Adaptive Capacity Benchmarking: A Handbook and Toolkit

Alexander Ballard Ltd

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Project Partners:
Hampshire County Council
Climate South East
The Environment Agency (Thames Region)
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A. Introductory

Welcome to the ESPACE Adaptive Capacity Benchmarking Handbook and Toolkit.

We hope you will enjoy using the materials which follow and will be prepared to improve them as you go, feeding learning back into the project. This could be via a dedicated website currently under development, or to Susan Alexander or David Ballard (at Alexander Ballard Ltd: email: enquiries@alexanderballard.co.uk) lead authors of this work commissioned by Hampshire County Council in partnership with Climate South East, the UK Environment Agency and VROM in the Netherlands.

The handbook which follows should prepare and guide you through a review of your own or another organisation to see how far they have developed their adaptive responses to climate change.

The toolkit is on the accompanying CD which contains items such as forms, templates, worksheets and the overall matrix to help record and analyse your data.

The handbook is structured in a logical sequence.

Part A will bring you up to speed with the framework you will be using and how it has been developed.

Part B will guide you practically through a review process.

In Part B from section 3 onwards we have included checklists to help you check off what you need to have done at each stage in the process. Blue Circles signal when you need to access something in the accompanying toolkit on the CD.

As you read through the text you will find other annotations which we have used to highlight an important insight or practical tip. Here's **a key to the annotations** we have used:

1. Blue circles = links to tool kit
2. Pink side bars = case illustrations
3. Light green text boxes = relevant anecdotes or additional information
4. Rectangular coloured boxes = learning points we particularly want to highlight

In some places we have used different coloured text. This is to help differentiate between six different response levels that you will need to recognise. You may also notice that we sometimes do not mention level six. That is partly because scarcely any organisations are yet acting from this level so we do not have enough evidence to describe level six characteristics in sufficient detail. In addition, very few organisations are yet acting consistently from response levels four and five, so the transition to response level six remains a task that can best addressed by focusing on these earlier, but still exciting and highly beneficial, response levels.

1. Introduction to the adaptive capacity benchmarking project

1.1 Overview

Climate change presents society with massive challenges, which go far beyond business as usual. As weather patterns change in ways that are both predictable and unpredictable, altering sea and river levels and the water cycle more generally, there will be impacts on communities, on assets and on services that we are only beginning to understand. As society responds, we need to figure out how to maintain economic activity, provide essential services and meet basic human needs in a vastly changing energy economy.

Organisations play a key role in such responses – whether government at local, regional, national or international level, or commercial organisations, or partnerships, or third sector organisations.

What enables one organisation to tackle an issue such as climate change more effectively than another? How does an organisation know when progress has stalled? Where should change agents focus their efforts in order to progress? These are some of the questions that Alexander Ballard Ltd has been exploring through the INTERREG-funded ESPACE project in a close and constructive collaboration with Hampshire County Council and with Climate South East, a regional climate change partnership.

We first investigated this issue at the end of the first phase of the ESPACE project. That project built on work on individual behaviour change that we and HCC had undertaken together. We drew on a range of expertise and wider research to set out six levels of organisational response to climate change. It described these across nine different areas, or 'pathways'. It resulted in the publication of the report "Moving to the Higher Ground". This is a recommended point of reference for those who wish better to understand the evidence base on which these practical tools rest.

The purpose of the next phase of work has been to produce tools and processes to help engage with the challenges identified during the first phase.

1.2 Research methods used

We have used a wide variety of approaches, including:

1. Extensive review of the literature on organisational change, on strategy and on human responses to sustainability issues (a reading list is appended to the Toolkit).
2. Critiquing by peer organisations: We held two workshops with leading organisations to critique it and tested it less formally with a wider range of organisations in both public and private sectors. The workshops included representatives from several large commercial organisations – some of them household names – from local and national government, from government agencies and from a leading NGO.
3. Peer reviewing: we have produced one paper for the professional / academic press.
4. Reflecting on experience from many years work on organisational change in this field and more widely, both on our own account and on the part of our partner organisations.

The Review Process and accompanying materials have been trialled successfully and improved with participation from a small number of ESPACE partner organisations, namely: Kent County Council, Hampshire County Council, The UK Environment Agency, TRL and VROM. We also had helpful feedback from UKCIP and some organisations outside the partnership such as RWEnpower.

It has been applied in several very different contexts and at different scales. For instance, reviewing the Netherlands Adaptation Strategy, assessing Kent's progress against some recommendations on its climate change strategy and helping transport consultancy TRL to get a sharper "climate change" perspective into its business development planning.

This has led to two further research approaches:

- Action research: we have worked alongside our partners and have sought and taken account of their feedback and that of the wider group of organisations who have participated in the work.
- More formal testing: we have made predictions about what organisations at different stages of development would be doing and have been able to test these on the ground.

1.3 What does this Handbook and Toolkit aim to provide?

This Handbook and toolkit summarises a way of giving organisations a simple method to review themselves and each other with regard to their response to climate change, covering both mitigation and adaptation[1]. Such a review can highlight strengths and areas for improvement and provide a focussed guide to next steps which meet the organisation's needs or aspirations.

If used systematically, the materials will enable organisations to identify the organisational capacities and change strategies that they need to develop in order to move forward on this agenda and to share and spread good practice in a programme of continuous improvement.

The framework has been trialled and improved, resulting in the production of this Handbook and Toolkit. The process has involved extensive work in partnership with Climate South East and Hampshire County Council, with significant input from other ESPACE partners and Climate South East Members. We have learned immensely from the process and realise that this work can never really be finished but will always be work in progress.

What we have done provides a good foundation from which to generate fresh ideas and ways of doing things. We trust that as time goes on, users will bring their own curiosity and creativity into the process to continually improve the toolkit and come up with stronger ways to generate and share information. We invite you to step up to the challenge and use what's here to get you started. In due course many users will find ways of improving the approaches; please continue to feed them back to help us to craft something that can only continue to improve.

[1] We include the need to adapt to a carbon or even GHG constrained future in this definition and so view the reduction in energy use as an adaptive strategy blurring the line some prefer to hold between adaptation and mitigation.

2. Exploring the framework

2.1 Introducing the Six Response Levels

Research shows that organisations can mature and develop (or fail to do so) much like individuals. The organisation takes on something new, hopefully gets better at doing it, learns from the experience and moves on to the next challenge. Like individuals though, many organisations don't change much until something forces them to do so. That something, as in this work, could be climate change.

This project has identified six clear stages of development when organisations take on the challenge of climate change. We call these response levels (RLs) rather than stages because we don't want to imply that in moving on it is necessary to leave each stage behind. Instead, the idea is to consolidate each level before learning to respond from the next one up. We see very few signs of an organisation being able to act successfully from RL5 without having a strong grounding at RLs 3 and 4.

While not every organisation needs to act from the highest levels of response, bodies that take substantial decisions which will affect communities, services and estates over decades – e.g. local authorities, national government and major companies in strategic industries – do need the ability to work from the higher levels when needed, as well as the systems to provide solid activity at lower response levels on a day to day basis.

RL 1. **Core business focused.** Organisations with a short term focus, e.g. some SMEs, do not see that the issue has much relevance to them at all. But all organisations, no matter how committed, need to be able to keep the show on the road in a rapidly changing world.

RL 2. **Stakeholder responsive.** Many organisations recognise the need to understand and comply with a complex and rapidly changing set of rules, regulations and financial instruments, while keeping up to date with customers' needs and corporate policy.

RL 3. **Efficient management.** As organisations progress, they begin to get a grip on operations, to quantify and prioritise issues, put in place common sense and effective management programmes for improvement. This often leads to much better ability to manage costs.

RL 4. **Breakthrough projects.** As understanding develops, organisations begin to see the need to learn fast about strategic threats and to identify options for responding to them. They identify creative innovations and put in place the conditions for a strategic response.

RL 5. **Strategic resilience.** As understanding of major threats develops, and as options begin to be identified, the organisation becomes more able to put in place programmes to ensure its resilience in what is likely to be a very different and fast-changing future.

RL 6. **The champion organisation.** All these steps will help society respond to climate change, as well as protect the organisation's own interests, but some organisations choose to go further and seek to lead wider social change to slow and reverse climate change itself.

We explore these response levels in more detail in Section 2.4 below – with examples to show how organisations are working at different levels.

Commercial / Value for Money pay-backs to action at the various levels

But before doing so, we would like to take a moment to consider what a framework like this means to different types of organisation. What is the payoff from working at a higher response level? Why bother to improve? We have chosen to use two lenses in responding: the benefit to the organisation itself and the wider benefit to society. In practice, the pay-off to both improves together.

Capacity	Some typical actions	Impact on organisation	Impact on climate change
RL1 – Core business focused	Decisions taken on the basis of past trends with little or no attention to changing strategic context	Can be very costly. E.g. a major company changed strategy but missed that energy costs would increase by £50m p.a.	Can easily 'lock-in' high energy or poorly adapted choices, making resistance to current or future action more likely.
RL2 – Stakeholder responsive	Initial action – e.g. notices to switch off lights, share cars, etc. Will respond to requests from stakeholders, if not necessarily very well.	Some marginal cost savings; more likely to spot changing needs of major stakeholders, so avoiding costly emergency actions to comply under duress	Unlikely to achieve much change but starts to bring the issue onto organisation's radar
RL3 – Efficient management	Quantifying / prioritising issues, putting in place common sense and effective programmes for improvement.	Well managed energy and water costs; capacity to notice & take advantage of funding opportunities. Fewer costly mistakes.	Builds the systems that are needed to respond to government initiatives such as carbon trading. Normalises action, showing that change is possible.
RL4 – Breakthrough projects	Learn fast about strategic threats and identify options for responding to them.	Identifies new ways of working with multiple benefits – e.g. costs, revenues (in business), climate change, reputation – win:win:win.	Dealing with climate change requires facing uncomfortable science; projects provide a positive way of doing so, so promoting wider change.
RL5 – Strategic resilience	Ensuring the organisation's resilience: e.g. review investment strategies to ensure their resilience in a carbon constrained & climate impacted future.	Actions at this level help ensure service delivery, keep the organisation solvent and ensure affordable project finance and insurance	As businesses act at this level, they begin to create the conditions for a future carbon constrained and climate impacted society. They ensure that economic activity continues

How the need for organisational change is interpreted at different Response Levels

We have noticed very different responses to the framework from different types of organisation. In a nutshell, people tend to become more positive and receptive the further advanced their organisation is. Why is this?

The table above suggests that the payoff (what is sometimes called 'the Business Case') can be very substantial indeed. This is not fantasy: the Stern Review of 2006 identified potential risk as around 40% of GDP – a figure that has since been revised upwards. Banking giant Lehman Brothers published an analysis in early 2007 that suggested that corporate responses to climate change might easily be one of the factors that determines whether an organisation succeeds – or fails and dies.

Consider provision of public infrastructure such as schools and hospitals: These last for 40 years or often more. Those built today need to be capable of operating in the environment of the 2040s and 2050s. Energy is likely to be significantly more expensive, and probably much less available even than today, and temperatures, rainfall, wind speeds and river flows (among many others) are forecast to be significantly different.

- Many buildings are provided through the Private Finance Initiative or PFI. There are clauses in such contracts to provide for financial compensation if service levels are not maintained. But (a) the construction sector as a whole still has significant work to do in recognising and addressing these risks, (b) the insurance sector is less and less prepared to protect against poorly designed projects.
- If such projects fail, the 'arms length' consortia of the construction sector can be expected to go into liquidation: these risks cannot in practice be transferred out of the public to the private sector. So the public sector risks being left with unsuitable buildings, unable to provide a core public service.
- For new housing, of which there is much planned in the South East of the UK, failure to address such issues risks leaving 'sink' estates, incapable of insurance, often more or less uninhabitable.

But these require RL4 or higher insight to see – and by definition such insight is rare or absent in organisations which cannot yet work at those levels. So the paradox is that the organisations which most need to improve are least likely to recognise the need to do so:

- At **RL1,** the value of assessing progress is completely unseen;
- At **RL2,** the response tends to be fearful and somewhat defensive;
- At **RL3,** there seems to be an interesting transition. At the early stages, the work seems to be straightforward: lots of things to do, not much point in thinking too deeply about them. But as the work begins to mature, there is (a) an understandable wish to progress and to understand good practice rather better, (b) a growing and uncomfortable realisation that good isn't enough. Organisations at this level are often intrigued and willing to look more broadly.
- At **RL4,** the need for change is recognised but often the capacity to change is constrained by RL3 practices in the organisation. There is often much appetite to understand and make transitions.
- At **RL5,** the organisation has typically thought many of these issues through for itself; it welcomes an adult discussion of what it can do to consolidate and move on.
- We have not encountered any organisations who are solid at **RL6**!

2.2 Complementarities

These six levels are broadly consistent with much research done by others. But the key question is, how does one move from one response level to another?

To answer this, we have gone to a significant body of organisational research: Complementarities Theory. The theory of complementarities suggests that successful innovation (such as happens when we move from one response level to another) doesn't happen by piecemeal change. A number of interlocking factors need to be developed together.

> *"Doing more of one thing increases the returns of doing more of another"*
> *(Milgrom and Roberts 1995)*

Furthermore, to try to improve performance in one area without improving in other complementary areas risks disrupting a system that works well at one response level without establishing it at another (and perhaps more suitable) response level. So partial changes might not only expensively fail in making progress but can easily make things worse. This is because each area represents an essential part of the necessary change but not all of what is required.

Put more positively: if any organisation needs to improve it is much more likely to do so if it thinks ambitiously, targeting performance improvements across a group of complementary areas in parallel.

Bold and comprehensive changes are more likely to be much more effective than timid changes targeted at only one or two areas. Given the extent of the challenge of climate change, this is a potentially crucial insight!

An obvious question follows: what are the complementarities that apply to organisational improvement for climate change? This question has potentially significant payoffs:

- If we can identify these, and see how they change and develop, then we have gone a long way towards identifying how to support organisational change.
- If we can find out where we stand on the complementary factors, then we can identify where a difference is most likely to make a difference.
- If we can identify where other organisations stand, then we can target what we do in a way that is likely to be within their scope, likely to improve the situation and less likely to make things worse.

Identifying the complementary areas for change (we call them 'pathways') and identifying how they change has been a key focus of this project. We have identified and tested nine: in the next pages we will introduce you to them.

2.3 Introducing the nine pathways for change

To help an organisation to see where and how to develop different levels of response the change tool gathers and organises information about nine organisational 'pathways' – complementary capacities (comparable to 'competencies' at an individual level) which need to improve together if change is to take place. What are they?

a) Awareness. The ability to realise what climate change means for the organisation's viability, for the viability of its work, for society and for the planet, now and into the future.

b) Agency. The capacity to spot, prioritise and develop opportunities for meaningful and timely action in response to information about climate change.

c) Leadership. The extent to which a formal leadership team can identify a vision in relation to climate change and can engage with, support and legitimise its implementation.

d) Agents of Change. The capacity to identify, develop, empower and support a group or "ecosystem" of champions at different levels so that they can be effective agents of change.

e) Working together. The capacity to involve, respect the needs of, communicate with, learn from, and act in collaborative partnerships with internal and external groups.

f) Learning. The extent to which the organisation can learn from experience and use what it learns to improve procedures, strategies and mission. (This is a particularly important pathway because it helps identify anything specific to a particular organisation that needs attention to unblock change).

g) Managing operations. The embedding of procedures to get to grips with climate change in a systematic way. These develop as the organisation's ambitions and competencies grow.

h) Programme scope and coherence. How far projects sit within an overall programme for action that is suited to the scope of what the organisation is trying to achieve and updated in the light of what is learned – where to build on success or to address constraints.

i) Using Expertise. The capacity to recognise, access and deploy the necessary skills, understanding and technical and change expertise to make the biggest difference.

