



Moving to the Higher Ground: Developing Climate Responsive Organisations

An interim report for Hampshire County Council and the ESPACE Partnership



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Project overview

What enables one organisation to tackle climate change more effectively than another? How does an organisation know when it's stalled on the climate change agenda? And what does an organisation have to do next in order to progress? These are some of the questions that Alexander Ballard Ltd has exploring with Hampshire County Council through ESPACE. Our purpose has been to help organisations move up through higher and higher levels to the higher ground where strong responses begin to take place.



What are the levels? Organisations progress through a number of stages or 'levels' as they respond to climate change. As their competency grows, their responses to the issue become more sophisticated and more effective. Put simply, an organisation that responds to climate change only by changing the light bulbs is demonstrating a lower level response than one that can change the design of its products or services to be more resilient to climate impacts and/or reduce carbon emissions big-time. In the jargon, the second organisation is demonstrating higher '**adaptive capacity**'. We have begun to clarify what each of these levels looks like.

And what are the pathways? For improvement to take place from one level to another, several aspects of an organisation's performance need to improve alongside each other. For instance, it is fine to improve organisational awareness

of the issues, but if the skills of people working on the issue do not improve more or less in parallel, progress through the levels will be patchy. We call each of these complementary factors '**pathways**'. We are beginning to differentiate what the key pathways might be and what they look like at each of the levels.

What's the point of doing this? To respond effectively to the challenge of climate change, we all need to improve what we do. We think that this tool will help and our experience supports this. For instance, we have used a prior version of this approach in a large project in industry and found that it helped significantly: performance improved both measurably and quickly.

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Project objectives



We were asked to work with HCC under ESPACE Partner Action 9, which is entitled: “Develop Mechanisms and Techniques to Influence Planning Networks at the Local Authority Level Whilst Engaging Those at a Regional”.

The following details the aims and objectives we were given for this work:

1. Develop Hampshire County Council's understanding of its 'adaptive capacity' to adapt to the consequences of climate change.
2. Develop Hampshire County Council's understanding of existing ability to mitigate the effects of climate change.
3. Using 'Matrix & Pathways Analysis', develop pathways descriptions that can assist, influence and inform Hampshire County Council when making spatial planning and strategic development decisions about climate change mitigation and adaptation.
4. Increase organisational and individual aspirations through articulating a vision of what truly excellent climate change practice might look like.
5. Make recommendations on how this work can be used to develop future steps in HCC.

A brief piece of work was also undertaken (with HCC's support) with the South East Climate Change Partnership, which is also an ESPACE partner.

This is intended to provide a basis for later work with the ESPACE extension project in which ABL has been asked to develop and trial a self- and peer-assessment process for use by ESPACE partners and more widely. Learning from this initial piece of work will be incorporated into the later project.

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Spatial planning implications

How is this project relevant to work on spatial planning by large public organisations such as local and regional government and governmental agencies and by businesses? In several ways:

- Climate impacts are only just beginning to occur, but the science from bodies like the IPCC and the UKCIP gives us a good idea of what will be coming in the next few decades and beyond. Business-as-usual, looking to the past for guidance, will certainly not be enough to cope with this: new ways of taking climate change into account will be needed.
- Adaptation is not regularly taking place on major projects in 2007 and is still regularly overlooked in policy proposals. For instance, the 10 sustainability principles for the 2012 Olympic Games do not mention adaptation and the subject is still hardly covered by pressure groups and many advisory bodies.
- This means that climate change adaptation is far from being 'business-as-usual'. It involves change and new ways of responding to the challenge will be needed.
- Our work for ESPACE on behavioural change identified vitally important conditions for change that need to be developed together. These are (a) 'awareness' of the agenda and of what it means for the person or organisation, (b) 'agency', or the ability of a person or organisation to take action meaningful *to them* in response to that awareness, and (c) 'association' with like minded people to support action on the issue. If one of these is missing, change will be hard. We also identified a key process, (d) action and reflection, to help these conditions develop together, ensuring that the process of change continues over time. But these activities need organising: our report provided evidence and summarised research to show that public bodies have a key role to play (what Michael Carley and Ian Christie called the *Linking Pin* role) in supporting change. If change is to happen 'out there', then we suggest that it is also needed 'at home'.
- In the light of this, 'Adaptive organisations' might perhaps form a fifth 'A' for change?

