued political patronage to operate effectively on a day to day basis.

Ease of establishment

Institutions vary in terms of how much financial or political capital is required to establish them. Those requiring legislation or large budgets are likely to be more challenging to set up.

There is no single, perfect resource policy institution. To test how well different institutional arrangements could deliver these requirements, we discussed the strengths and weaknesses of six different scenarios with a group of experts (listed on page 35).

1. No new institutions



"The skills needed to deliver many aspects of resource policy already exist in government."

A future government could choose not to change institutional arrangements. But this does not mean that resource policy should stand still. The government-wide initiative to deliver economic growth under the coalition shows us how an aim can be achieved by co-ordinated action across different departments. Each department could contribute the necessary analysis and expertise functions where relevant.

What would it require?

The skills needed to deliver many aspects of resource policy already exist in government: the Ministry of Defence and the Foreign Office have the geopolitical intelligence to monitor causes of supply risk; the Treasury has an enduring remit to assess threats to economic growth and stability; BIS co-ordinates innovation funding and supports existing and emergent sectors through its industrial strategies; CLG leads on how waste is collected; and Defra is responsible for resource management, waste and natural capital, and has some understanding of the underlying environmental drivers of resource risk.

In practice, this cross-departmental approach would require a responsibility for resources to be added to the most relevant directorates within each relevant department, whilst instituting more working groups between them, such as the virtual team supporting the development of the bioeconomy road map described on page 20.

An example of cross-departmental working:

The virtual team on the bioeconomy

This was set up following the House of Lords Science and Technology committee's 2014 inquiry into the bioeconomy. It links up civil servants from BIS and Defra and provides a nimble way to integrate each department's expertise into the project.

In this case, the collaboration involves an ad hoc working group but such teams can involve more formal arrangements, like secondments. Whilst the effectiveness of this particular group cannot be judged until the bioeconomy road map has been published and its recommendations have been put to the test, it is worth noting the supportive context for the project. It is linked to an influential inquiry that has already led to shared oversight of the bioeconomy being added to BIS and Defra ministers' portfolios.

"Cross-departmental working is only likely to be effective on a reactive rather than proactive basis."

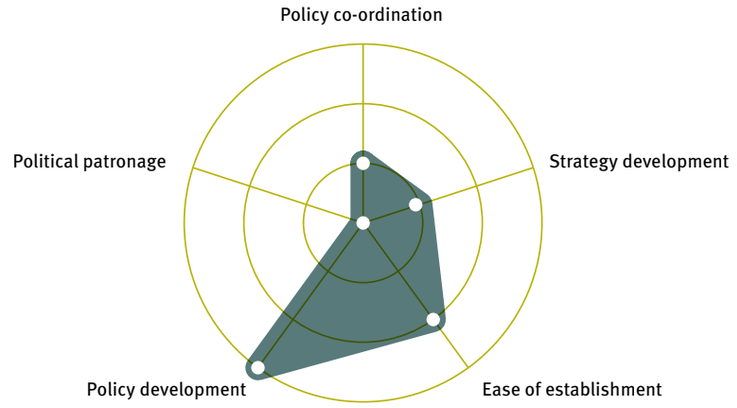
This approach would need sustained political interest to be effective. Cross-departmental working is notoriously difficult, especially on enduring issues, due to changes in the personnel and priorities of the departments involved. This is, therefore, only likely to be effective on a reactive rather than proactive basis ie responding to particular opportunities or concerns rather than supporting a strategic approach.

Pros and cons

In periods when political interest in resource issues is already high, a cross-departmental approach could make the most of existing expertise within government and support cross government action.

Without a specific institution supporting it, it may struggle to develop strategy and co-ordinate cross-departmental activity. It may also be hard to develop expertise beyond existing capabilities.

2. Non- statutory office within a department



A non-statutory office could perform analysis and provide expertise and advice across government on resource relevant polices, helping to co-ordinate policy. This is the role of the Rural Communities Policy Unit (RCPU) in Defra.