How do these pathways change and develop at the different response levels? This project has developed and tested a framework for looking at these. Let's go a bit deeper.

2.4 Looking at the pathways in more detail

Analysis of pathway a) Awareness

What does this mean? Awareness implies a deeper understanding and engagement with the issue than simply "brand awareness"(i.e. the meaning of the term and that it's happening). Awareness is not an on/off switch but something that develops over time both cognitively and emotionally as people learn more about the causes, impacts, scale and urgency of climate change. In organisations we look for awareness of how climate change will affect core business, operations and premises and the capability to prosper in a carbon constrained future.

Why is it important? To the extent that awareness can grow, so too does the motivation to take action. In organisations with low awareness, action only takes place if there is a compelling reason to do so – perhaps to respond to consumer pressure. In organisations with high awareness, a pro-active and wide-ranging strategy for action is developed over a longer time-frame. If awareness isn't broad enough, decisions will be made which lock- in patterns of high carbon behaviour for many years into the future, risking their faltering under carbon constraints, or increasing vulnerability to impacts.

At **RL2**, organisations recognise that climate change may be happening. However, most managers do not know enough to say how the issue will affect them or their areas of responsibility in the future.

Organisations at **RL3** see climate change beginning to affect the organisation and as needing a serious response similar, say, to health & safety. People recognise that the organisation contributes to the issue and see some of the basic adaptation pressures, also recognise some of how government policy might develop & affect them.

An organisation at **RL4** recognises that the issue is far more than business-as-usual. Organisations begin – for instance – to do in-depth reviews of particular operating areas, looking at how they will be affected by climate impacts or by a radically changing energy economy over strategic timescales – upwards of 10 years.

Experience suggests that awareness at **RL5** is rare and takes some years to become very solid. At this level, organisations have detailed awareness of climate trends and possible carbon constraint scenarios decades into the future and have a good understanding of how these might impact upon their responsibilities. This provides a strong basis from which take can approach major decisions. Some organisations go so far as to track or even commission relevant scientific research, which develops awareness further.

Taking a long view in the Netherlands (RL5+)

The Dutch Government has set up a 'Delta Commission' to review options for maintaining coastal defences in the light of climate projections and to help in planning actions to secure the resilience of the Netherlands.

The Dutch have demonstrated over centuries that they have the will and competence to face the challenge of the sea. The Commission is looking at possible impacts over the next 100 to 200 years. This will include the James Hansen accelerated sea level rise scenarios as a possibility – potentially 5+ metres this century alone.

Analysis of pathway b) Agency

What does this mean? Agency is the capacity that an organisation develops to spot, prioritise and make the most of opportunities for action that it regards as meaningful on climate change.

Why is it important? Research shows that people resist increasing awareness unless they think they will able to act in a meaningful way – i.e. unless they have 'agency'. Organisations have far greater opportunities to respond to climate change than individuals yet unless they explore and extend the space they have to take action, nothing will change.

At **RL2**, organisational strategists and managers see other areas as having a much bigger pay off right now but they would consider acting if an important stakeholder were to ask them. The agency in this would be more to do with maintaining good relations with the stakeholder than because of any perceived intrinsic value for the organisation itself.

Organisations working at **RL3** recognise the benefits of continuous improvement actions – e.g. to incremental costs & revenues – and begin to see lots of opportunities to act. The timescale for action is normally the budget or planning cycle. Managers identify, cost, prioritise and commit to improvement actions that meet cost benefit criteria.

At **RL4** the emphasis is on strategic win: wins. Organisations begin to see opportunities to take a major step forward in their engagement where current strategic priorities overlap with the climate change agenda. This can be done well alongside projects that aim to increase awareness at the same time – the brief being *both* to understand risks and opportunities in depth *and* to propose major steps forward.

At **RL5**, timing becomes crucial: organisational strategists recognise that opportunities for high agency are often time-specific, e.g. when capital equipment needs replacing or premises are being built or refurbished. At such periods, responses can be highly cost-effective – but if the opportunities are missed, it is very easy to become 'locked-in' to costly high carbon operations and vulnerable to climate impacts. At this level, major decisions need to be examined in detail for their potential to open up – or to close down – strategic freedom.

Combining Agency and Awareness (Early RL4)

The Antrim Area Hospital, one of eight major hospitals and several community sites served by the Northern Health & Social Care Trust in Northern Ireland, put in a wind turbine in February 2005.

Cost and carbon savings were two main drivers of the project. They will save around £90,000, a quarter of their energy bill. This money will be directed back into patient care.

The Turbine is an icon as it is very visible to staff, patients, visitors and passers-by.

The project team now provides advice and information for interested parties.

(Source: The Low Carbon Innovation Forum (www.carbon-innovation.com)

Analysis of pathway c) Leadership

What does this mean? This pathway focuses on the role of the formal leadership team, i.e. the senior management team, board or governance group. This is because they can develop a strategic vision and legitimise and govern how this is implemented.

Why is this important? Without support from the formal leadership team it is unlikely that change efforts will take root and spread more widely through the organisation and beyond. Agents for change may need to enlist formal leadership support before an initiative takes off so it is important to assess where the formal leadership currently stands on climate change

At **RL2**, while leaders do not generally say much about climate change, some have made some statements which suggest that they might broadly support some action if not too costly. This provides some basis for others to begin to act. But it isn't clear where they would draw the line and they have not given clear guidance as to what others are expected to do – or not.

Leaders working at **RL3** typically approve and spread a policy & programme of action & people feel confident that they would be backed up if acting in line with these. They are treating CC as a mainstream activity - e.g. by setting targets & monitoring progress. While activity is usually delegated quite a long way down the organisation, leaders become involved in periodic reviews and might make speeches that support action both within the organisation and more widely.

Leaders using **RL4** begin to identify major strategic questions that they can't yet answer and commit to getting themselves and the organisation up to speed with the issues. They might personally sponsor certain strategic projects, seeking rapid improvement and staying very closely in touch with what is being learned: it is not just a question of receiving a report at the end. They will often actively participate in projects, demonstrating leading-by-learning. Some might take time out to look at the issue in depth through in-depth workshops or industry working groups.

When using **RL5**, leaders see climate change as crucial to the long term future of the organisation. They ensure that the issue comes up in every major decision, and is seriously assessed in capital projects: if managers haven't thought the implications through, they are sent back to the drawing board. Leaders act as senior 'champions' – e.g. with government.

Leading performance breakthroughs in an English County Council (Early RL4)

We found a lot to learn about leadership for innovation in a recent review in an English County Council. There is an impressive bias for action and experimentation, and people know that they will be supported to innovate where possible. Leaders are prepared to set challenging targets and then to support the innovations that follow. One Cabinet Member said,

"I see my job as being to set very ambitious targets and to show my managers that they are credible, e.g. that a comparable level of performance is being achieved somewhere else – if not necessarily in the way that the managers would prefer. Then I ask them to find a better way. If they can do it, I will be delighted. If not, then they might have to accept the approach I came up with!"

Analysis of pathway d) Agents of change

What does this mean? Change doesn't happen unless it is spearheaded by a passionately committed individual or group of agents of change (also known as 'champions'). Such people aren't simply good at grasping the climate change agenda, they also have strong "soft skills" such as the ability to tailor their communications to win support from diverse groups. They know from experience how change happens.

Why is this important? Agents of change are vital to accelerate action on climate change. However, their effectiveness will depend on the amount of support and resourcing, degree of networking, and level of responsibility given to them by senior managers. A strategy needs to recognise the stresses that can accompany high levels of awareness and commitment and also needs to plan for succession: initiatives often run out of steam when a change agent moves on.

At **RL2**, individuals with a personal commitment to improving climate change performance may have been given some recognition. However they usually have to fight for resources, e.g. training, time, budgets.

Leaders using **RL3** typically see change as being within a business-as-usual context and so appoint people as agents of change on the basis of their role or of their technical expertise and support them with networking opportunities, training, etc. This does help. However, as their awareness grows, some may feel isolated and under-supported; as they come to recognise the scale of the changes that are needed they may fear that they will lack support from others.

At **RL4**, training and support begin to focus on change and innovation. The role recognises the importance of organisational change, with time being set aside to support this. Access to senior decision makers is opened up in key projects. Agents of change are increasingly selected as 'policy innovators' who have a commitment to the specific field of work as much as for technical skills or organisational role.

At **RL5**, agents of change are seen as a key element in strategic change with plans being made to have them in place at the right time, supported by the relationships and processes to help them handle the challenges ahead – e.g. trusted by senior managers and with easy links to senior levels.

Developing an 'Ecosystem' of champions in British Telecom (RL4+)

BT has developed an ecosystem of champions. Their director publically supports their climate change programme on a dedicated website. BT has senior level representation at meetings of other senior level champions from other organisations.

The champions in each of the six main divisions of BT meet once a month. Others volunteer or are recruited as time goes on. They are led and supported and invited to put forward creative suggestions for change.

Managing Director Bruce Stanford (of Major Programmes at BT Wholesale) describes himself as a voluntary Environment Champion, and when interviewed by the Low Carbon Innovation Forum (www.carbon-innovation.com) said,

"The piece that was missing in our ecosystem was a direct engagement with our lines of business. We now have a champion close to the leadership teams of all lines of business. That's when things start to happen."

Analysis of pathway e) Working Together

What does this mean? This is more than is commonly understood by stakeholder engagement. It is the extent to which the organisation can form effective internal and external alliances and strategic partnerships so that the whole can achieve more than the sum of the parts. However, we also take account of how well it can use "normal" stakeholder engagement processes to build relationships of strong awareness and agency through sharing learning and experience.

Why is this important? Working in groups with others is the biggest single predictor of change on environmental issues. Moreover, stepping outside the "business as usual" comfort zone involves taking on fresh challenges and steep learning curves, removing barriers that increasingly cannot be handled in isolation. There is therefore a need to form strong alliances with others in order to share relevant expertise and remove barriers in the way of progress.

At **RL2**, organisations do discuss climate change with key stakeholders – e.g., clients, legislators – if they request it. If required to do so, they will engage with other groups.

An organisation working at **RL3** typically sees stakeholders as people – inside or outside the organisation – who can affect, or are affected by, what it does. It follows good practice in identifying, communicating with and involving stakeholders before taking decisions.

At **RL4**, people recognise that working creatively together with stakeholders for a period requires building considerable trust – e.g. by working transparently with conflicting agendas and striving for win : win outcomes. Many participants need help to understand what climate change means for them and to identify options, so support is given to enable them to contribute at a high level.

Organisations working at **RL5** recognise that long term strategic responses to climate change require the development of networks of organisations with the capacity to work on them. Most organisations are nowhere near having that that capacity yet – in public or private sectors. There is a need to start from a realistic assessment of each stakeholder's current capacity and to tailor engagement at a level that can be handled realistically. So partnership and capacity building need to take place together – a challenging mix.

Challenging work over years on the Manhood Peninsula (RL4+)

Two local residents on the Manhood Peninsula in West Sussex initiated a community partnership to grow their capacity to understand coastal climate impacts and plan adaptive actions together. They ensured the partnership truly represented different levels of working, from neighbourhood to national government, and that there was mutual respect and trust between members. They made efforts to bring everyone up to the same baseline level of understanding of climate change. They used dialogue processes to ensure "experts" and "laypeople" communicated better.

Feedback from each workshop was taken on board and used to improve the next one. There was a very high level of participation (over 50%) in action-planning and learning by doing. Learning from the project spread to other districts and other countries because of the involvement of active participants in networks.

Analysis of pathway f) Learning

What does this mean? Learning has much in common with innovation. We're interested in how organisations stimulate learning through experimentation and reflection. We're also interested in how learning spreads through an organisation so that new procedures & strategies are shaped by feedback.

Why is this important? Nobody yet knows how practically to stop climate change – or exactly what needs to be done to adapt to it well enough and quickly enough. There is a huge learning need. Action can run into the sand unless people involved are constantly reviewing progress and asking "how to" questions such as: How do we draw up a carbon inventory; how do we assess our exposure to climate risk? How do we accelerate a shift to low carbon technology across our operations/supply chain? A strong learning ethos based on action AND review is needed if an organisation is to find ways of responding to these and other such challenges that will arise.

At **RL2**, organisations see learning to improve climate change practice as a good thing in principle – but if anyone wants to go further and actually do any learning they probably need to organise it themselves and may need to do it in their own time and even fund it themselves.

Organisations using **RL3** use learning to improve performance. Mistakes are seen as opportunities to learn rather than to blame. Results are assessed against intentions and anomalies used to improve practice in the future. There is learning from experts and benchmarking.

At **RL4**, projects include a strong learning-by-doing focus with rapid feedback and a search for absolutely leading edge practice to accelerate innovation. Top executives stay closely in touch with what is being learned, looking for strategic as well as operational insights. To make this possible, there need to be processes and facilitators who are trained to help participants identify and challenge beliefs and taken-for-granted strategic assumptions that may be getting in the way of breakthroughs.

Learning in the US Army (A non-climate change example at RL3)

The US Army developed an "After Action Review" Programme which examined what was supposed to happen in a mission or action, what actually happened, why there was a difference between the two, and what can be learned from the disparities. Enlisted soldiers and officers meet together in a climate of openness, collaboration and trust. *(In "Working Knowledge" by Davenport and Prusak. Harvard Business School Press, p8)*

Knowledge for climate in the Netherlands (RL4+)

There is an exemplary programme of learning in the Netherlands adaptation programme. Minister Jacqueline Cramer emphasises the particular need for Learning for Innovation. This is a particular emphasis of work with the business sector. The whole 'Knowledge for Climate' programme emphasises and supports learning through the 'knowledge hotspots' being developed with municipalities and businesses.

At **RL5**, the emphasis moves to using partnerships to learn together as new strategic issues are identified and addressed. 'Knowledge management' approaches give people a chance to apply new insights & test them out for themselves. *A basis of strong (level 4) reflective learning by doing is necessary to open up work at this level.*

Analysis of pathway g) Operational management

What does this mean? The extent to which the organisation can turn plans into effective action and can recognise and act on the need to improve their ability to do so over time.

Why is it important? Too often, good ideas fail because they cannot be carried through on the ground. Data from good operational management helps the process of action and reflection. As the scope and purpose of activities becomes more ambitious at the higher levels of response, so the approach to operational management needs to change and develop.

At **RL2**, organisations begin to develop some pockets of good operational practice - e.g. in specific projects or in certain work groups. This is an important start, building experience and confidence for the future. However, these pockets of practice are not yet standard across the organisation and could be vulnerable when key staff move on.

Organisations using **RL3** are getting on top of how they manage Climate Change issues – normally by strong carbon management programmes or possibly by following checklists or good practice guides from organisations such as Climate South East or the ABI. They manage for continuous improvement of performance and to apply good professional practice. They communicate procedures and expectations clearly to staff and suppliers. They set targets based on analysis, measure outcomes and take corrective action both to improve performance and also the system of management itself.