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Overview of the change tool

The adaptive capacity change tool rests on the following basic assumptions:

- i. Organisations' responses to issues such as climate change follow a predictable process through a series of stages ('levels') as they become more competent on the issue. To put it another way, an organisation that responds to climate change only by changing the light bulbs is demonstrating a less developed response than one that is able to change the design of its products or services to be more resilient to climate change and to help mitigate its progress.
- ii. Development across a set of core qualities ('pathways') is needed if progress is to be possible. It is not enough just to decide to behave at a more advanced level; this decision needs to be enacted through improving operational procedures, managerial awareness, external engagement processes, etc.
- iii. Since the pathways are mutually reinforcing, breakthroughs in one area will be constrained unless others are developed as well. In other words, the pathways are 'complementary' – all are needed. An example from consumer marketing is 'product, place, promotion, and price' – if development in any of these lags behind the others, overall progress will likely be harmed and the new product will likely flop.
- iv. While it is in principle impossible to identify every pathway, a good number of generic ones can be identified and managed. Others that are relevant only in a specific situation can be identified and addressed if one or more of the pathways includes appropriate processes to do that.

These assumptions are consistent with common sense, with experience, with academic research and with much theory on change. The pathways and levels approach suggests that progress should regularly be assessed for all of these 'pathways' to see where progress is lagging and to identify where '*a difference might make a difference*'. The lessons from this can easily be used to help managers and 'change champions' plan improvements.

The change tool is therefore being structured along matrix lines: the current draft includes six levels and nine 'pathways'. Future work on the tool (in the ESPACE extension project) will incorporate feedback on these initial ideas, will test them in a range of differing organisations, and will develop and test assessment protocols.

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Six levels of climate change response



Organisations in common with individuals improve their response to climate change in predictable levels or stages as they develop their understanding both of the issue and how to respond to it. As they grow in competency, their responses to the issue become more sophisticated and more effective. It is good for an organisation to take simple energy efficient measures, but if its service provision is potentially at risk from climate impacts or depends on significant uses of energy, more comprehensive changes are needed – e.g. to assess the risks and reorganise services to make them more resilient in a changing climate and to reduce energy use dramatically. This is clearly a higher level response.

Various researchers confirm the levels approach (see Appendices). One source – Dexter Dunphy's work – provides a good basis, but it can be developed further: we amalgamated two of his levels but added another, making six in all. We can map these different levels of response onto a framework not unlike a ladder.

Here are the first three levels. Most organisations of any size have moved beyond level 1 by now, with most being at levels 2 and 3 (our own research into corporate responses to climate change, supported by work in SECCP):

1. **Non-responsive:** Senior managers see climate change as threatening and would prefer not to engage with it. There will be reluctant action, if any. No resources will be allocated. Viewed more positively, this level can represent focus – albeit simplistic and short-sighted – on areas of core importance to the organisation.
2. **Compliant:** Managers will respond to pressure from a significant other – e.g. a legislator or a customer – but won't be proactive. There is little understanding of climate change issues and how they apply to the organisation's activities and actions risk being a tick-box exercise. Nonetheless, being able to recognise and respond to the concerns of key stakeholders does mark progress.
3. **Efficient management:** Managers recognise that climate change needs to be managed systematically, rather than occasionally. There will be measurement systems & targets, ISO 14001, carbon management, etc. Climate change is usually delegated to someone lower down the organisation; senior managers may think they've cracked it. Work at this level does provide a foundation for later progress. But relatively few, even at a senior level, yet grasp the scale of the climate change challenge, especially for adaptation.

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Levels of climate change response – 4 to 6

Work at levels 1 to 3 represents business-as-usual management. But climate change is certainly not a business-as-usual issue: we know for sure that the future will not be like the past: procedures and ways of working that were good enough in the past will not be good enough in the future. This is a strategic issue, challenging the basics of organisational functioning. It needs the strategic perspective of the boardroom to be involved, building on and interacting with the strong operational grip of the agenda that begins to be developed at level 3.