An example of a non-statutory office:

The Rural Communities Policy Unit

Established in 2011, the RCPU sits within Defra but works closely with all departments whose policies have an impact on rural communities. It was established as the government's centre of rural expertise and advises policy makers within Whitehall departments on the likelihood and possible scale of rural impacts. It suggests mitigation actions that could be taken. A key function of the RCPU is to 'rural proof' policies: assessing policy options to be "sure of the fairest solutions in rural areas."[20]

The RCPU was created to fill the gap left by the abolition of the statutory Commission for Rural Communities (CRC) in 2011.[21] The CRC reported annually on rural issues such as house prices and poverty levels, provision of services like public transport and education and changes in rural population levels. It also commissioned special reports like the 2009 report on rural poverty.[22] Whilst their remits are similar, the RCPU has had a much lower profile than its predecessor, and none of its analysis or recommendations are public.

What would it require?

Civil service resources could be reallocated without any new legislation or recruitment, making this an easy institution to implement. The Material Security Working Group has made a good case for the remit of such an office, with the main capacities focused on information gathering, analysis, and co-ordinating activities across government.[23]

"As a centre of expertise within government, a non-statutory office would provide useful analysis of available data and identify gaps in existing data sources."

The precise strengths and weaknesses of such an office would depend, in part, on the department in which it was based. Work by the Institute for Government has shown that co-ordinating cross-departmental activity is best delivered from the centre of government ie the Cabinet Office or an equivalent of the prime minister's Strategy Unit, created under the last Labour government.[24] Such bodies depend on continuing high level support from senior politicians.

If it were not based in the Cabinet Office, it would most likely be housed in Defra or BIS. The table below summarises the strengths and weaknesses of these options.

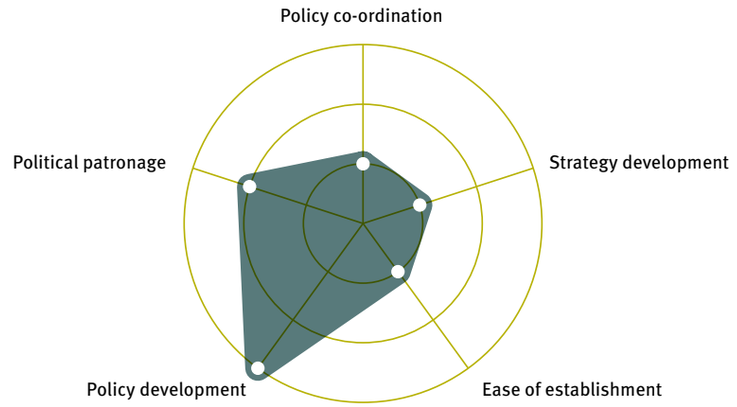
Office location	Strengths	Weaknesses
Cabinet Office	Ability to co-ordinate cross-departmental activity	Dependent on high level political support
BIS	Proximity to existing BIS policy areas, including industrial strategy and innovation support	Competing with short term growth as a departmental priority Lack of established resource or environmental expertise Risk of resource issues being side lined due to the size of the department
Defra	Established resource and environmental expertise	Limited capacity to develop and deliver policy due to budget cuts Perception that the department's focus is on regulating business to reduce environmental harm, rather than enabling green business growth

Pros and cons

As a centre of expertise within government, a non-statutory office has the potential to improve policy outcomes where political salience is high and there is little internal governmental disagreement over the priority of resources interventions, especially if it is located in a central policy delivery unit like the Cabinet Office. It would provide useful analysis of available data and identify gaps in existing data sources.

Unless it has explicit ministerial buy-in from other departments it would face difficulties in driving change beyond its home department. Its operations would also be threatened by changing departmental priorities and its status may make securing the necessary intelligence from businesses and classified sources difficult.