At **RL4**, the emphasis is on completely rethinking how things are done so as to achieve breakthroughs in performance. This requires ambitious targets supported by the experimentation and measurement processes to know when breakthroughs have been achieved. The emphasis needs to be on making changes not on justifying them – & on managing the risks as one does so. Flexibility in planning is needed to allow changes of direction and project partners as new opportunities emerge.

Staffordshire CC's approach to climate adaptation – RL5

Staffordshire County Council has an Adaptation Plan for the Development Services Directorate which ensures that any new building is built with a package of measures to withstand increased wind speed, heavier rainfall, extremes in hot and cold and so on without higher energy demand. It requires each service directorate to: develop their own plan with regular reviews against both performance and forecast changes; and prioritise actions against service continuity, dealing with emergencies and designing for the future. (Source: www.staffordshire.gov.uk)

At **RL5**, the emphasis moves to assessing operational procedures and assets not only for how well they work today but to ensure they will work in the future under possible climate change scenarios – e.g. drought, floods, energy constraints. Risks are managed in a sophisticated way to take account of inherent uncertainty – e.g. by building some diversity into operations or by creating options to respond flexibly in the future.

Analysis of pathway h) Programme scope and coherence

What does this mean? The extent to which an organisation can develop and participate in a coherent programme of projects, building on earlier activity and recognising a wider context, the different timescales involved, differing agendas and critical paths.

Why is this important? Action on climate change sometimes takes place in isolated pockets of an organisation with everyone else totally unaware of its significance, or there may be many initiatives with no clear idea of a rationale prompting them, or connection between them. A very different picture emerges in organisations with strong programme scope and coherence. This is where we see a programme evolving so as to take on board lessons from earlier projects and developments in the field.

At **RL2**, organisations may contribute ideas or feedback to help programme development – but only if someone important asks it; managers would not see it as their responsibility to devise a work programme.

At **RL3**, organisations are strong at recognising and addressing many of the barriers and opportunities that exist within their organisational boundary and will ensure that issues identified are quickly addressed in the next round of work. However, organisations are much less strong at dealing with issues outside their own boundaries (though they may regard their supply chain as an appropriate focus for action). They are also unlikely to recognise that the need for cultural changes is also part of their programme's scope.

At **RL4**, projects that aim to make major breakthroughs need to address issues that have blocked progress previously, which often require engagement with issues that cannot be addressed within the organisation's own boundaries. They are set up to work on barriers & opportunities that they cannot address in isolation – but managers need to gain authority from senior levels before going further.

Organisations working at **RL5** on scope and coherence obviously log, prioritise and act on issues identified in previous projects. In due course they will go on to take action on any issue that needs to be addressed for further progress, of any type – e.g. cultural, human resource issues, strategy questions – whether inside or outside the own organisation, including (e.g.) at local, national or international government level or in the wider community.

How leading organisations manage RL4+ strategic programmes

The work of the Environment Agency's Thames Region inevitably runs into barriers sometimes. For example, there might be issues to resolve with a Local Authority, or concerns about how legislation is being interpreted at National Government or EU level. Clearly such issues often fall outside the remit of the manager who first encountered them.

There are strong RL5 management processes to ensure such issues get addressed. Managers are confident that Agency top management would take up issues in government or in the EU when needed. They were also confident that an Area Manager within the Region would take constraints up with local authorities at a senior level. As one person put it, 'Just try and stop us!'

VROM in the Netherlands has a formal (RL4) 'Agenda setting' process for feeding learning from the knowledge hotspots back into the programme.

Analysis of pathway i) Expertise

What does this mean? Climate change requires many types of expertise including science, technology, legal, social sciences, psychology, economics, etc. We do not only need to be able to access it, but also to recognise the need for it in the first place – including when and where it needs to be deployed.

Why is this important? It is much easier to come up with creative approaches to address climate change if an organisation can draw on a requisite diversity of experience and expertise. Thinking more defensively, for many organisations major investment decisions are quite rare: if appropriate expertise is not brought in, there is a danger of maladaptation for decades to come. The capacity to recognise and deploy appropriate expertise to where it is most needed can accelerate innovation and problem solving.

At **RL2**, organisations do not have formal systems to identify the skills that are needed. Managers can sometimes identify some people – colleagues, consultants, etc . – with some relevant expertise, e.g. from previous jobs or personal interest.

At **RL3**, organisations identify expertise needed in basic operations in a structured way and begin to put in place programmes to develop them through training or, where necessary, by hiring them in.

At **RL4**, unusual approaches are required and so the organisation needs to identify and bring in expertise that lies outside standard operations. It brings in people with unusual approaches and skills and will do the necessary research to identify these.

At **RL5**, the organisation recognises that there will inevitably be areas of expertise that it needs and that it doesn't know that it doesn't have. Programmes recognise the need to engage with a 'requisite variety' of expert perspectives: the organisation recognises that this needs work and won’t happen by chance. It uses a variety of processes to engage with a wide range of expertise to seek out and help fill its own blind spots. Timing of use of expert opinions becomes crucial, since it is recognised that some decisions are in effect irreversible and if expertise is brought in too late, it will be virtually useless.

Developing a system to seek out expertise in the Netherlands (RL4+)

The VROM ‘Knowledge for Climate’ Programme is supported by a group of researchers from Dutch universities and research institutes. The programme designers have taken steps to ensure that expertise brought in goes beyond the current interests of the professionals:

The leadership of the research process is shared between a leading natural scientist and a leading sociologist of climate change. This brings a variety of perspectives in at the top.

Secondly, ordinary people working in the breakthrough areas play a major role in defining what type of research they need and – if they wish – also in suggesting where to find people with the relevant skills.

The programme designers plan that in this way the experts’ role will continually be used to support practical needs of the projects. Non-experts can look widely for exciting new ideas with confidence that the process will help rather than hinder their being used.

What about the missing response levels: RL1 and RL6?

We do not see it as the purpose of this project to make recommendations for **RL1 – 'Core business focused'**. We do recognise its value – but managers don't need this Handbook to help them with it! The various change tools, most notably the matrix in the toolkit, do provide hints to help you to recognise RL1 behaviour. It is important to do be able to do so because RL2 recommendations may be the most appropriate to use for organisations which seem to be unable to activate performance from higher levels where required.

RL6 – the 'Champion Organisation' – is a different matter altogether. Research undertaken with international companies at the beginning of the century by Dexter Dunphy and colleagues in Australia identified none at all at a comparable level. We have not observed behaviour in the UK which is close to that level yet, in private or public sectors (a concern, since many public bodies, for instance, have a statutory duty to promote sustainable development – a responsibility that requires RL6 insights).[2]

RL6 is probably a level that needs to be accessible to spatial planners whether in their constituent organisations or possibly as a capacity made available in planning processes in another way.

Why is this? While individual buildings may come and go, the pattern of settlement – particularly around water, whether coast or river – and also as regards patterns of transportation and energy requirements has implications over centuries and so inevitably crosses into RL6 terrain.

This is clearly an issue in the Netherlands, particularly in the context of the James Hansen 2008 accelerated Greenland ice melt scenarios which imply potentially very large and rapid rises in sea level: there are already substantial parts of the nation around 6 metres below sea level and also major issues about river discharge to avoid the nation getting what the Dutch call 'wet feet'.

So it was a relief to see some signs of RL6 activity in the VROM Climate Adaptation Programme reviewed as part of this project (we also identified early signs of RL6 questions – if not yet activity – in one of the commercial organisations with whom we tested the framework during this project). We identified, for instance:

- An unusually long term awareness horizon. The Coastal Commission is taking a 200 year perspective, we were told. This requires looking at trends beyond the lifetime of particular investments and brings into play fundamental questions about the Hansen scenarios;
- A fundamental focus (they use the phrase 'unshakable commitment') on the part of policy makers to the ongoing protection of the nation far into the future.
- Commitment to a core role for the Netherlands in the global response to climate change – for instance to the development and exporting of an unrivalled degree of adaptation expertise to other nations (for example to Singapore and to Louisiana).

We have listed our predictions for RL6 behaviour in the matrix in the toolkit. But we do not encourage too much focus on RL6 right now: the main work needs doing at RL3, 4 and 5, in our view: RL6 would encourage an unrealistic level of ambition for most organisations right now. For most of us, that is exciting work for the future!

[2] This is NOT to say that there are no change agents or leaders who have RL6 insights or capacities, but only that we have seen no organisations, or programmes, in the UK that yet seem to come close.

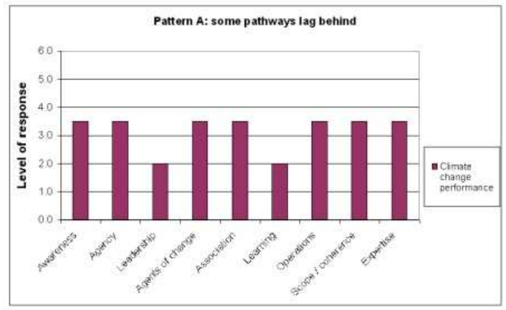
2.5 The patterns of response and what they imply for action

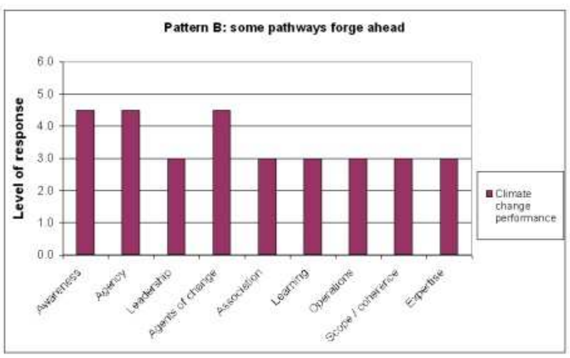
To help focus attention on areas where a difference might make a difference, the six levels of response and nine pathways for improvement can be presented graphically during the review, making it easy to identify where performance is forging ahead and where it is lagging.

We have identified three generic patterns of response:

Pattern A: Some lagging pathways

In this pattern, some pathways are lagging behind most others. They are likely to be acting as a brake on progress. The payoffs from improving them are likely to be very high – almost certainly higher than trying harder in leading pathways.



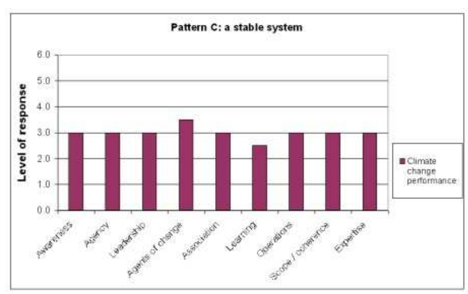


Pattern B: Some pathways forge ahead

In this pattern, progress along some pathways is beginning to accelerate. Nobody wants to slow down or stop momentum – and yet there is a great risk that the initiatives will fail unless the rest of the organisation moves forward, The task may be to protect the leading pathways and use them as a basis for developing other pathways

Pattern C: A stable system

In this pattern, different aspects of the organisation reinforce each other, making change difficult: whatever happens it tends to look like more of the same. The task is to 'unfreeze, change and then refreeze' – finding out ways of creating opportunities for groups of pathways to move together in parallel, protecting the experimentation and spreading learning to other areas.



Look at Section 6.2 to see an example of what this means in practice.

2.6 Why organisational development matters for spatial planning and climate change

Climate change is expected to present many challenges for planners in north-west Europe. Two of the most pressing are:

1. The accelerated hydrological cycle will make it harder for dense human populations to thrive amidst larger and more violently fluctuating volumes of water;
2. Rising sea levels will threaten the viability of many coastal settlements and economic enterprises

In addition to these two core challenges, there is a host of other ways in which expected climate change will impact on spatial planning. Farming patterns may become less long-lasting; changes to soil structure will affect the positioning of infrastructure; people may need to live nearer their place of work; emissions reduction policies will dictate changes to energy generation and distribution; the need to conserve biodiversity as habitats change and species migrate. The list is open-ended not just because of uncertainties about the scale of impacts but also because there can be no firm predictions of how society will respond to climate change.

As these "hard" planning problems become more pressing, the social space in which planning occurs is also by necessity changing. In the Netherlands and elsewhere, the concept of "creating space for water," for instance, has required brokering new relationships between water authorities and a range of stakeholders. For instance, to manage increased volumes of river water, the authorities in some regions are forced to flood farmland at certain times of the year. Farmers have had to be persuaded to diversify into the tourism and leisure industry by running boat hire facilities and so on.

Major issues of awareness and behaviour change are involved in a policy of 'managed retreat'. Research carried out for West Sussex County Council as part of the first phase of the ESPACE project, showed how great a challenge this is likely to be: people who live in flood plains have a statistically significantly lower level of awareness of flood risk than the general population: this shows how hard it might be for 'expert' opinion to be recognised as valid by a population whose behaviour might need to change.

The European Water Framework Directive has also enlarged the frame of reference by which spatial planning decisions are made, not least because it makes the water catchment area the focus for cross boundary working to produce management plans.

In the UK planners are still adjusting to the fundamental differences between a process formerly known as land use planning, carried out by a smaller group of experts and the relatively new concept of spatial planning which requires early involvement in both planning and implementation from a much broader range of organisations and communities.

It is in this "softer" social space that the adaptive capacity work has most relevance. As a wider range of stakeholders become involved in the spatial planning process, (local strategic partnerships in the UK are just one example) there is a danger that decisions could be made without sufficient awareness of the dynamics of climate change nor sufficient specialised understanding of issues, such as the hydrological cycle cited above. Raising levels of "awareness" and developing "learning" processes become important pathways to attend to.

The capacity that different agencies have to work together is also sometimes called into question. To implement adaptive measures through the spatial planning process requires local authorities to adopt partnership working practices that may run counter to their organisational culture and sometimes to a long history of political antagonism. Being able to make progress along the "working together" and "leadership" pathways is therefore critical.

For the spatial planning process to address climate change effectively, those involved need to make decisions for a much longer time horizon than they may be used to, because certain choices lock- in a pattern of water and/or energy use for the next fifty years during which time climate changes will have significantly reduced the options. These concepts are cognitively and emotionally challenging and may require expertise not necessarily available to communities. Another ESPACE output from the UK Environment Agency has been to develop a tool (working title, "the decision tree") to help spatial planners understand how decisions taken today can lock-out future options under different climate change scenarios and are therefore maladaptations. For instance, if land that will be needed to store much more water in the future is used now for housing. However, unless capacity on the "expertise" and "managing operations" pathways is developed tools like this may be overlooked.

On a positive note, the wider involvement of communities in spatial planning does provide many opportunities to build capacity for "agency" "agents of change" and "programme scope." We suggest that incorporating these and the other pathways described in this Handbook into the spatial planning process makes it more likely that adapting to climate change would become a reality rather than a rhetoric.

This Handbook and the accompanying toolkit should make it possible to review not only the organisations involved in spatial planning but also the process itself. It should enable reviewers to identify "maladaptive hotspots" where certain pathways may be lagging and therefore endangering the likelihood that the spatial planning process will be taking enough account of climate change. One example we spotted in the UK recently was the mismatch between the level of awareness shown by the village design statement at parish level, now part of the spatial planning process, and that of the regional plan.

The village design statement of Ramsbury in Wiltshire, England, focuses mainly on the need to preserve the aesthetics of housing and landscape and does not contain a single reference to the need for changes to make the community more resilient to changing climatic conditions.