Relatively few organisations (in either public or private sector) have yet made the transition to the boardroom or senior officer or elected member teams that is facilitated at level 4 and which is required for effectiveness at levels 5 and 6.

4. **Strategic Experimentation:** This level provides a bridge from operations to strategy. The senior management team begins to recognise that the agenda poses substantial risks and opportunities. While not ready fully to incorporate climate change into strategic decision making, they begin to use projects to make breakthroughs in practice, allocating senior management time and other resources to them and taking a close interest in their progress – e.g. by participating themselves or by having them report to board level.
5. **Strategic responsiveness:** Top management teams recognise that climate change is of significant strategic importance. They are active on the issue as a key part of strategic management, focusing on the ongoing resilience (e.g. of capital, of plant and facilities, of services) of the organisation and the key systems of which it is part both to climate impacts and to a future in which energy is likely to be seriously constrained. Serious climate change responses need an ability to work at this level, which is still rare.
6. **The ‘champion organisation’:** At this level, still very rare, the organisation’s focus is on significantly changing the political, social, legal, technological environment in which it operates in order to promote sustainability, rather than just respond to a changing climate or position itself with respect to the issue.

So how do organisations move through the levels? Experience backed up by powerful research on change suggests that they do so by improving performance on a number of key pathways (similar to individual competency areas) in parallel with each other.

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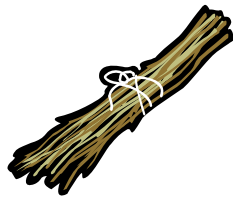
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Level 1: Resistant

'Keep our heads down and it might go away!'

At level 1, now relatively rare among larger organisations in the UK, there will be reluctant action, if any. In level 1 organisations, senior managers feel threatened by climate change. They feel this not so much because of the environmental, social and economic threats the issue represents (they are not up to date with these) but because of its complexity and the increasing emphasis on it from legislators, the media, investor groups, activists and customers. The response is one of denial, burying heads in the sand, hoping the problem will simply go away. There will be reluctant, opportunistic action, if any; no resources will be allocated.



We don't often meet large organisations at level 1 – or not in the UK at least and certainly not in the public sector.¹ Some smaller organisations act from this level (according to Environment Agency managers we spoke to in 2005). We saw no evidence of any part of Hampshire County Council acting from this level.

Dexter Dunphy's description of levels distinguishes between organisations who do not act because they are actively hostile to the agenda and those who would just prefer not to think about it very much. However we could not see much difference between these positions in practice, so decided to amalgamate them.

Organisations at this level will not turn up for events. They will be unresponsive to approaches and may consider legislators, activists and enforcement bodies to be actively hostile.

Because of this, people who engage with organisations at this level need to be prepared to use the carrot and the stick. But in the UK carrots and sticks available to public bodies are still relatively weak for climate change (as opposed, for instance, for pollution of water courses). It may be best to engage on other agendas to climate change to begin with.

¹ Read 'Crimes against Nature' by Robert F. Kennedy Jr for a more critical view of some large American organisations.

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Level 2: Compliant

*'We don't have much impact on climate change. All we do is produce paper.'*¹

This level is still reactive as opposed to proactive. Managers are beginning to respond to external stimuli such as customer complaints, investor demands or, increasingly, changing legislation. Typically those few internal influences that spur change come from areas such as facilities management staff, occasionally from elected members or non-executive directors. There is no attempt to go looking for opportunities to act and no strategic plan to direct engagement or look for growing return on investment. There may be some small 'fire fighting' budgets. Managers' timescales are measured in weeks or months.

The majority of the general population is at level 2 – broadly sympathetic but not seeing the everyday relevance to them. We encounter many organisations at level 2, including in the public sector. Most organisations of any size probably have large pockets of compliant behaviour, people who just don't see how this applies to them.