3. Statutory office



Like a non-statutory office, this would also deliver analysis and expertise, but it would benefit from greater autonomy than an office within a department. A good example of this is the Office for Budget Responsibility.

An example of a statutory office:

The Office for Budget Responsibility

The Office of Budget Responsibility (OBR) was established in 2010 to provide independent and authoritative analysis of the UK's public finances, removing the politics from economic decision making.

Its major function is to provide five year forecasts for the economy and public finances. It uses these to judge the government's performance against its fiscal targets. The OBR is staffed by civil servants and led by executives appointed from the Institute for Fiscal Studies, the Bank of England's Monetary Policy Committee and the Treasury. It benefits from an advisory board that draws heavily on academia.

Despite initial concerns that the OBR would not be sufficiently independent of the government, its work was highly praised in an independent review in 2014.[25] Its authority has been accepted to the point that Shadow Chancellor Ed Balls has been calling for it to audit manifesto spending commitments in advance of the 2015 election.[26]

What would it require?

A statutory office for resources would act as an information gathering and advisory body for government. But it would be less vulnerable to changing priorities and more able to provide advice independent of political interests. That said, its ability to co-ordinate cross-departmental policy would depend on support from politicians across government. It would also not be associated with any particular area of policy development, unlike an office within a department.

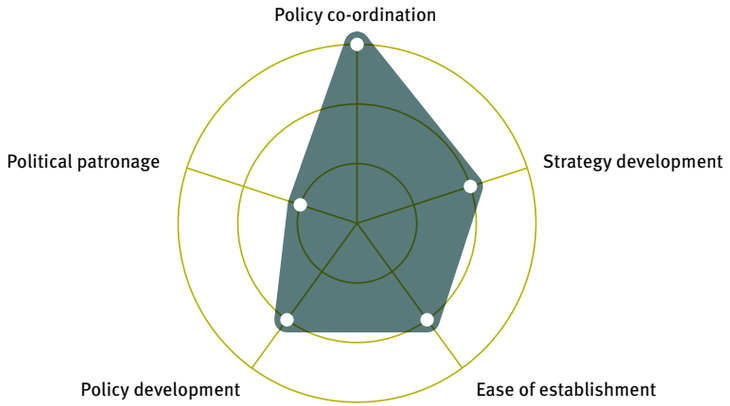
Pros and cons

The accountability of this office to parliament would mean attention to resource issues would be maintained in the face of changing political priorities. It would also benefit from having a remit for analysis that was independent of ministerial direction.

However, this independence means the office is also removed from policy developing mechanisms, so it could struggle to co-ordinate action across government, especially when political support was not high.

"A statutory office would be less vulnerable to changing priorities and political interests."

4. Standing committee



A standing committee would deliver policy co-ordination, information and analysis, and strategy development functions. The National Security Council is the best model for this type of institution.

"A National Resources Council would be the main forum for collective discussion of the government's objectives for resource policy."

An example of a standing committee:

The National Security Council

The National Security Council (NSC) is the main forum for collective discussion of the government's objectives for national security. The council meets weekly and is chaired by the prime minister. The council has three sub-committees whose remit is to examine more specific national security areas in which a range of relevant departments participate. Other cabinet ministers and senior officials, such as the chief of the defence staff and heads of intelligence agencies, attend as required. The political groupings are complemented by cross-government groups of senior officials that support and inform these ministerial level structures.

The NSC has been effective under the coalition government thanks to direct political patronage from David Cameron.[27] As such, it has helped decision making on national security to become more collective.

What would it require?