2.7 Other benefits from using 'pathways analysis '

Besides helping us to 'spot the patterns', and so derive overall strategies for change (*e.g. break the stuck and reinforcing pattern, attend to lagging pathways, protect and build upon breakthrough areas*), doing 'pathways' analysis also:

- Helps us to catch ourselves when we are trying to do the same things, only harder
- Helps in strategising and programme planning.
- Helps climate change governance.

Catching ourselves when we do the same things, only harder

It is often good (for example) to take soundings in consultation exercises or public meetings to find out what people think about climate change issues – and it may also be legally necessary to do so. But the breakthroughs in understanding that people may need to develop in order to contribute creatively to strategies for change usually come from giving them the chance to participate over some months in a project that means a lot to them (RL4). To increase the number of (RL3) consultation meetings often means just doing the same thing, only harder – it will quickly run into diminishing returns. We need to recognise when we have done enough, when it is time to change gear.

The assessment process is designed to catch us when we try to do the same thing, only harder; it is designed to give us the signals that it is time to change gear.

Signs that it is time for a change include:

- Hard work not leading to continued improvements
- Performance clustering around one level (see Pattern C in Section 6.2).
- It can be a good idea to ask an independent friend to critique your management programme using the matrix in the toolkit. Does s/he notice an attempt to try something different, or does it look like more of the same?

Spotting a repeating pattern is a crucial step – the next challenge is to come up with a different approach, with finding a difference that is capable of making a difference. Again, this is one of the main purposes of the adaptive capacity framework presented in this report.

Helping strategy and programme planning

Many organisations (e.g. local government, development partnerships) need to produce climate change strategies and / or action plans. It is hard to do this well without looking at the challenge through the perspective of the different response levels that will be needed. Using pathways analysis you can:

- Identify the response levels that need to be covered in the programme
- Identify where you currently stand on each pathway
- Identify the specific challenges that need to be addressed in moving forward
- Identify case examples and contact details of people who can help
- Give senior management a framework against which they can assess progress, without their necessarily needing to be climate change specialists themselves.

This is not only the case at the level of an overall organisational strategy or plan. It is also helpful when planning an improvement programme. Building in a chance to experiment (for instance in one service area, in a new office building or in a programme like ESPACE itself) can offer the concrete experience that is needed to make a bigger change realistically possible in due course.

Helping climate change governance

It can be easier to plan activity at a new response level than to carry it through – the organisation's current pattern of response tends to hold it in place. Pathways analysis gives top management and programme managers an opportunity to review progress formally every few months and focus attention where it is needed, thereby helping ensure that the differences planned do actually make a difference.

2.8 Further Reading

As we have noted, this work rests on many published sources (as well as on much practical experience of what works). This is not an academic report and we took the view that readers would not thank us for referencing as if it was. On the other hand, we wish to acknowledge some of the many sources from which we have drawn.

Key sources include:

- (On this framework) (a) *Developing Strategic Capacity to Respond to Climate Change*. 2007: D. Ballard, Organizations and People, Special Issue on Sustainable Development. (b) *Moving to the Higher Ground: Developing Climate Responsive Organizations: An Interim Report for Hampshire County Council and the ESPACE Project.* 2007: Alexander Ballard Ltd, Available from Hampshire County Council.
- (On response levels) *Organizational Change for Corporate Sustainability: A Guide for Leaders and Change Agents of the Future.* 2003: D. Dunphy and A. Griffiths et al, Routledge.
- (On complementarity theory) *Innovative Forms of Organizing: An International Perspective.* 2004: A. Pettigrew, R. Whittington (eds.), Sage.
- (On leadership – also valuable insights on response levels) *Executive Leadership: A Practical Guide to Managing Complexity*. 1994: E. Jaques and S.D. Clement. WileyBlackwell.
- (On organisational learning) (a) *Organizational Learning II: Theory, Method and Practice.* 1995: C. Argyris and D.A. Schön. Prentice Hall. (b) *Images of Organization*. 2006: G. Morgan. Sage.
- (On agents of change) *Warm Hearts and Cool Heads: The Leadership Potential for Climate Change Champions: A Report for Hampshire County Council.* 2005: Alexander Ballard Ltd. Available from Hampshire County Council.
- (On the key role of 'agency') *Public Perceptions and Sustainability in Lancashire.* 1995: P. MacNaghten, R. Grove-White et al. Report available from Lancashire County Council, œ10.00.
- (On behavioural change for sustainable development) (a) *How Local Authorities can Promote and Support Behaviour Change for Climate Change.* 2005: Report for the ESPACE project by Alexander Ballard Ltd, available from Hampshire County Council (b) *Using Learning Processes to Promote Change for Sustainable Development*. 2005: David Ballard in 'Action Research' Vol. 3(2) (Includes a full list of sources).

Of the sources above, the biggest debts are to the Dunphy / Griffiths book on organizational change and the Pettigrew / Whittington book on organizational complementarities. There are many more that we could recommend for further reading. If interested, please contact the lead authors of this handbook at Alexander Ballard Ltd (enquiries@alexanderballard.co.uk)

B. Conducting the Review

In this section we lay out the process of undertaking a review in more detail.

We do this in several ways:

- First, we provide a plain text guide to undertaking a review. We have done our best to write this in plain English, to be usable by people doing this work for the first time.
- Second, at various points we offer a simple CHECKLIST. This is something that you can copy, add to so as to suit your own requirements and take with you when going to a review.
- Third, we have provided a PROCESS MAP – again to take to the review to keep track of where you are in the process.
- Fourth, we have the various documents and tools in the TOOLKIT. These include specific documents you can print off (or use on your PC) to gather and analyse data during your reviews, draft letters, consent forms, even report templates. The symbol on the left hand side lets you know when there is something in the toolkit that you can use.
- Finally, you will have been given a copy of this workbook by an organisation which has a license to use it. You may of course contact that organisation to ask for assistance or to discuss a point of interest.

TOOLKIT LINK

When you see this symbol, it gives a link to something in the toolkit

Section 3 covers deciding whether to undertake and how to approach a review.

Section 4 covers beginning a review

Section 5 covers data collection and analysis

Section 6 covers sharing findings, drawing conclusions and making recommendations.

3. Deciding whether to do a review

3.1 The appreciative yet robust approach – an underlying principle

The purpose of the adaptive capacity review process is not to criticise. The process we have adopted is based on 'appreciative inquiry' – so we start with recognising what organisations do well and look at how they can continue to improve. Reviewers try to encourage senior and key staff to describe projects and processes relevant to climate change (adapting to impacts and/or operating in a carbon constrained future) which demonstrate good practice or something they feel particularly confident about in their organisation, focussing on issues such as the following:

- Accessing and deployment of relevant expertise.
- Learning and knowledge management, i.e. how well learning spreads, formal review processes etc.
- Development of climate change champions.
- Operational Management, e.g. carbon costing, environmental management systems.
- Widening the scope and coherence of projects, e.g. scaling up and replicating success.
- Developing strategic alliances and internal/external stakeholder engagement.
- Spotting and preparing for future opportunities for significant action.
- Developing levels of awareness.
- Robust and empowering leadership.

The phrase "appreciative inquiry" was originally formulated by David Cooperrider and Suresh Srivastva . As a doctoral student in 1980 David Cooperrider began to focus on what was going well at a clinic he was studying rather than on the problems. He found this opened up possibilities for change more quickly than focusing on what needed to be fixed. Over the years that followed a new approach to organisational change developed which worked with people's aspirations and the most "life-giving, life-sustaining" aspects of organisational existence.

There is always something positive that an interviewee can find to say using this framework and this creates an important feel good factor. All too often individuals and their organisations are so busy tackling the next challenge that they forget to celebrate and learn from positive reinforcement. When people get talking it often astonishes them to discover just how much they are doing when they have been carrying the perception that not much has been happening.

This is particularly important on climate change: those of us who have been working on it for some time know how easy it is to feel discouraged at the sheer amount of work that remains to be done, to forget how much contribution we have been making.

This is one of the immediate benefits of the review as is the communication both internally and externally of initiatives which would otherwise have remained invisible to others. Organisations also find it gratifying to know that their endeavours if offered as a case study will benefit others – and vice versa.

It is NOT the purpose of this process to audit: we have designed an adult process which makes an assumption that people do not deliberately try to mislead. On the other hand, in some organisations it is possible to put on 'rose tinted glasses': it is not our purpose to agree with everything that management thinks about progress, and so we aim to steer a middle ground between recognising what is being done, noticing what isn't yet being done and could usefully be considered, using evidence as appropriate.

3.2 What and who is it for?

We suggest that this appreciative, benchmarking approach is best suited to organisations or partnerships which genuinely want to and need to make progress on adapting to climate change. We found that the organisations that put themselves forward to take part in our trials tended already to have a commitment to improving their response to climate change and to learning from others. This does not necessarily mean that these organisations are working at a very high level, but does mean that they have recognised that climate change will affect their work and that they have the potential to develop their response to the next level.

The benchmarking approach is relevant to a wide range of circumstances:

Focus of use	**How this framework & benchmarking approach can be used**
Organisation – e.g. a County Council, a Government Dept. or a business.	Allows an organisation systematically to review current status and to track progress. By putting current status & plans in a more substantial improvement framework it helps conceive & track ambitious change.
Subsidiaries – e.g. business units or departments	A head office or Council Leader may set an organisation's policy but needs to understand where improvement is needed & help it happen
Group of suppliers or partner organisations	It is not enough to stipulate what a supplier or partner needs to do: they also need to be able to do it – and helped where necessary. The framework allows realistic improvements to be agreed & monitored.
Strategy development	It is very easy for strategies to be conditioned by the organisation's current Response Level. The framework helps think through what is needed in a rigorous way, stepping outside the current mindset. It then allows this to be carried through into achievable improvement steps.
Improvement 'club' or learning partnership of organisations	The framework can be used to identify which organisations lead on which issues and so help mutual improvement, also to identify where a partnership is weak overall and so particularly needs to focus efforts.
Projects or programmes	Projects or programmes (e.g. for adaptation or for energy resilience) often take participating organisation(s) far beyond what they would normally have to do. This framework can help them think through what additional capacities they need & may help them to recognise them.
Working with stakeholders	Approaches to stakeholder working must be suitable for the organisation or group in question. Put simply – you wouldn't approach a RL2 organisation in the same way as one that is nearing RL5 – the approach would be over the head of one, far too simplistic for another. The framework helps you to pitch a suitable approach.
Governance, leadership	Top managers or Non Executive Directors often realise that climate change is an issue that requires their attention but understandably lack specialist expertise; this framework is designed to help them govern.

3.3 Should we be getting on with this process now?

Here are some questions which if answered positively should help you to decide whether this is an approach you want to take:

- Is my organisation open to learning and improvement?
- Is there some recognition that adapting to climate change or to an energy constrained future is necessary?
- Is there a desire to find out what other organisations are doing on this issue?
- Would it be of value to assess how climate change fits into mainstream strategy?
- Have we enough interest to commit time and intellectual energy to this review?
- Do the pathways and levels described in Section 1 make some sort of sense to us?

So when should this be done? It is easy to tick all the boxes and then to put it back in the in tray – yes, we should (in principle) be doing something about these things – let's bring it up at ... (put in your organisation's favourite delaying response!). But ...

... timing is a key issue! Being able to access the higher response levels becomes crucial at times when major decisions are being taken, when strategies are being formed. Miss the window of opportunity and things become expensive. Here are some typical examples:

- The roof blew off a new UK hotel, only a few days after it opened in early 2007. Higher wind speed is a significant possibility under climate change (according to Building Research Establishment – BRE – experts) but one suspects that the people who designed this building might not have done all the background reading!
- A major construction company had to close a new theatre only days after opening because of storm flooding. The drainage systems were suitable for past rainfall patterns but what happened was typical of future more extreme patterns of rainfall. The storm drains had to be replaced at a cost of over £2 million. To have made the same changes during initial construction would hardly have cost anything.
- A new hospital found that its energy bills were £2 million per annum over budget. Looking into this, it turned out that the construction company had designed for low energy cooling but that a subcontractor had reversed the changes, out of ignorance. Almost impossible to reverse!
- A well respected PLC (for its RL3 performance) made a commitment to reducing carbon emissions annually. It changed strategy, but failed to notice that significant increases in energy costs were implied. Energy bills rose by £50m per annum, completely unexpected by management and too late to reverse the decision (the CEO & top team didn't survive for long!).

It is of NO VALUE to consider how best to manage the construction of a new building or to plan a new development once construction has begun, even once design work has got well under way. By that stage the plans will be locked into place; imagine the frustration of recognising what could have been done when it is too late to do anything about it.

We suggest that timing is everything: look at the organisation's strategic programme, at its capital expenditure plans. If anything major is planned, the time to do a review is NOW, before plans are set in stone. Major projects need to be looked at because mistakes can cost money and – as we have seen – jobs. But they also give a tremendous opportunity to accelerate progress, to be 'breakthrough projects.

3.4 How much time will be needed and what is the payoff?

- If you are being reviewed you will need an internal **lead reviewee** to liaise with the review team and manage the process with them – a sort of 'fixer'. This will typically require 2 full days of someone's time.
- Those taking part in exercises or interviews will need to set aside at least 1-2 hours for this and be prepared to attend the final round-up meeting.
- The review team (probably 2 people) require 2 to 4 days each to gather and analyse information, for peer review and moderation and to draft the report.
- In addition, the lead reviewer will need another day and a half to write up the report and generate case studies.
- All key participants will need to meet in a round-up meeting that could be anything from 1 hour to a half day.
- Ideally, and depending on the perceived importance of the issue and the urgency of the changes that are needed, the whole process would be repeated in annual or bi-annual cycles.

In discussing time budgets, it is helpful to point out that at the individual level the pay-offs are various and we noticed that the more people put in, the more they and their organisations got out. Here are some of the positive benefits that various individuals commented on:

- ✓ A chance to reflect on my own role and effectiveness
- ✓ Learning what is actually happening
- ✓ Hearing what others are doing
- ✓ Sharpening our understanding of the internal issues involved
- ✓ Confidence that we're on the "right" track
- ✓ Good for our reputation
- ✓ A language with which to talk about these things
- ✓ A helpful lens with which to view our customers and their needs
- ✓ A nudge to implement something that was only an intention before
- ✓ A new way of seeing what's needed.

At the level of the organisation we argue that the pay-off is being able to identify the specific actions which will allow it to achieve a more profitable business position (if commercial) or deliver services in a cost-effective and resilient way (if public sector) while making a significant contribution to sustainable development. The table in Section 2.1 above gives some examples.

3.5 Reviewer's checklist for setting up a review

Please make a copy of this checklist and use it to keep track of what you need to do on reviews.

No	Ref	Action	Review team notes	Done?
1	3.1	Ensure you, team & client organisation understand the 'appreciative yet robust' review approach		
2	3.2	Discuss the possible ways in which the review might be used & agree a focus using table in Section 3.2.		
3	3.3	Discuss and agree appropriate timing of the review in the light of wider management plans, particularly strategy development and major investment programmes.		
5	3.4	Discuss & agree time budgets in the context of the agreed focus.		

4. Setting up a review

We have produced a flow diagram and a simple step by step overview of the adaptive capacity benchmarking process. Both can be found in the toolkit. We recommend that you print out a copy of whichever you prefer and keep it with you to keep track of where you are at each stage of the review.