Discussions in SECCP suggested that a significant number of its partner organisations are at this level. Our work in Hampshire County Council itself suggests that – on climate change at least – many managers are broadly sympathetic and have strong operational systems but have not yet activated them for the issue – a level 2 position.

Our work with the Environment Agency in 2005 suggested that getting the timing right is key to engaging level 2 organisations. Offer them help when the issue is top of mind – e.g. when the legislation has just come out or when they have just been asked by their customers or service users to do something differently. At such points they welcome support – at others, the papers will rapidly slip to the bottom of the in-tray.

How to move level 2 organisations forward? Easy: set them the task of becoming organised – e.g. by putting in a carbon management system or ISO 14001. The Cargo Handlers case study in the ESPACE report shows how effective this can be (Appendix E, Case 9).

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¹ The Director (of a major construction company) who said this was forced into action because of wider group policy, but quickly grasped the issues as he began to act. In the following years he became a significant and respected champion for change in his company (which improved very significantly) and more widely.

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Level 3: Efficient management

'We're getting this issue under management control'

At this level, climate change begins to enter the proactive agenda. The 'ad hoc' gives way to a more systematic response as some individuals recognise the need to address the issue as a management priority. It is still seen as one among many separate tactical disciplines, as are, say, human resources or health and safety in many organisations. Climate change is now dealt with on a regular basis as a part of the set of management processes. Measurement systems will be developed, or perhaps modified, to include climate change, targets are set and dedicated staff appointed. Senior management, however, seeing this as a secondary priority, will delegate the work to middle managers and will give it relatively little of their own attention. It will be treated as a technical problem and will manifest in such forms as ISO 14001 certification and, often, PR-focused reporting procedures. Managers' timescales will typically be linked to the operational planning and budgeting cycles – usually annual.

This is where most UK businesses operate on climate change. Discussions with SECCP suggest that this level is characteristic of many of its partner organisations, with very few yet going much further.

Our work in HCC suggests that activity at this level is getting under way in many departments as targets are being set, as carbon measurement is beginning and as initiatives such as the Nottingham Declaration and the Aalborg Commitments begin to affect operational practice.

A significant difficulty at this level is that managers often think that they have got on top of the issue – but this is rarely the case. While developing good management responses is important, we suspect that it is easy to use them as a comfort blanket, as a way of avoiding thinking too hard about the issues. **Level 3 is necessary but is not enough:** climate change is a strategic issue and business-as-usual responses are not enough.

So how to take the next step? The risk management agenda was adopted by Sir Nicholas Stern and provides an opportunity to use the efficient operations agenda to explore the strategic agenda. Exploring vulnerability of services and investments to a changing climate or to a constrained energy future can be very helpful. Many organisations have good risk management practices but rarely apply them to climate change as yet. We used this approach with good results in the construction sector in 2002 to 2004.

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Level 4: Strategic experimentation

'We need to learn what this agenda means for us'

At level 3, an organisation has not yet climbed far enough up the ladder to see over the wall. At level 4, on projects, some managers will begin to have 'peek' experiences, and key others will be keen to hear about them.

This is the level at which the senior management team begins seriously to think about the very real risks and opportunities posed by climate change. Response becomes both proactive and innovative. While the majority of the more time-consuming action is still (appropriately) delegated, and while there are as yet no decisive policy shifts, senior managers become more actively involved in setting the agenda and monitoring progress. Projects are typically run by people who report directly to the board or senior management team, with Directors and Senior Elected Members becoming actively interested (and sometimes directly involved) in projects. There is a focus upon searching for breakthrough performances through experimentation; original thinking is encouraged. Such projects typically take time to set up and to operate; managers' timescales lengthen and are typically three to five years.

This level is not described in Dexter Dunphy's model: we identified it partly from considering experience in Hampshire County Council, partly by reconsidering earlier experience (as an example our work in construction can be best situated at level 4), and partly by reference to the wider organisational literature.

We think that the Hampshire County Council is mostly not operating at level 4. There are many potentially strategic projects on the go (indeed we have been involved in some of them ourselves) but the necessary interactions with senior management that is required seems not to be happening. Indeed organisational routines seem to block rather than facilitate vertical communication. (NB this is not necessarily senior management's fault – such routines can quickly become custom and practice). We would like to stress that this is by no means unusual on this issue.