A National Resources Council (NRC) would follow the example of the National Security Council in terms of constitution and operation. It would include ministerial representatives from all the relevant Whitehall departments with a parallel officials' group. It would be the main forum for collective discussion of the government's objectives for resource policy. Such an approach has been operating successfully in Germany since 2007.[28]

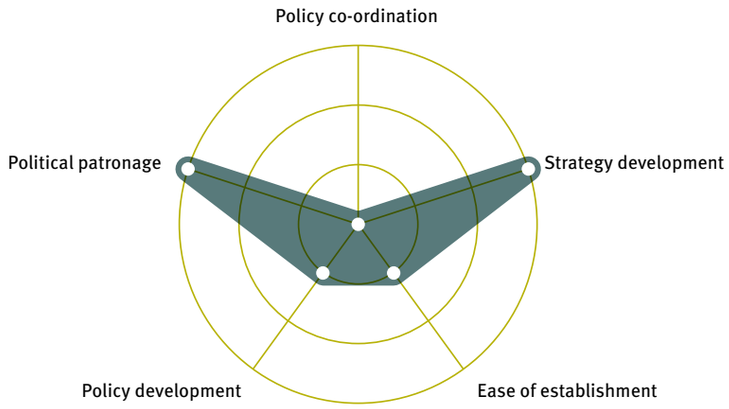
By having political representation from across government, it would help to turn political interest into effective policy. It would also benefit from the expertise and information available thanks to the associated senior official groups across government. But the level of commitment it received from ministers would depend on patronage at the highest level, such as that which the NSC has from the prime minister. It would also depend on action taken within each department to turn strategy into policy.

Pros and cons

The council would be able to co-ordinate action across government. It could also make the most of existing government expertise.

Being independent of a department it would have no direct policy development capability but would rely on ministerial representatives securing action within their departments. It could also face challenges in developing long term strategy and engaging experts from outside government.

5. Independent commission on resource risk



An independent commission would help politicians to develop strategy and policy by identifying priorities for action and suggesting mechanisms for acting on them. A good example is the Turner Pensions Commission. It would also help to develop the framework for analysing which threats require government intervention.

An example of an independent commission:

The Turner Pensions Commission

This was set up in 2002 to work out how an ageing population could manage financially in retirement, driven by concerns about the declining availability and viability of private sector pension schemes. The commission adopted a two stage approach to depoliticise the process, with the first stage providing a detailed analysis of the problem to build consensus about the priorities for any policy response.

The second stage provided recommendations for reforms to address the problems identified. The commission was chaired by Lord Adair Turner and had TUC president Jeannie Drake and LSE professor John Hills as commissioners. The commission's secretariat was largely drawn from the lead department, the Department of Work and Pensions (DWP). The commission used extensive public engagement, including industry, NGOs, shadow minsters, the TUC and the CBI.

Thanks to this broad engagement, the consensus seeking approach and the political acumen of Lord Turner, the commission proved very effective with many of the recommendations being implemented with cross-party support in the 2007 and 2008 Pensions Acts. Implementation of the recommendations has continued under the coalition government.[29]

"An independent commission should draw on military and security service intelligence on possible pinch points in resource supply and the strategies of rival manufacturing nations."

What would it require?

An independent commission would conduct an enquiry into the resource security of the UK and the government action required to address any identified risks. It would need financial support for a secretariat and access to government data and intelligence. To have credibility, it should be led by a high profile figure, have access to senior economists and include senior business representatives amongst its commissioners. It should also draw on military and security service intelligence on possible pinch points in resource supply and the strategies of rival manufacturing nations.

Unlike the ongoing role of the other institutions considered here, this commission would be a task and finish initiative. Therefore, it would be complementary to all other possible institutional arrangements.

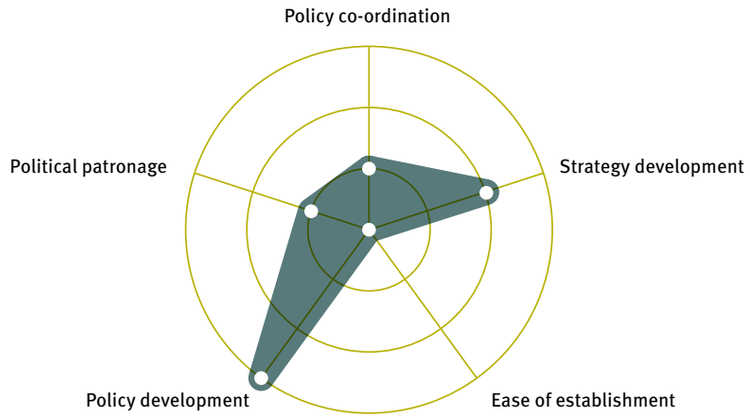
Pros and cons

An independent commission could clarify what is at stake and help politicians to understand their political choices in relation to resources.