At the heart of the process is a very simple cycle:

Use the process flow chart or the step by step overview to keep track of progress

1. The review team makes an initial estimate of the response levels at which the organisation is currently operating. This may be based on discussions with management, on document reviews, on impressions gained from the way in which the organisation agreed to undertake the review (an organisation undertaking the review because they have been told to will typically be working at a lower response level to one that recognises it needs to develop capacity to increase resilience, for instance).
2. You then interview people, conduct exercises, review documents and processes, etc. You pay most attention to the response levels where you think the organisation is strong but ask questions and carry out reviews, etc., either side of this position to let you know in case you are getting it wrong.
3. You record information and then transfer it to a summary document which allows you to identify gaps and to gain an overview of where the organisation sits. You pay particular attention to certain key questions.
4. You ask yourself whether you have got enough evidence to draw conclusions: if not you refocus and carry on until you are confident; if you have, you make a judgement, based on the evidence, discuss it (perhaps even reach it) in conversations with internal contacts and then write up and discuss the implications.
5. Throughout the process you work closely with internal people aiming not only to gather information but to share data collection and sense making, transferring expertise as you do.

We will now go through the process in greater detail linking to items in the toolkit via the blue circles.

4.1 Setting up the review team

In the first review, we suggest that a minimum of two people external to the organization are needed to carry out a review, particularly if most of the data gathering takes place on site. Two people take in more information and can share taking the lead. If the first reviewer is asking questions, the other needs to make copious notes. Ideally, a note taker would also be part of a telephone conference call when an interview needs to happen by telephone. In practice this is not always possible, in which case using a speaker phone and/or recording the interview may be the next best option.

Data analysis and sense-making, both in the moment and later, are enhanced when two reviewers are present. It also establishes a peer review process early-on.

Reviewers can offer each other moral support and helpful feedback as sometimes the process can be inspiring and sometimes dispiriting. Two reviewers can help each other to manage the feelings that may arise from the process and may also bring different but complementary skills in their interactions with other participants in the review.

With less experienced reviewers, it makes sense for the team to comprise people who have already done some work together or feel comfortable going into a new situation with someone they trust.

In second and later reviews within an organisation, there is no reason why the review team should not comprise both external and internal people. Indeed our experience in comparable processes (prior to this project) suggests that in due course the process can work very well when carried out entirely internally. However, in such cases it is vital to have an external moderator or supervisor to review the conclusions and evidence. This is because it is hard to assess the current status of an organisation without an external perspective. (We did this during the review period: HCC itself had been closely involved and used an internal team; however, we carried out an external moderation by telephone. (As has been our previous experience, the moderation process tended slightly to increase rather than decrease scoring).

During the trial period each review was led by someone who had carried out at least one previous review. It risks stating the obvious but everyone on the team needs to be familiar with the model and confident in their understanding of it. A half day “immersion” workshop would be a sensible starting point for would-be reviewers.

Peer reviewing and supervision

The quality of analysis achieved by each review will depend on the experience, perspectives and insight offered by the review team. It is important that enough time is built into their schedules to enable at least one full meeting and then a chance for quick phone calls to exchange ideas and some collaborative drafting of the report. Team members should feel comfortable enough with each other to be able to challenge and argue for different scores when necessary. It may be advisable to appoint someone external to the role of supervisor so that reviewers have a point of contact for any questions or doubts or upsets that may occur.

4.2 Contracting

Once the issues in Section 3 have been discussed – scope and focus, timing, time commitments, etc, it is necessary actually to document what has been agreed – e.g. by an exchange of emails and letters.

Whether charging or offering a free service, or perhaps carrying out a review on a mutual basis (as may happen, for instance, in a 'best practice' club), the review will work more smoothly if there is clear agreement on both sides about what is expected and what will happen when. The process flow chart (in the Toolkit) gives a helpful overarching framework which needs to be linked to a time line customized for the particular review. Being realistic about the various time pressures people will be working under, the need for some follow-up, reflection space, drafting etc. it is wise to allow a month from start to completion.

There is a sample consent form for using case examples in the toolkit

Contracting needs also to include a clear agreement in writing (see consent form in the tool kit) for the sharing of good practice as case examples, also to cover issues like data collection and security, right to use case studies and process for 'signing them off', etc. Our guidance is:

- Unnamed 'data' – i.e. unattributable to the specific organisation – is available for the database to help other organisations in general terms (e.g. 'we find that 60% of local authorities who are active at response level 4 on pathway x do this activity');
- Named (or otherwise identifiable 'case examples') to be signed off with the host organisation, by a specific person, otherwise not to be used.
- Certain organisations are more concerned about image, or intellectual property, or confidentiality of strategic plans, than others. In such cases, you may be asked to agree an 'NDA' or 'non disclosure agreement', in which case these issues need particular attention. It is obviously fair for an organisation's privacy to be protected, but the purpose of the process is to help people learn from others' experience and this must inevitably involve some 'give and take'. We think that the two points above will usually be enough.

4.3 Work planning and opening meeting

Once the lead reviewee has been given the go ahead by his/her organisation to commission a review, it is important for him/her to meet face to face or on the phone with the lead reviewer to draw up a time line with the following milestones:

- Date for corporate literature to be sent to the reviewers.
- Date for site visit.
- Date(s) for meeting/interviewing other key staff if absent for site visit.
- Completion date for first draft report.
- Completion date for final report. Date for report presentation and closing meeting.

There are 2 template reports in the toolkit suitable for sharing at the beginning of the review

An agreed list of key staff representing a cross section of the organization needs to be drawn up and a "template" version of the final report given to the lead reviewee (if this hasn't already been done) so that s/he knows what to expect of the final output.

It would also seem appropriate to share with the lead reviewee some or all of this Handbook so that s/he has a written reminder of roles, responsibilities and the approach being taken.

It is the responsibility of the lead reviewer to write up and distribute the notes and schedule of this first meeting to the lead reviewee and other reviewers. The lead reviewee needs to forward them to participants from his organisation.

It is also important at this stage to emphasize the need for quality time with participants. Interviews need to be carried out in a secure, quiet environment, free of interruptions and distractions, ideally in an individual rather than shared or open- plan office space (though we have been able to have a reasonable conversations in a canteen where necessary).

Make sure that there is enough time. A whole hour needs to be ring fenced for the interview in order to give the participant an opportunity to benefit fully from an understanding of the tool, to contribute their perspective effectively and to establish the kind of relaxed, respectful and collaborative relationship necessary to get the best from the experience.

Why quality time matters
In one of the first reviews a key interview took place with a senior interviewee who was on a mobile phone on a train, squeezed into 45 minutes. Fortunately, the lead reviewer had enough experience not to be thrown by this, but it's not a practice to be encouraged.

Leave some space for conversations to overrun – we have often found even very senior people voluntarily giving considerably more time than they had originally committed. Why is this? We suspect that they are rarely able to discuss this issue in depth: this is a challenging and interesting issue, besides being serious and urgent, and people usually enjoy the stimulation. However it is important not to take anyone's time for granted: check that they are OK with what is happening!

4.4 Getting started

Requesting and reviewing initial documents

You should ask to see a selection of at least two – around six is ideal – examples from the following:

Environmental documents:

- Any environmental or corporate responsibility report or environmental policy statement
- Any other corporate literature, e.g. press releases pertaining to climate change or CSR etc.
- Relevant articles in in-house magazine
- Training material on climate change
- Climate risk evaluations
- Speeches or presentations on climate change
- Accounts of carbon reduction activities
- CSR or environment or sustainable development pages from the organisation's website

Broader documents:

- Project plans, especially building project specifications
- Corporate risk register or due diligence processes
- Responses to tenders or applications for funding
- The business plan or corporate strategy document
- You can of course download organisation strategies, etc, from the organisation's website.

It is best to get at least a couple of examples from each of the groups above. This is because an organisation which normally works at lower response levels will mention climate change much more frequently in the first list than in the second. Climate change being discussed seriously (not just in 'let's show how 'green' we are terms) in the second list indicates that the organisation is beginning to move ahead – or might well be working at quite high response levels already.

The lead reviewee may need to get permission to release these documents; for some of the ones in the second list it would be by no means unusual to be asked to agree a formal non-disclosure agreement – or alternatively to read them on-site and not take copies; such issues should be discussed as soon as possible in order to deliver the documentation to the review team before site visits and/or interviews commence.

Documents in our experience were particularly helpful for getting a sense of response levels on particular pathways but rarely covered them all.

See Section 5.1 for ideas on how to review documents.

Setting up your filing system

One of the most challenging aspects of the review is trying to keep on top of the amount of information generated. We have designed several forms to help (see toolkit) and the review team need to exercise some discipline in filling these in for each document reviewed, or interview/exercise completed.

We also designed a matrix to be used on a portable computer which can both act as a prompt to the reviewers (as they fill it in, they will soon notice which cells are empty), and for organizing and storing data.

Alternatively, the matrix can be printed out as a hard copy and completed shortly after the sessions – e.g. on the train home.

We found that it helped to have a dedicated ring binder and box file in the same colour for the paper work generated by each review, until such time as an online data storage and retrieval system can be built.

See Section 5.4 for an example of how you might use this system in practice.

We found that we were most likely to get into trouble if we became a bit over confident and ignored the processes we had developed. A review can go very well indeed and it is easy to leave thinking that everything is clear. But then another project needs to be finished and the clarity can pass. That is when the documents in the toolkit come into their own! Remember, storing information is not just for this review but to help other organisations

Agreeing the role of the reviewer and the reviewee

Roles need to be established and mutually understood early on. A collaborative relationship between the lead reviewer and the lead reviewee is critical to the success of the review. As the gatekeeper to the rest of his/her organisation, the lead reviewee (or proposer) almost needs to feel part of the team. S/he needs to have enough understanding both to feel confident that the review is going to be of value (important for "selling-on" to others) and to know how to access people and information who can contribute the most appropriately to it. S/he needs to be sufficiently senior/respected to elicit full collaboration at the levels needed

S/he will also need to influence the process so that it works best for the organisation in terms of time scale and fixing meetings/interviews. It is imperative that the reviewee understands and "owns" the process so that a schedule for meetings in optimum conditions can be drawn up accordingly.

The reviewee can be an excellent source of information and can enjoy an opportunity for critical reflection if introduced at an early stage to the framework of levels and pathways. Encouraging the reviewee to have a go at some impressionistic scoring is a good idea because it helps him/her to stand outside the organisation and look at it through different eyes right from the start. This early scoring can act as a reference point to come back to later with either confirming or disconfirming evidence.

The different ways in which an action can be described often give important clues to the response level being used. There is a difference in framing between, "we went onto a green energy tariff because stakeholders were asking us and it only cost us £500 a year more than our old one (RL2)." And "we signed up for green electricity as the next step in our carbon management plan." (RL3 and ready to move on ...)

What the reviewee says and how they describe their organisation also helps the team to work out what kinds of framings to come in with and at which level to pitch questions. They can check this choice out with the reviewee.

During site visits, the lead reviewee needs to act as a master of ceremonies, making introductions when necessary, showing the visiting reviewers around, taking care of their practical needs and sometimes translating what people say if in-house jargon or politics, for example, get in the way of understanding.

The role of the reviewer/review team is to collect information as impartially and as appreciatively as possible. It is not their job to point out what an organisation should be doing or what they think its failings are. They need to make sense of what they find-out both within the frame of reference set by the organization, and within the wider context of the adaptive capacity framework as a whole.

Reviewers need to take note not just of **what** they are being told but also of **linguistic clues**, e.g. certain expressions, tone of voice, even sentence structure, which help to clarify the level at which the organisation is operating.

Reviewers also have an important role in setting the tone of the review and putting participants at ease. The review will be most helpful not only if it feeds back fresh insights, practical suggestions and inspiring examples, but also if those taking part feel confident that the process has given them sufficient opportunity to explain their work and shape the conclusions. The aim is to run a process which feels more like a collaborative inquiry than a hostile audit!

Reviewers need to check that participants receive enough information to help them prepare for interviews in advance and that during the interview they feel relaxed and able to reflect, question and volunteer information without being put on the defensive. This requires good interpersonal skills.

The review team needs to work like a team. They will need to meet before each review to assign roles and responsibilities and fix dates for further meetings; among themselves to share notes and arrive at scorings; and with the reviewees to collect information and deliver the final report. Decisions need to be made about how open these meetings are, in other words how much involvement they would welcome/invite from the lead reviewee or even others in his/her organisation.

Taking an appreciative approach from the beginning

An appreciative approach is helpful for reviewing an organization because as much can be learned from the success of an initiative as from a failure and people generally prefer to talk about what is working well and where they want to go next. Here are some of the ways that we have applied the approach:

- Preparatory material for reviewees includes open questions inviting participants to talk about particular projects that they are proud of, or which have moved the agenda on, or which have been valuable for learning.

- Interview guidelines remind reviewers to offer positive feedback when appropriate. Case examples are chosen to inspire and celebrate achievement and are compiled from each organisation reviewed.
- We chose descriptors for the lower levels which had more positive connotations, e.g. “stakeholder responsive” rather than using Dexter Dunphy’s original terminology, “compliant.” (This mirrored a change in our own understanding as we came increasingly to realise that the lower response levels (RL2 in this case) are not ‘wrong’ although they are usually insufficient.
- One of the reasons for pinpointing the likely response level early is to “pitch” the review within the range of activities that the organisation is likely to have accomplished. If, for instance, all the questions are pitched at too high a level it risks making people feel as if they have got nowhere and achieved nothing. By offering them lists of actions within their RL range which they can tick off as completed reminds them how much they have already achieved.

This approach overlaps with what we have discovered about awareness and human agency in relation to climate change. If the challenge looks too big, people risk feeling overwhelmed and giving up. However, if they can see that even small steps are leading somewhere, it gives them strength to continue.

The only way I can stay on my bike when pedalling up a steep hill is to look down at each turn of the pedals rather than looking up to the vast, seemingly never-ending slope that lies beyond. If my companion says, “come on slow coach,” I am more likely to give up than if I hear the words, “good going.”

Educationalists have shown that appropriate positive feedback enhances motivation and stimulates further learning. Test this out for yourself by comparing how you feel when someone has praised something you have done and how you feel when you have been judged/criticized for not having done something.

Agreeing a suitable ‘target’ for the organisation’s performance

At some stage in the process you will probably find it helpful to agree a suitable ‘target’ for the organisation’s performance.

For instance, if the organisation has high energy costs but relatively low fixed assets, with a short decision making time frame, then RL3 might be a sufficient target.

If, however, the organisation has a substantial capital programme, with much capital stock, and has major responsibilities for service delivery over decades, then it will almost certainly be necessary to be able to use RL5. (Examples include power companies, water companies, local authority education, adult services and children’s services departments, highway agencies, major construction companies working on Private Finance Initiative contracts, transport companies such as railways, and many more).

However many organisations are simply not ready to make a commitment to RL5 working: although the evidence suggests that they will probably need to do so, they simply do not understand the agenda well enough to be able responsibly to commit to doing so – yet! In such cases, RL4 might be a suitable interim target. After they reach it, they can assess the situation afresh and retarget as appropriate.

Remember that if the organisation has a ‘Sustainable development’ remit (as do many local authorities) there is probably an implicit RL6 agenda. And yet most organisations (in the UK at least) are miles from such a position.