However we saw evidence that a few HCC departments may be ready to enter this level, or even taking first steps. If so, this provides a great opportunity for HCC as a whole, because the projects in which these departments are involved would provide an ideal opportunity for the sustained involvement of people from the wider council (and indeed community) that can improve capacity more widely.

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Level 5: Strategic responsiveness

"Rethinking how we can operate in a radically changing world"

Level 5 is the first point at which an organisation has climbed far enough up the ladder to have a sustained view over the wall. Climate change responsiveness requires some level 5 organisations able to influence others.

At level 5, the links with the organisation's core strategic thinking have been acknowledged and are being acted upon, decisively and iteratively, by the senior management team. Climate change has become a key theme in mainstream, long-term strategic thinking and day-to-day activities throughout and beyond the organisation. Senior managers are personally involved in setting policies and in framing and overseeing tactical responses (which are of course still delegated). The impacts on organisational resilience are explicitly addressed in areas such as capital, real estate, people, plant, services and products. Managers' timescales are congruent with other major decisions and investment cycles – at least five to ten years.

Level 5 thinking is needed because – for most organisations – climate change will radically affect core operations. Imagine how vulnerable current patterns of service delivery would be to a radical drop in the supply of energy. Imagine the chaos that will be caused by climate impacts – in Europe in 2003, tens of thousands died during the heatstroke (reported as a near certain climate impact by UK Chief Scientist Sir David King in 2005), rivers, roads and railways became unusable for transport, power stations closed down, hospitals couldn't cope.

Climate change represents a significant change in the strategic environment, often over decades, and requires strategic thinking of a high order in order to respond. Most organisations have not yet taken this step, whether in public or private sectors. One that has is Du Pont de Nemours – a leading Chemical Company in the USA. Its CEO, Chad Holliday, is on record as saying that the company needs to be prepared to work effectively within a significantly carbon-constrained economy. Du Pont has a long and distinguished record of significant reductions in carbon emissions (having also earlier played a significant role in the elimination of ozone depleting substances). But even Du Pont does not seem to have taken the adaptation agenda on board as yet.

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Level 6: The champion organisation

'We need to build the networks to sustain change'

Level 5 is strategic in that the organisation recognises and responds to a changing context. This covers the adaptation agenda and can also address the mitigation agenda (adapting to a carbon-constrained economy). But, while important, this is not enough for climate change. As a species we need to halt climate change or we will eventually lose the ability to adapt. We need not just to react to a changing context, but to stabilise and reverse those changes. This is high level strategic work and it requires at least some organisations to be capable of working at level 6.

Consistent performance at this level is extremely rare – Interface Carpets (whose CEO's stated goal is to go beyond long-term sustainability to become 'a restorative organisation') may be the only example. Here issues concerning the role of organisations as servants of society (or not) are addressed. Systematic response has been transcended to achieve systemic response. The understanding, range and nature of significant stakeholder relationships have been extended to include former critics, future generations and the global levels of the economy and ecology. Managers' timescales are linked to global trends – decades and more.

The main business of level 6 is mitigation. But just as mitigation can be handled at level 5 (when framed as adaptation to a carbon-constrained future), so adaptation can be handled at level 6 (because it offers a way into sustained engagement with the issue).

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Pathways for improvement

In consumer marketing, managers talk about '*product, place, promotion, price*', which must all work together in harmony if the new product is to succeed. To begin with, the product must meet a consumer need. Even if it does, however, it will not sell unless it is in the right place (e.g. on the high street, on the web, in the store), unless people know about it and unless the price is right. Each is necessary, but insufficient in isolation.

This is a good metaphor for improving organisational effectiveness on an issue like climate change: research in industry shows that a set of complementary factors need to be addressed together if change is to be effective. Address only one or two and the others will hold change back; indeed things often get worse (because the factors previously worked together reasonably well – changing one alone harms the system but isn't yet enough to establish a new one).