It could identify priority areas for government intervention (ie where the UK is especially vulnerable or has particular opportunities) and recommend suitable strategies. It would be able to identify where lack of data prevents effective risk analysis and how the gaps could be addressed.

Being outside government, it may find it difficult to secure departmental action and ensure policy delivery.

6. Department for Natural Resources



"The most far reaching institutional change would be to consolidate greater control for policies within one department."

The most far reaching institutional change would be to consolidate greater control for policies relevant to resource security and productivity within one department: a Department for Natural Resources tasked with maintaining and enhancing the natural resource base of the UK economy.

This would address many policy co-ordination problems by placing responsibility for the most extensive policy areas relating to resources within one department. It would also provide the expertise and analysis functions on resource flows, supply scenarios, and interventions to address constraints.

What would it require?

The precise remit of such a department would be the subject of negotiation; but, to have responsibility for the policy areas most relevant to resources, it should build on Defra's existing responsibilities for waste policy and the environment and take over producer responsibility from BIS, and planning and collection systems from CLG. Its scope would, therefore, closely resemble that of the Department of the Environment as constituted between 1976 and 1997.

Its activities would include land use planning – especially important for biological resources – and it would represent the UK in international resource policy negotiations, working closely with the Foreign and Commonwealth Office and the Department for International Development (DFID) when considering supply chain risks and the impacts of resource production overseas.

The wider remit and influence of this department could attract a high profile political leader able to champion resources in cabinet discussions.

The reorganisation required would reduce the total number of government departments, fitting with the expectation that there will be further consolidation in central government after the next election to meet the continued demands of deficit reduction.[30]

However, departmental reform is disruptive and expensive. Research by the Institute for Government suggests that transition costs can range from £15 million to £175 million, depending on the type of reorganisation.[31]

There is also likely to be a hiatus in policy development as new structures and processes are developed. Therefore, it is only worth doing if resource policy is going to be an active area of government for the next ten years or more. Moreover, such a department would not eliminate policy co-ordination problems; it would just move the policy frontiers between departments. There is a real risk that having a specific department would accentuate the silo tendency of government and reduce the propensity for other departments to act.

Pros and cons

A dedicated department could mobilise political capital and deliver sustained policy support for addressing resource issues. It could co-ordinate action over the wider range of policy areas within the department and develop more systemic approaches. Its remit would also help fuse industry and environmental thinking on resources.

It may struggle to co-ordinate action on resources across departments and the political capital it earns its secretary of state would depend in part on the political salience of resource issues.

5
Conclusion and recommendations

Successful future governments will need to help businesses secure resource inputs, increase productivity and lower the social and environmental impacts of resource use. Politicians from across the political spectrum recognise this.

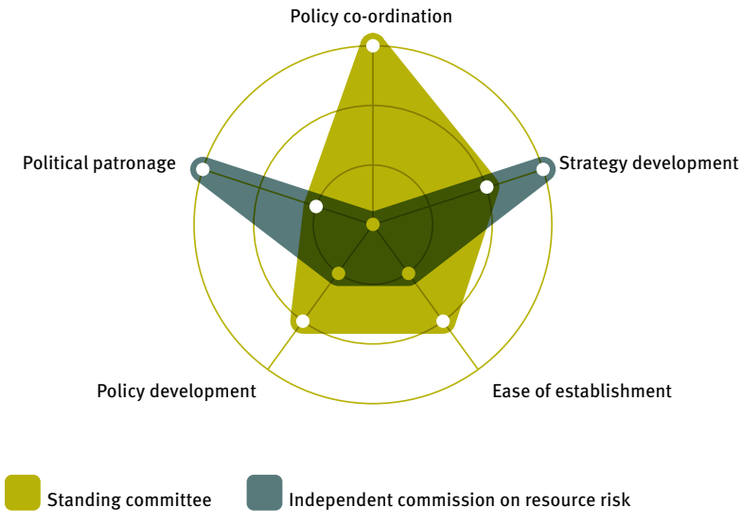
An effective framework for change requires leadership right across government. It will be necessary to draw on expertise both within departments and from outside government. The approach needs to be responsive to short term threats and opportunities whilst also supporting the development of a long term vision and strategy.