In such cases, where the ideal 'target' is well out of reach, we strongly recommend discussing and agreeing an appropriate medium term goal with management. We also recommend that the target should be both a significant step forward (assuming that this is necessary – it usually will be) but also achievable. Sometimes it is best to make this explicit, as in: *'We agreed that the organisation will probably need to be able to use RL5 in due course; recognising that this would represent very significant progress from the current position, we agreed an interim target of RL4 with a review of progress in 18 months time.'*

Here is a summary of some of the criteria which determine which of the response levels need to be activated in a typical organisation:

- *Organisations need to be able to work at or above RL2 – 'Stakeholder responsive' – if, for example, they are subject to legislation or to regulation on climate change (perhaps accompanying economic instruments such as carbon trading), or if customers or service users or political leaders are asking them to do so, or if their top management has policies to which they must comply.*
- *Organisations need to be able to work at or above RL3 – 'Efficient management' – if, for example, they are required by stakeholders or by legislation to adopt an environmental management system, if their energy bill is more than trivial, if they are likely to be subject to carbon trading, or if heavy users of water, or if they are involved with the built environment as contractor, client, or adviser.*
- *Organisations need to be able to work at or above RL4 – 'Breakthrough projects' – if, for example, its managers are aware that climate change is posing or might pose strategic challenges to which they cannot yet respond confidently or if it works as an adviser to organisations in this situation.*
- *Organisations need to be able to work at or above RL5 – 'Strategic resilience – if, for example, they have responsibilities or take capital decisions (e.g. invest in industrial plant or buildings) which have an expected life of two or more decades, if they advise on such decisions or if they have substantial capital sums invested in the stock market.*
- *Organisations need to be able to work at RL6 – the 'Champion organisation' – if, for example, they have statutory responsibilities (e.g. in their charter from Government) or a mission to promote sustainability,* or if they advise such organisations on relevant issues.

Sometimes an internal document gives clues. For instance, one major US corporation, a household name, is currently looking for strategic resilience to climate change in its operations worldwide: this clearly implies an RL5 target. A significant local authority recently had a major senior review of its climate change performance: this committed the organisation to finding out much more about the issue: an RL4 goal.

Using the review process to help 'tune into' where the organisation currently stands

Early in the development of a process for working in organisations we took some advice from an expert in processes for developmental data collecting. The expert, Helen Baron, told us that people feel much better if they can answer questions or tick lots of boxes rather than feeling at a loss because what is being asked of them is too far out of their frame of reference. This advice made sense in terms of the appreciative approach described above. However, it requires reviewers to make a pre-emptive assessment of an organisation's response level based only on what they can learn from documentation and the lead reviewee. It is then very important to hold any assumptions lightly while looking for disconfirming as well as affirming information. It is also important to ask for information that would be characteristic of higher response levels as soon as it becomes apparent that the organisation is matching the picture for a lower response level.

Planning your visits

Although potentially more time consuming, meeting people where they work and having a look round buildings provides extra information that can be missed if conversations only happen off- site. Participants also have a chance to show you projects in progress, pointing out things that they may have forgotten to mention on the phone. It is therefore useful to build in some “down time” when planning your visit both to enable space for reflection and a chance to wander around. Setting up meetings with key participants is a job for the lead reviewee who should be reminded to punctuate each appointment with 10-15 minutes thinking time, if possible, to allow the review team to quickly compare notes and reframe questions to match a different response level if necessary. It also helps if the team can have a dedicated room as a base to return to during the day, to confer or enter findings into the online matrix.

When we visited one of the partner organisations for our review, we could physically experience the difference good building design makes to energy efficiency. Natural light lit up the central spine of the office block where people could congregate. Thermal mass seemed to provide sufficient insulation to keep internal temperature stable without the use of a lot of extra heating or cooling.

The toolkit includes a series of options, such as card sorting, as alternatives to the one-to-one interview. Part of planning the visit should be to work out which of these options would be best suited to the particular circumstances and time table. For instance, if you have decided to meet several people at once such as a departmental team, it might make more sense to facilitate a series of short exercises rather than a structured interview. This latter is the approach we took as part of our review of the Environment Agency Thames Region.

4.5 Reviewer's checklist for beginning a review

Please make a copy of this checklist and use it to keep track of what you need to do on reviews.

No	Ref	Action	Review team notes	Done?
1	4.1	Set up the review team, including supervisor and / or moderator if needed		
2	4.2	Write letter setting out 'contract' for the review, including use of case examples.		
3	4.3	Hold opening meeting and agree work plans with lead reviewee		
4	4.4, 5.1	Carry out initial document review		
5	4.4	Set up filing system & prepare documents		
6	4.4	Clarify roles of reviewer and reviewee		
7	4.4	Discuss & agree 'target' for organisation's performance		
8				
9				
10				

5. Gathering and analysing the data

5.1 Reviewing documents

Depending on how many documents you have to read (the minimum is two, an ideal number six) a systematic initial analysis and recording of findings is likely to take one reviewer anything from a half to a whole day. Though obviously this need not happen in a single sitting and the work needed can be divided up among reviewers. It is important to do this with some degree of rigour because in your meetings with the review team, you will need to be able to refer to the documents to support your assessment. We suggest one way to do this, using the interview/document analysis sheet in the toolkit:

You will need:
Document review sheets and matrix (from toolkit)
Highlighter pen
Biro
Quality time

Use the interview / document analysis sheet to summarise interviews or documents

1. **Go through the document** using a highlighter pen to identify paragraphs relevant to the 9 different pathways – and anything else of interest. Write the names of the pathways boldly in the margin. Don't worry if a particular section seems to be covering more than one pathway or if you can't work out any response levels yet.
2. **On the interview / document analysis sheet** fill in as many of the notes sections as possible using page and paragraph references and short quotations as an aide-memoire. Once again, don't worry too much if you are uncertain about the position on the matrix.
3. **Call up the matrix** when you are through, (load onto your computer from the toolkit as an excel spreadsheet.) Save it with the name of the reviewed organisation.
4. **Open the matrix** and working down the first column on each sheet, look at the level descriptors for each pathway that you have made notes on. Use these descriptions to guide you as you start to fill in the tentative position note on the interview/document analysis sheet.
5. **Fill in the matrix** with detail from the interview/document analysis sheet.

The matrix is a spreadsheet which helps you to collate evidence, spot gaps & draw conclusions

Not only will this process help you to feel more confident in your assessment, particularly when you come to discuss it with colleagues and the reviewee, but it will also begin to give you a sense of where there are gaps that need filling. You can then focus on getting the information you need to fill these in when you go to the site or start interviewing participants.

5.2 Interviews

Getting on the client's wavelength – finding the questions that s/he can answer

For reasons that we emphasised above, you need to home in on questions that participants can answer confidently – and positively. Several factors will enable this as detailed below.

At the point of identifying people who you are going to interview, you need to find out from the lead reviewee which pathways s/he is likely to relate to as part of her/his experience in the organisation. There will be very few people who could talk about all the pathways, even if there were time to do so. It makes sense to be selective.

You also need to find out what projects to do with climate change the interviewee is or has been involved in as talking about something "concrete" is always a good place to start. It also gives the interviewee more confidence at the start to be able to talk about something that they know more about than you do. If you ask "open" questions to start with, such as: "How easy did you find it to......" "What did you learn from...." "At what point did you begin to..." it is easier for the interviewee to open up and start to volunteer information than if you start with "closed" questions which invite yes/no answers.

Part of tuning in to the right wavelength is about having done a preliminary assessment of the organisation's likely response level because this will help you to ask questions at an appropriate level.

Interview tips: working with senior people and with working level people

At the start of the interview it is best not to assume that the person you are interviewing has had time to read any of the material you so diligently provided so you will need to reiterate very briefly what the review is all about, what you hope to cover and the key message: "This exercise provides valuable insights that can benefit you, your organisation and society if you're looking to progress your agenda on climate change and share your learning and experiences more widely." Your starting focus then needs to adjust to the level of the organisation the interviewee is at. Unless the organisation is acting from RL4 or above, it is unlikely that those in senior management will have been closely involved with any significant projects. Senior management will be more confident talking in general terms about environmental policy or how climate change may be impinging on business strategy. In the toolkit, on the leadership pathway starter sheet, you will find a set of questions that we have found helpful to kick start conversation in the board room.

Don't forget your PWI
A facilitator we know coined the phrase: "perceived weirdness index" to remind colleagues not to stray too far out of a client's comfort zone.

'Pathway starter sheets' suggest useful ways of starting to discuss each pathway

It is also very much a question of judgement and experience as to how much of each pathway starter sheet you cover with each participant. It may be too challenging, for example, to ask a CEO to select pen portraits on the leadership starter sheet. (If you do this you will need to reconjugate the statements to read "we" or "I" rather than "they".) It is very much a question of tuning into their wavelength and comfort zone.

Ask 'open' questions …

Particularly at the beginning of a review, and with senior people, we recommend asking 'open' questions about the climate change programme. Examples include:

- *"What do you see as the most important challenge for your organisation on climate change right now?"*
- *What would you like to see your organisation being able to do in three years time?"*
- *"Which recent activities do you see as most important?"*
- *"What risks and opportunities do you see climate change posing for your organisation?"*

The answers to such questions will give an excellent short cut to which response levels the organisation is currently able to use. It is actually quite hard for people to discuss a programme at a response level that they do not recognise – and if they can do so, that indicates some progress towards it – provided the person in question to some extent can speak for the organisation.

The matrix includes a list of 'activities' at each response level within each pathway

… but also ask focused questions

While open questions are a good place to begin, they rarely cover enough detail in many of the pathways. So it is important to ask to speak to people who know the detail on these – for instance a manager of a project which exemplifies good working with others, or the manager responsible for climate adaptation. In such cases you would probably ask much more detailed questions about what is actually being done. The matrix spreadsheet includes a list of typical activities at each level within each pathway: you actually wish to find out which of these is being done, or not. At some stage you will actually have to ask!

It is also helpful to ask more general questions within each pathway. Such as, *"Looking two years ahead, where would you like to be reaching in managing operations?"* Again, it is good to recognise people's ability to envisage significant change when it comes to writing the final report.

Reviewing projects or decisions

Particularly when there is little supporting evidence, it is good to look at what happens in practice. Ask to look at the plans and reports about or speak to key managers of significant projects or capital expenditure – what, in practice, did people actually do?

Looking for the client's 'energy' for change and development

Linguists, anthropologists, social psychologists and other communication experts tend to agree that over half of what we communicate comes from body language. It is therefore helpful to notice non verbal signals, such as shifts in facial expression, leaning forwards, tone of voice and so on which give you a clue to where a participant's interest in change and development lies. You can test out your hunch, even by respectfully mentioning what you noticed, for example, "I noticed you looked quite excited about……, is this a particular interest of yours?"

This is likely to elicit quality information that will help you to gauge which response level is currently active, and, perhaps even more importantly, aspirations and the target level for the future.

5.3 Using the tools in the toolkit

Using pathway starter sheets

In the toolkit you will find a set of pathway starter sheets. For each pathway there is a brief explanation of what it is, why it is important and what it can teach us. This introduction is followed by a set of questions or an exercise, or both. These are different approaches that we have devised to gather information on each pathway and can be provided to participants even before you meet them to help build their understanding of the pathways and the review process. However, some of these approaches may not be sufficient or appropriate to the situation in which you are working. It is advisable therefore to think through a set of structured questions that you can ask particularly if you have identified gaps on the matrix that need filling. Unfortunately, we cannot second guess all the questions that might need to be asked as these will be contingent on the context. However, we hope that we have provided enough of a start in the toolkit for you to be able to build on and improve.

Use the pathway starter sheets. These are to help you get going quickly if this is all a bit new to you.

Recording data

Ideally, appoint one person on the review team to be the dedicated note-taker. This will not be possible if reviewers work individually and/or over the phone.

Much of the data you collect will come from interviews which will generate copious notes. Keep all of these together in one notebook dedicated to the organization you are reviewing.

If possible, record data onto the analysis sheets and/or matrix as close to doing the interview as possible when detail is fresh in your mind. This saves a workload building up for later.

5.4 Summarising the evidence and reaching an initial judgment

The matrix spreadsheet in the toolkit is designed to allow the reviewer to record the evidence that s/he has gathered.

Use the matrix spreadsheet to record what organisations are actually doing and to spot any gaps

The 'matrix' has one worksheet for each pathway. Each worksheet is divided into sections for each response level. These can be sorted in various ways. Within each response level in each pathway is a set of 'activities', each of which summarises the type of thing that organisations which are active at that response level do. For instance, measuring carbon emissions and prioritising them is a typical action at response level 3 within the pathway 'Managing operations'.

Each row of the 'matrix' has a set of columns in which you can record the evidence you find. You can briefly summarise it if you wish but you MUST give a link back to source documents (e.g. Interview 3, p2, e would indicate that the evidence for this activity can be found in your third interview, page 2 of your notes, highlighted point 'e' – so giving an audit trail). See Section 4.4 on setting up your filing system.

As each row of the matrix is completed, you make a judgment as to whether:

- You are unsure whether this happens or not
- The activity does not apply
- The activity is definitely not done
- It is planned but not yet done
- It is partially done
- It is fully implemented

If there is nothing in any of these columns, you may not have asked any questions about this activity!

This gives a simple visual clue as to where there are gaps in what you have done. For critical 'acid test' activities in particular (these are marked on the matrix) you would probably be looking for several bits of evidence.

Where there are gaps – focus on them, especially if they seem important (don't worry too much about gaps at RL2 and RL6 in a RL3-4 organisation, for instance!

Use the reviewer's assessment sheet to record your judgments about the organisation's overall status

When you have completed this analysis – i.e. when you think you have enough data – then it is time to begin to form a judgment.

This is NOT just a question of totting up the numbers in each row. You should ask yourself, *'On the basis of what we have seen, and of the evidence we have collected (but also using our own judgment), which response levels are active for this organisation on this pathway?'*

We have designed a useful form for you to use in doing this. It includes summary descriptive text for each RL within each pathway for you to use in the final report and it leaves space for you to make and record your own judgment. (You can score performance as 0 = nil, 1 = some initial activity, or 2 = significant activity. Again, you can lift what you write straight from the form and insert it in the final report for that pathway.

5.5 Involving the client in the analysis to develop capacity and increase quality

We never envisaged that the adaptive capacity benchmarking tool should be used as an audit but much more as a peer to peer collaborative inquiry technique. In the long run it would make sense for cross-organizational review teams to form. In the short term, those being reviewed will need to grow their capacity to review others and therefore need to be, will benefit from being invited into the analysis in some way.

A lot hinges on the relationship the review team builds with the lead reviewee. If s/he is present during the site visit and sufficient space is allowed between each interview, it makes it possible to include him/her in post interview sense-making and analysis. Then, if a first draft report is issued fairly quickly after the review it can be talked through with the lead reviewee and others whom s/he thinks it would be appropriate to include. This gives the participants both a chance to provide further evidence as they come to understand the scoring better, and to argue scores up or down if there is a major difference in the assessment. It is through such deliberations that people come to understand the pathways and levels better and learn to discriminate more.

Indeed these review discussions with the lead reviewee and others are probably the most significant form of quality control available.

We have found it rare for people significantly to over score their own organisations. Indeed, the more developed the organisation is, the more inclined it is to underscore itself (perhaps because they understand the extent of the changes that need to be made). So discussions about our scoring have usually been more about evidence and interpretation of the Response Levels than about trying to talk a score upwards without evidence. (But that <u>has</u> happened – which is why the evidence base plus a non-defensive approach is so important. It is fine to change judgments upwards, <u>provided</u> that there is the evidence to support doing so!

5.6 Finding the gaps and going deeper

Right from the start everyone needs to be clear that follow-up interviews or requests for information will most probably be needed after the main review day/site visit. After all, you can't predict what you will be able to find out nor where the gaps will be. This is another reason for transferring data from notes into the analysis sheets and onto the matrix promptly, because you want to identify gaps early enough to be able to book time with the most appropriate person to fill them.

Another reason for keeping track of what you know and of what you don't know is that you don't want to waste your own or other people's time by covering the same ground multiple times – an experience that we soon realised we needed to avoid. On the other hand it is often good to have evidence from more than one source: a statement in a document you have reviewed is usually best followed up with a question: *'We were interested to see that you are doing X, could you tell me a bit about that / could you show me an example of that please?'*

When there are clear gaps, these areas need to be followed-up with the help of the lead reviewee. Some follow-up interviewing also helps if you need to gather some more "forensic evidence" (see Section 5.7 below).

5.7 Avoiding 'appreciative creep': looking for the 'forensic evidence'

Although we have argued earlier for the use of an appreciative approach in reviewing, appreciation needs to be balanced with the search for some hard evidence. People often talk so enthusiastically about what they intend doing that it is easy to be persuaded that they are doing more than they actually are. People can also make overinflated claims for what they are doing not because they are trying to talk-up their organizations but because they often can't discriminate between breakthrough practice and what remains business-as-usual (although probably helpful). It is very easy to become extremely appreciative of the organisations we work with – both of the people and of the work they are trying to do, often in very difficult circumstance.

The forensic evidence sheet is designed to help here. The matrix also identifies key questions.

Overall we think that that is both natural and usually a good thing: it helps to create an atmosphere of trust and support that can help them recognise and do what they need to do. However it is easy to lose a critical edge and so fall into 'appreciative creep' – letting our spectacles become more and more rose coloured, interpreting everything in the most positive light. This doesn't help at all. The craft of such a review is about being **sympathetic and appreciative without losing a critical edge**. During the trial period we sometimes used the term "critical friends" to describe our role as reviewers.

The reality is that certain activities are particularly good guides to whether an organisation is working effectively at a response level. For instance:

- If the organisation is of any size, it would be very unlikely to be working effectively at RL3 if it did not have strong evidence of carbon management activity.
- It would be very hard to argue that an organisation is working at RL4 if no members of senior management were closely involved in what it sees as 'breakthrough projects', if these projects were only desk exercises and if their purpose were not significant breakthroughs that go beyond business-as-usual.
- If significant investments do not have very serious risk evaluation (e.g. climate impact and energy risk) over a 20+ year horizon (not just evaluating the impact of the project on climate change and seeking to minimise it), if planning assumptions did not take systematic account of energy and insurance cost future trajectories, if there is no evidence of significant partnership working (not just stakeholder involvement), then the organisation is very unlikely to be robustly at RL5.

If some such 'acid test' conditions are not met, it should prompt a very critical look at some of the supporting evidence in other pathways. For instance, is awareness as strong as all that *on the ground*? Do people really grasp the irreversibility of certain major decisions? The chances are that there will be some areas that are less strong than we first thought.

It is good to find and resolve inconsistencies if we can, though ultimately we can present the client organisation with the inconsistency and ask them if they can help us to make sense of it .

5.8 Reviewer's checklist for gathering and analysing evidence

Please make a copy of this checklist and use it to keep track of what you need to do on reviews.

No	Ref	Action	Review team notes	Done?
1	5.1, 4.4	Carry out document review		
2	5.2	Carry out interviews		
3	5.2 5.3	Carry out more focused interviews to look more deeply at key areas		
4	5.2 5.3	Look at projects or investments in greater detail where necessary		
5	5.4	Summarise the evidence and reach initial conclusions		
6	5.5	Remember to check out conclusions with client		
7	5.6 5.7	Identify key gaps and go deeper, focusing on the 'forensic evidence'		
8				
9				
10				

6. Sharing findings, drawing conclusions, making recommendations

6.1 Making sense as we go

From the very beginning of the review, whether we mean to or not, we usually make estimates as to where the organisation might be scoring. Is it, for instance,

- A mature organisation, able to operate effectively at the higher response levels – and also to use the lower response levels where necessary?
- An organisation at an early stage of its development, learning to use the more mainstream response levels (e.g. RL3) and very far from being fluent in the strategic domains of RLs 4 & 5?

The danger, of course, is that we will jump to overhasty conclusions and stop listening for the disconfirming evidence; we might become prejudiced and stop listening. On balance, however, we think that the risks are less than the benefits.

Our view is that it is on balance **helpful** to draw tentative conclusions – **provided** that we do so cautiously and hold them lightly, all the time **testing them against the evidence**.

Here are some of the arguments in favour of drawing early conclusions:

- We will probably be doing so whether we mean to or not, so we might as well be aware that we are doing it.
- If we are aware of the judgements we are making, it is easier to look for the evidence to disconfirm them; if we are unaware of them, prejudices may be harder to counteract.
- If we have a sense of the capacity of the reviewed organisation, it becomes easier to communicate with them: for instance, most people working in an organisation at a lower response level will usually have different motivations from and will probably not have as much understanding or experience of the issue as people in a higher responding organisation.
- We want to make the interviewing process as enjoyable as possible; if we get the wrong 'register' for our questions – whether too high or too low – we will either leave the interviewees looking puzzled – or will not give them the chance to show us what they know.

So here is what we suggest:

- From the very first contact, treat every interaction with the organisation as a diagnosis. For instance, why do they say they want to carry out the review? If it is to build their strategic capacity for the future, that is evidence of a higher response level; if it is because their senior management team has instructed them to, that might be coming from a lower response level.
- In particular, treat the document review and early meetings as diagnoses. The 'tone of voice' can be very revealing.
- Ask the main internal contacts where the organisation stands. You won't necessarily agree with them – for instance, one of the signs that an organisation is moving on is that it becomes more self-critical – but you may well find that people have a strong sense of where they are (it is your job to help them confirm or deny this and then decide what they can do about it).
- Pitch the questions at the level that you think they will be able to answer. Once you are confident, then ask some questions at higher levels until the reviewee starts to give a series of negative answers – a sign that you have crossed a barrier into a response level that they have not yet reached. When you do, pull back a little and try to end the interview on a positive note.

6.2 Identifying the patterns

One of the key insights of 'complementarities theory' is that things improve most easily when they move forward together. If one area is moving ahead faster than others, diminishing returns will soon set in if the other areas do not improve as well.

It is like learning to play a musical instrument. The payoff is being able to play with other people in a band – a very enjoyable thing to do!

However, there are at least three key skills:

- Melody
- Harmony
- Rhythm

It is no good improving one of them – they all need to improve at about the same rate. If one improves but the others don't, enjoyment may actually go down: the music will seem easy, and yet you will still keep on making mistakes. It is all too easy to give up.

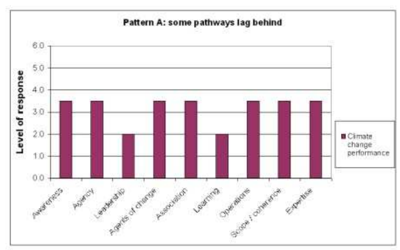
In consumer marketing, people talk about getting the four 'P's right – product, place, promotion, price. Get one of them wrong and sales will not follow. All the money spent in the other areas will be wasted. Despite all the hard work, no promotions, no awards are likely to follow.

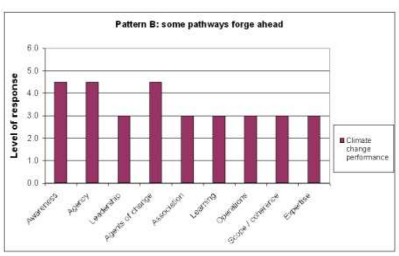
So one of the most important ways you can help is by noticing the patterns of change. What is strong, what is lagging behind? Where would a difference make a difference?

Here are some common patterns:

Pattern A: Some lagging pathways

In this common pattern, two or three pathways are lagging behind most others. They are likely to be acting as a brake on progress. The payoffs from improving them are likely to be very high – probably higher than trying harder in leading pathways.

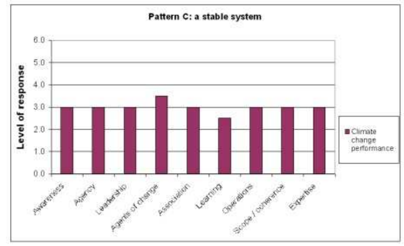




Pattern B: Some pathways forge ahead

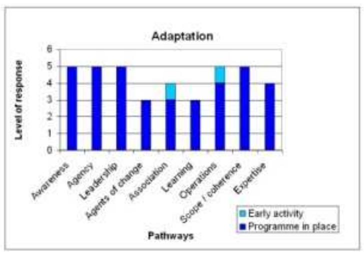
In this pattern, progress along some pathways is beginning to accelerate. Nobody wants to slow down or stop momentum – and yet there is a great risk that the initiatives will fail unless the rest of the organisation moves forward. The task may be to protect performance in the leading pathways and use it as a basis for developing other pathways. It is important to ensure that the underlying causes of the stronger performance (in this example probably centred around one or two agents of change) are not dismantled without realising it – losing an agent of change from a key position is often enough to undo years of effort if there has been no plans for the succession. Better to use the area where performance is moving ahead as a strongpoint to which (in this example) leaders and a wider group of stakeholders can be brought into contact, in which new operational procedures can be tried out, from which the learning for the future can be extracted, thereby bringing wider performance forward.

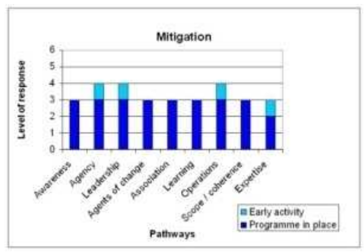
Pattern C: A stable system



In this pattern, again very common, different aspects of the organisation reinforce each other, making change difficult: whatever happens it tends to look like more of the same. As performance along one pathway improves, it becomes less consistent with what is happening along the other pathways and the resistance to change increases. The task is to 'unfreeze, change and then refreeze' – finding out ways of creating opportunities for groups of pathways to move together in parallel, protecting the experimentation and spreading learning to other areas.

There are other patterns. For instance, sometimes performance is much stronger on one type of activity than on another. For instance, mitigation performance might be much stronger than for adaptation (this is quite common in the corporate sector); we have also noticed this pattern the other way around, with much stronger adaptation, in a review that we recently did in a UK public body (see the charts below):





This can also happen in a sub unit of the organisation – e.g. in a single department or a product line, perhaps as an echo of an earlier 'breakthrough project' that succeeded but was never quite consolidated. Again, such a pattern is a sign both of opportunity (there is something on which to build) and of danger (the tendency will be for performance to slip backwards towards the organisational status quo and not to progress – unless something is done to build on earlier performance). There are no absolute clear cut answers.

Good questions to ask yourself and others include:

- What's the pattern?
- What needs to be attended to?
- What can be built on?
- What are the risks?
- What actions might work?

6.3 Testing conclusions

As you complete the matrix, a clear pattern of response should begin to emerge. The evidence usually begins to cluster around certain response levels.

The matrix is designed to help collate and summarise evidence.

Collecting evidence does not of itself score the organisation but it does form one of the strong bases from which you can draw and defend conclusions.

As you do so, ideally in dialogue with the client, there are two main tasks:

- Testing the gaps – making sure that you are not missing evidence
- Critiquing the positive scores – avoiding the danger of 'appreciative creep'

Testing the gaps

As you complete the matrix in the toolkit, you will notice the patterns of evidence. From time to time, check out the response levels with no entries:

- Keep asking the occasional question which you expect that they might find difficult to answer on the basis of past responses, but revert to ones that they can answer when several responses are negative in a row.
- To avoid people feeling bad, ask them about what they would like to do next – which will be a good way of identifying where the organisational 'edge' lies.
- Ask who might best be able to talk about the organisation's plans for the future. Remember that if people are beginning to talk about something in the next Response Level that is a sign that they are ready (or may have begun) to develop the capacity to move there.
- In due course, probably with the lead internal contact, ask outright – this is what we are seeing: are we missing something?

General points on testing conclusions

The best way to test conclusions, we believe, is to begin to do so before you have finally reached them!

It is a much bigger game than trying to come up with a reasonable 'score'; we are mainly trying to help the participating organisation to move forwards, to improve. To do this, we are sharing a way of thinking with them. It is more important that they understand this, that they can test it for themselves, than that every judgement that we reach is perfect. (But on the other hand, they will probably find it easier to understand, if the judgements we reach seem robust and reliable – hence the Handbook and toolkit).

Our advice is to conduct the review process as an adult: adult conversation with the organisation.

Share the framework with them – the documents in the toolkit have been designed to help you do this. Ask the people you meet for their opinion as to where they stand (often they will be harder on themselves than on others), share your conclusions with them and the evidence to back them up and ask whether they agree, ask for the evidence to back up what they are saying, look for the evidence you need to test your own conclusions, explain why you are coming to the conclusions that you are reaching, be open to what they say.

6.4 Using supervision

Particularly if the process is being carried out by relatively inexperienced reviewers, it is important to have some form of supervision process. (Experienced reviewers probably still need to talk through their judgments with someone who is also experienced). This is to maintain consistency: it helps to compare the organisation with others that have been reviewed. When all is said and done, does organisation X look as if it is ahead of organisation Y? If so, what is it doing differently? At whatever level the organisations currently stands, what looks like exciting new practice, whether a good way of managing learning at RL3, a ‘breakthrough project’ at RL4, a process for strategic review at RL5?

In practice, we had excellent debate and worked through a certain amount of disagreement in reaching conclusions in some reviews. The presence of a non-participating reviewer, further from the emotions of a particular review, helps significantly.

To help with this we are developing a database and comparison tool. In the meantime, the spreadsheets of past reviews themselves become a basis for comparison.

6.5 Making specific recommendations – why we urge caution

In principle, we do not think it is a good idea for a review team to make black and white recommendations at the end of a review. Why not?

- In terms of the six levels of response, a 'prescriptive' intervention is likely to be most suitable for a client at RL2. That is fine if that is where the organisation is and where it can appropriately remain, but it won't help its progress to RL3 and beyond. As a programme progresses, managers need to take on thinking for themselves.
- If you too strongly recommend a course of action, then there is a risk that the participating organisation might abdicate responsibility: *"the reviewers told us that that was how it should be done"* (implication: so what happened wasn't our responsibility!). So there is even a danger that taking too strong a prescriptive approach might take the organisation backwards to RL2!
- Clients know their organisation better than the reviewer can. It is usually better if they can be helped to see what is needed and then figure out for themselves how to achieve that end.

Six general styles of intervening to promote change have been identified[3] – the prescriptive (the consultant tells the client what to do) is only one of them – and many see it as the LEAST likely to lead to lasting change. This is because it all too easily leads to the consultant or adviser taking over, taking too much responsibility.

It would obviously be inconsistent for this Handbook to say exactly what a reviewer should do in each circumstance! Our general advice is:

- Help people understand their needs in terms of development;
- Help them understand where they are now, what sort of challenge needs to be tackled next and where the priorities lie;
- Bear in mind where they currently stand and use language accessible to where they are now;
- Give examples of what other people have done in responding to similar challenges;
- Based on this, help them decide their own priorities – in particular looking for opportunities to shift a number of factors together;
- Encourage them to commit to specific actions;
- Agree a review timetable;
- Ignore any of this advice if it seems appropriate – but think through the implications first!