"An effective framework needs to be responsive to short term threats and opportunities whilst also supporting the development of a long term vision and strategy."

Of the options discussed, we consider that improving resource policy with no new institutions would only be effective with a high level of sustained political interest. The same applies to a non-statutory office, if it were to have any chance of delivering co-ordinated policy. Both non-statutory and statutory offices would be useful centres of expertise to inform policy development. A statutory office would also be more resilient to the vagaries of fluctuating political interest, but it would be removed from policy development and so could struggle to get its recommendations implemented.

A Department for Natural Resources has the attraction of being dedicated to policy development in a range of areas relevant to resources, but it could become marginalised within government; there would also be a risk that, with resources being confined to one department, other departments could consider that the issues are no longer their responsibility.

Our recommended institutional framework for resource management



We consider that there is one combination which offers the best scope for developing an effective strategy and co-ordinating policy development

across government: a National Resources Council supported by an independent commission on resource risk. The former would provide the necessary cross-departmental reach and high level political engagement to support effective policy development, and the latter would provide valuable expert advice, identifying where government support is needed and priorities for action.

The prize for effective action on resources is significant. It offers the benefits of increased security and economic stability, new sources of employment and the opportunity to revitalise the UK's industrial base. Calls for increased political action on resources are growing and, whichever party forms the next government, change is likely. The creation of a new institutional framework for resources within central government will support UK businesses and signal clearly that resource security is a political and economic priority for the UK.

Annex

Strengths and weaknesses of the current approach

Information provision

The Office for National Statistics compiles annual material flow accounts as part of the National Environmental Accounts, but the level of detail on material types is insufficient to assess the UK's exposure to supply risks and the understanding of waste material flows is too poor to plan infrastructure or recovery systems. It is hoped that the Electronic Duty of Care (EDOC) system will improve our understanding of resources embodied in waste flows, but this will depend on the level of uptake amongst businesses, which has been slow to date. WRAP's analysis of resource flows has helped to identify gaps in the data and demonstrate how small a proportion of resources are recovered at end of life.

Our understanding of ecosystems and the resources and services they provide the economy is patchy. For example, decades of research mean that fish stocks are fairly well characterised but we are only just beginning to look into the availability of pollinators. Academic research on pollinators and other ecosystem service functions is funded by the Natural Environment Research Council (NERC) and the Biotechnology & Biological Sciences Research Council (BBSRC). The Natural Capital Committee was instituted in 2012 to advise the UK government on how to ensure England's 'natural wealth' is managed efficiently and sustainably, but the evidence to date suggests there is insufficient political interest to act on their recommendations. There is also very little information on the international availability of biological resources, although the Committee on Climate Change has studied the international biomass resources available for energy.[32]

Analysis of risks and trends

The government's 2012 *Resource security action plan* (RSAP) acknowledged business concerns around security of supply for certain resources and the difficulty of assessing the UK's exposure to supply risks for particular materials due to the lack of data on quantities used or projections of future supply and demand. Moreover, the action plan largely drew on the EU's critical materials analysis as the most recent assessment of resources with supply risks. Whilst the EU continues to update its critical materials assessments, it doesn't include any assessment of risks to biological materials and is not a substitute for a UK analysis due to the lack of specificity around the industrial sectors and resource requirements of the UK economy.