[3] The six styles are Prescriptive, Informative, Confronting, Cathartic, Catalytic and Supportive. A good overview of the various approaches is in 'Client-Centered Consulting' by Bill Evans, Peter Reynolds & Peter Cockman. It is aimed very much at the sort of person who is likely to be carrying out a review rather than at the professional consultant.

6.6 Using case examples to make suggestions

Many of the carbon management tools that we see reported in the media, in books or at conferences are helpful. However the majority of them are RL3 tools, without their designers even realising it. But more RL3 interventions won't help us if it's the RL4 breakthrough we need.

The Mullah Nasruddin's lost keys

There are many stories about a Sufi 'Wise Fool', the Mullah Nasruddin. Here is a favourite:

One night, some of the Mullah's friends saw him on his knees under a street light, looking for his keys. They all got down to help him look. After a while, having had no success, someone asked him: "Oh Mullah, where did you drop your keys?" "In the back garden", said the sage. "So why are we looking out here?" "There is no light in the back garden!"

As with the Mullah's keys (see text box on left), it is all too easy to keep looking for the next step where the light of past experience shines, rather than go into the darkness of the back garden where we know that the answers must lie. But the supply of good advice drops away rather quickly above RL3 (relatively few government departments, consultancies or advisory bodies themselves operate consistently at these levels) so where do we look for advice, for practical examples of what we need to do?

That is why we have collected a set of case examples which illustrate examples of practice on each pathway at different response levels (typically from RL3 to RL5). Read what people are actually doing at the level you would like to move to. Why not pick up the phone and give them a call?

And do share your own case examples! One of the ambitions of this project is to develop a substantial library of how different people have gone about finding answers to the issues that arrive at different stages of the journey of responding to climate change. And no need to be bashful: a case example at RL3 may be helpful to many organisations since the number of organisations that are trying to make the RL2 to RL3 transition is still much bigger than those making the other and later transitions. And of course RL4 and 5 case examples offer practical help as people step further out into the unknown.

The case examples help demonstrate good practice on each pathway; you can use them in your final report

Staying slightly out of step

One of the main signs that changes are taking place comes when your circle of friends or partner organisations begins to change.

You are most likely to be helpful to organisations who are slightly behind your own position, most likely to be helped by organisations who are moving ahead of you but who can still remember how they coped with the challenges you are facing.

It is obviously fine to work alongside your peer organisations – PROVIDED that you are aware of the risk that you will reinforce the status quo by doing so –i.e. be better at doing things (a bit) better than at reconceiving them and doing them differently.

In due course you will begin to recognise which of the organisations you meet are a step ahead of you, which are moving out of sight, which are your peers, and which are the ones to whom you can most easily be helpful. You can make choices about where you want to put your time (see text box above right).

6.7 Formal feedback of findings

Identifying the final audience(s)

It is easy to assume that you need to communicate what you have found mainly to the lead reviewee. But s/he is likely to need you to write in a way that s/he can use with others, e.g. with members of the Senior Management Team or perhaps of the Cabinet.

So it is really important to discuss with the lead reviewee with whom s/he expects to share the final report and to tune into the language and arguments that they are most likely to be able to engage with.

Matching the language to the Audience

We walked straight into some feedback that led to significant learning in one of our early reviews: our main contact point said when s/he received the report, *"It is very interesting, but I wonder who it is aimed at".* As so often, that challenge led us to significant learning.

In our review, the participating organisation was consistently showing evidence of behaviour at the boundary between response levels 2 & 3 (though with a subsidiary unit clearly capable of working at a much more advanced level). Of all the pathways, 'agency' was among the less developed: they had a weak sense of how dealing with the issue could benefit the organisation.

Talking with them, it became clear that this might partly be because their important stakeholders (e.g. their 'clients') were themselves at a very low level of development: although substantial organisations, they didn't understand the agenda: although climate change posed potentially fundamental challenges, they could not articulate how the highly skilled organisation we were reviewing could help them (this is by no means uncommon).

Our review team could see the potential and made many recommendations. The feedback helped us to realise that we had written as if the participating organisation were at RL4 or 5. They weren't, and so what we wrote missed them. At RL2 moving on to 3, they needed to be reminded of some basic truths:

- Their customers were under pressure to move on this issue;
- When they recognised this, likely very soon, they would start asking for help: the organisation would do well to prepare (the RL2/3 agendas)
- When they did, the strong skills of the participating organisation meant that there was a good potential market for them (the RL3 agenda).
- The subunit in question has provided a depth of skill and experience that is a resource for the wider organisation and more widely: worth considering how to use it to develop service offerings for wider use (recognising earlier RL4 experiment).

The key message from this was: use what you have learned from the organisation to decide what to say to them and how to say it! This is not to back off the issue, but to help communication, to unblock change.

The structure of the final reports

The reports are quite substantial. We suggest producing a detailed working level report for use by the people responsible for the programme and a much shorter report for discussion with top management. They would take a long time if you had to write from scratch (it took us a long time to do so in the initial reviews!).

The toolkit has two template reports to make writing your own a lot easier. They are colour coded to help you.

Fortunately, to save you much of the effort, we have provided templates of each report in the toolkit. These are colour coded to indicate (a) standard text which never or rarely changes (for instance, giving an overview of the conceptual framework), (b) text modules which are inserted to be relevant to the particular organisation (for instance describing the two or three levels in a pathway that are most relevant to the particular organisation right now, or case examples that are most likely to help them) and (c) text that is written specifically for the review in question (for instance describing what the organisation is or is not doing at present at a particular response level on each pathway.

As a general principle, we recommend that the report is centred on where the organisation stands at the time of the review. For instance, an organisation which is doing most of its activity at RL3 and which has a good deal more to do at that level should receive information about RL2, RL3 and RL4 but it would not normally be helpful to write a lot about RL5 and certainly not about RL6. An organisation that is beginning to move to RL4, however, would have RL3, RL4 and RL5.

Use the reviewer's assessment document as a source for report comments on the pathways

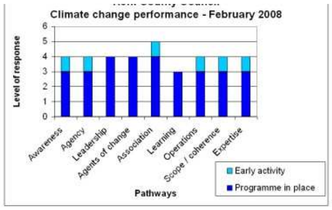
The Reviewer's Assessment in the toolkit includes various versions of the phrases used in reporting at RL2, RL3, RL4, and RL5. We did find enough evidence of early stage RL6 activity in one review to include some sentences on that (an exciting moment!) but we feel it is premature to include full descriptions at this stage (contact your organisation's supervision process for assistance if you think you might be encountering RL6 behaviour or if the organisation you are reviewing seems to be very solid at RL5).

We have found that this makes the whole process a lot easier. Of course, we would like to stress that the primary job of a report is to communicate rather than to be consistent. So use the template as amended as a basis for the final report but change what you need to change to work for you and for the participating organisation.[4]

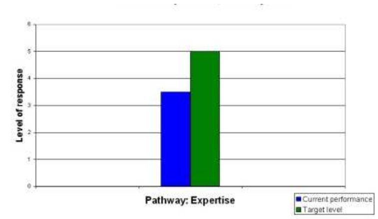
[4] However do NOT change the framework unless given clear approval by your organisation's supervision process. The framework rests on much research and should not be changed lightly. If you find information that does not 'fit', that is excellent: first put it onto a new page (E.g. called 'Other interesting findings) and continue with the reporting process. Second, refer the material to your organisation's supervision process for discussion and to decide whether and how the framework might need to be updated. We would like to stress that we would welcome such feedback: this is a learning process and we need to know about what doesn't fit so that it can continue to improve!

Using graphs

Graphs are among the most simple but valuable ways of feeding back information. We use two kinds of graph at present:



An overall pathway comparison chart



Summarising status of each pathway against target

Use the simple graphing spreadsheets in the toolkit to help prepare the report.

There are simple Excel spreadsheets in the toolkit – just enter the numbers where indicated and insert the graph into the Word document to replace the template graphs indicated.

We use Photoshop Elements for this process when we use Office 2003, or use the programmes directly in Office 2007. Your own organisation will have its own approach.

Many of you are likely to come up with better approaches to sharing results on graphs.[5] Do let us know – we would certainly be interested and would be more than happy to use good ideas in any future updates to this Handbook!

The process of reporting

1. The most important place to begin is with the summary of where you see the organisation on each pathway.
2. Get out the report template (full version) from the toolkit and choose the modular text versions such as case examples and pathway descriptions that suit where the organisation is right now.
3. Put in the graphs (see above) and write the organisation-specific text in the places shown in the template. Take care to write the text in a manner appropriate to where the organisation stands right now, but in a way that can help them to move on as and how they need to.
4. Check out and discuss with the rest of the review team.
5. Send this to the Lead Reviewee for discussion and advice. Do the conclusions make sense? Is the tone right?
6. Importantly, check out any political sensitivities. For instance, if the Leadership pathway is one of the brakes on progress, it is vital to mention this but it is common sense to take account of the possible sensitivities. So look for ways of phrasing comments in a way that is true, that articulates the case for progress, but which can be 'received' by the leaders in question. Remember that they, or people responsible for other lagging pathways, have many other things

[5] For instance we haven't yet figured out how to indicate 'beginning activity' (the lighter blue in the left hand graph above) in a comparison chart as on the right hand side. We would be delighted to have suggestions from the more software literate!

on their plate besides this and that they are human beings! And remember also that there may be other constraints which hold them back of which you and others know nothing.

7. Redraft the report and then produce the summary version for sending to the top team.
8. Prepare a summary presentation for the closing meeting.

Closing meetings

There is a tension between getting across the framework and cutting to the chase: what does this organisation need to focus on right now. You will have to find the balance that works for you in the context of the specific participating organisation.

We find that the best approach in talking about progress, about 'where next?' is often:

Making progress often works best by taking two steps forward for insight, then taking one step back towards the current status to take action and open pathways for change!

People can often follow an argument about what is needed at the next step but one (e.g. the case for RL5 if their centre of gravity is at RL3). However such an organisation would usually not able to act at RL5 yet – so you would need to identify pragmatic actions (in this case at RL4) that they can (a) realistically take and (b) would actually help move them forward (to the extent that they need to).

Sometimes it is better, particularly at the earlier response levels, to 'frame' actions at one response level that – if done well – will take them to another response level. For instance:

- Requiring a supplier to implement a carbon management programme (e.g. as part of a supplier development programme) is an RL2 argument for an action at RL3.
- Doing a Carbon Footprint or Life Cycle Analysis, or updating the corporate risk register, are easy to 'frame' at RL3 but have the capacity to take an organisation into RL4 and beyond.
- Whatever is chosen, remember to think about and discuss which changes would be needed in other pathways to support development.

In a well developed organisation, these conversations can be held directly with top management in the meeting itself. If the organisation is early in RL3 or below, these conversations might be better with the Lead Reviewee before the session and the discussions might better be led by him or her.

Remember: this is usually a lot of fun for both reviewer and participating organisation!

The feedback has almost universally been that the process is fun. Often surprisingly so.

We think that this is because the framework is already pretty strong (and is growing stronger the more it is used and updated) and that it gives people a language to discuss climate change and pragmatic suggestions for what they can do in response to it. It is not aimed at necessary but distant policy – e.g. at discussing what should replace the Kyoto Protocols. Nor is it trivial – it takes us beyond reminding each other to turn off the lights (a perfectly valid RL2 activity, but more is needed!). It provides a framework for giving each other agency, for bringing this tremendous challenge into the space of action, but without belittling it.

People respond well to this, in our opinion. This is as true, perhaps more so, at top management level as for the rest of us.

6.8 Gathering and recording case examples

During the course of information gathering you will come across examples of good practice and even if these are similar to what other organizations are doing, for example, a green travel plan, it is worth noting down the details in enough depth to turn the information into a case example for future use. At some point the case examples you have collected need to be entered into a database. When we started this project we only had recourse to the normal filing system provided by windows and we created a template which would remind reviewers to file the case with relevant permissions etc. (see case study form in the toolkit). However, in time this will become easier in terms of storage, retrieval and use because an online database system will streamline the paper systems we have developed.

You can really help organisations improve by providing case examples – a form is in the toolkit.

The case examples are vital to bringing the final report to life because they can be used to illustrate moot points in a tangible way and open up opportunities for organizations to learn more directly from each other. As the database grows, the idea will be to draw out of it very specific stories of what other organizations are doing to provide inspiration and further elucidation of the pathways. If organizations are agreeable we could also provide contact details for experience sharing.

6.9 Reviewer's checklist for drawing conclusions, sharing findings & making recommendations

Please make a copy of this checklist and use it to keep track of what you need to do on reviews.

No	Ref	Action	Review team notes	Done?
1	6.1	Ongoing assessment of organisation's position throughout process		
2	6.2	Graph the patterns and discuss the implications with lead reviewee		
3	6.3 6.4	Make conclusions explicit and test them in peer review process, with reviewee and with supervisor		
4	6.5 6.6	Identify case examples and discuss areas where a difference might make a difference		
5	6.7	Prepare and discuss draft reports		
6	6.7	Revise reports as necessary & hold closing meeting		
7	6.8	Identify possible case examples, write them up and gain explicit permission to use as discussed in contract.		
8				
9				
10				

C. Afterword

7. Using pathways analysis to help cross the 'emotional chasm'

In closing, we would like to say a bit about the contribution that 'pathways analysis' can make in helping people to face the tremendous emotional challenge of change for sustainable development.

We observe many organisations doing valuable work at RL3. However, important as it undoubtedly is, an increasing number are realising that climate change demands a different quality of response. People know that they need to progress, to change gear, but many do not know how to go about doing so. In the absence of clear guidance, many simply try harder: better carbon accounting, better reporting, different targets by governments, a better follow on to Kyoto – that will surely do it?

Work at RL5, on the other hand, needs to take a 25+ year perspective. This involves looking at some pretty uncomfortable science. Yet advice on behaviour change sometimes suggests that this level of awareness is best avoided for fear of overwhelming people and in the interests of staying positive. We would agree if RL3 actions were all that were hoped for.

But RL3 is not enough. Significant adaptation work at RL5, especially in spatial planning, needs a high level of awareness – and far too few people have it. The research evidence, and experience of working with many people on this agenda over many years, is quite clear on this.

The people we meet who are effective at RL5 understand the issues very well and have found their own way of responding. In the past this has sometimes been a bit hard, but the support given for this work by ESPACE partners and Hampshire County Council has helped to identify a path across what has been something of an emotional chasm.

We believe this path can be built through work at Response Level 4. An important practical and theoretical contribution of this project has been to set out the work that is needed at this level. We find again and again that a well set up RL4 'Breakthrough Project' facilitates the transition from RL3 to RL5. Through a well focused RL4 project people can come to understand the issues better, and to gain a sense of their own (and their organisation's) 'agency' or meaningful space to act. Some people (typically around 20 to 30%) will significantly deepen their engagement with climate change issues. For instance, we have seen self-professed climate 'sceptics' put aside their positions and become leaders of action, committed agents of change.

For these people to complete an RL4 project successfully, we think that it is vital that they are offered appropriate support. If they choose to become more involved, they need assurance that they will be empowered to make a difference. If not, they need reassurance that the organisation has an adequate programme into which their contribution can be offered. They also need the RL4 project itself to be set up in such a way as to make its success much more likely.

That has been a major motivation behind this project. We hope that it has made a small but vital contribution to helping humanity respond to a massive crisis, largely self-created, to which we are all likely to fall victim, unless we learn to radically improve our responses.