Although there has been no UK economy wide analysis since the RSAP, there has been a sector specific analysis of the current supply risks and future supply constraints for resources related to energy technologies.[33] One goal of the work funded by NERC and the BBSRC is to improve understanding of the natural resource base that underpins the economy, but there has been no assessment of the vulnerability of the UK economy to the mismanagement of biological resources.

Innovation and support for resource productivity

Innovate UK (formerly the Technology Strategy Board), the Research Councils, especially the EPSRC, and the Knowledge Transfer Network, have all supported or are supporting projects to raise awareness of critical materials amongst businesses and help them develop substitutes or 'critical material free' processes. Similarly WRAP is helping businesses and local authorities to innovate by brokering voluntary agreements with targets, which in turn encourage new behaviours.

Landfill tax and associated waste regulations with recycling targets are the most prominent regulatory drivers to address unaccounted for costs and increase resource recovery and productivity, although they are too generalised to address specific security of supply concerns. In the RSAP, the government had raised the possibility of using Individual Producer Responsibility requirements to increase critical material recovery, but has repeatedly deferred action on this.

Government Buying Standards provide some support for supply of reused or refurbished products, but this is limited to encouragement rather than requirement and only for a few limited products.

Ensuring the continued availability of biological resources

Provision exists for policies to maintain or restore natural resources such as carbon sequestration function and water quality and flow within the recently reformed Common Agriculture Policy and allied policies, such as the Water Framework Directive. There have also been specific interventions to ensure the continued provision of ecosystem services, such as the recent National Pollinator Strategy or the designation of some Marine Conservation Zones.[34] While there are plentiful examples of policy measures which have benefited natural resources, there is not yet an effective overarching strategy for natural capital.

We are grateful to the following individuals for their comments and input, however the views expressed in this report do not necessarily reflect those of the participants.

Expert interviewees

Mark Turner, head of the chemicals unit, BIS

Dame Fiona Reynolds, master of Emmanuel College, Cambridge University and Green Alliance chair

Stephen Tindale, research fellow, Centre for European Reform

Tom Burke, chairman, E3G

Susanne Baker, senior climate and environment policy adviser, EEF

Julian Kirby, campaign specialist, Friends of the Earth

Sir Graham Wynne, Green Alliance trustee

Jill Rutter, programme director, Institute for Government

Jonathan Pearson, senior researcher, Institute for Government

Dame Helen Ghosh, director general, National Trust

Paul Ekins, director, Institute of Sustainable Resources, University College London

Workshop attendees, 20 November 2014

Peter Young, chair, Aldersgate Group

Andrew Jenkins, sustainable development manager – products, Boots UK Ltd

Steve Lee, CEO, CIWM

Colin Church, director, resource, atmosphere and sustainability, Defra

Susanne Baker, senior climate and environment policy adviser, EEF

Sir Graham Wynne, Green Alliance trustee

Sue Armstrong Brown, deputy director, Green Alliance

Jonny Hazell, senior policy adviser, Green Alliance

Dustin Benton, head of energy and resource stewardship, Green Alliance

Rebecca Willis, independent researcher and Green Alliance associate

Jonathan Pearson, senior researcher, Institute for Government

Dinah Nichols, chair, Keep Britain Tidy

Tracey Rawling Church, UK director of brand and reputation, Kyocera Document Solutions

Laura Sandys, MP

Steve Bass, head of sustainable energy policy, Ofgem

Ray Georgeson, CEO, Resource Association

John Williams, chief technical officer, Sinvestec

Forbes McDougall, head of circular economy, Veolia

Dan Cooke, director of external affairs, Viridor

Julie Hill, chair, WRAP

Patrick Mahon, strategic assistant to the CEO, WRAP

Endnotes

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[15] Adapted from analysis in: EEF, 2014, *Materials for manufacturing*

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