Put more positively, if you are already doing one thing, doing other things becomes much better value. And ambitious change is more likely to be successful than timid change.

Can we identify these complementary 'pathways'? There's bad news, but also very good news:

- Bad news, because every situation is different and it is impossible to identify all pathways for all situations.
- But good news, because some pathways for change apply in all situations on climate change and processes to identify and address other pathways can be included in the core set of pathways.

So what are they? We looked at the literature on personal and organisational learning, resilience and change, including our own earlier work in the ESPACE project. And we looked at what happens in practice.

What did we find? On the next page we identify 9 pathways, all of which are clearly needed for change.

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Identifying the nine pathways for improvement

We have identified three groups of three pathways. It is still early days in the project and these will be reviewed in the ESPACE extension. However we think we are getting very close:

Three strategic pathways:

- (a) Awareness of the issues
- (b) A sense of 'Agency' or the capacity to act meaningfully on the issues
- (c) Leadership that understands the agenda and can take appropriate actions.

Three developmental pathways:

- (d) Champions to lead the way for change
- (e) Association with stakeholder groups, internal and external, to involve and learn from other people
- (f) Learning processes of 'Action and reflection' to make sense of what is happening and to refocus activities (e.g. identifying new pathways).

Three operational pathways:

- (g) The 'Operational control' to turn ideas into action
- (h) The 'Programme coherence' to take learning from one project and use in another
- (i) Strength in identifying and 'Using expertise' appropriately.

These three groups areas overlap of course – each pathway could be seen as strategic, developmental, operational. We received feedback that some might pathways might be put in different categories. But we think that there is a different emphasis in each group and we also we find this a helpful way of remembering them! (More [feedback](#) welcome). Let's go on to look at each in a bit more detail.

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Strategic pathway a: Awareness

What do we mean by 'Awareness'? The extent to which members of the organisation have an appropriate grasp of what the issues mean for wider society, for the organisation and its mission and for their own particular areas of responsibility now and into the future.

Why is it important? 'Awareness' is one of the three core conditions for change identified in the ESPACE project. Champions for change have high levels of awareness and high levels of awareness are required to act skilfully on a complex issue such as climate change. However Awareness is not an 'on – off' switch: developing very high levels of awareness (which are rare) typically takes some years.

How does Awareness develop through the six levels?

Level 1: Head in the sand, don't want to think about it at all.

Level 2: Climate change is happening and in principle it should be addressed – but we don't see that it has anything very much to do with us, action looks costly, and we don't see many significant reasons for us to change.

Level 3: Climate change is an important issue that is likely to affect our organisation in various ways – fiscal, customer preference, costs, etc. We need to get the systems in place to be able to manage the issue in the future.

Level 4: This issue looks bigger than we first thought. We need to find out a lot more about what it means for us.

Level 5: Climate change is a huge issue which will affect every aspect of our organisation. We need to take the implications into account in future planning and in decisions with long run implications.

Level 6: This issue is among the biggest that our planet, let alone our species, has ever faced. We cannot adapt for ever. We might not make it but we have a responsibility to do what we can. Many top level champions are at this level of awareness. While the issue distresses them, they are also moved to act in a sustained way.

Other comments: Most of the population is at level 2 (on this scale – we used a different one in the ESPACE report). This is also true of many environmental managers, even at a fairly senior level. Generally people have most or all of the information they need in order to deepen awareness: more data don't help. The other core 'A's' for change (association, agency, action & reflection) all need to be present if personal awareness is to deepen.

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Strategic pathway b: Agency

What do we mean by 'Agency'? The organisation's capacity to identify opportunities to initiate meaningful, effective, affordable and timely action on the issue of climate change.

Why is it important? Research shows conclusively that awareness does not lead to action (indeed information will be resisted) unless people can see a way of taking action that is meaningful to them personally in response to the information that they receive. In addition, action is sometimes very difficult and costly but '*moments of agency*' can often be identified where actions are much easier. 'Agency' is therefore one of the key 'A's' for change.

How does Agency develop through the six levels?

Level 1: Outsiders have to identify the agency opportunities and more or less force the organisation to take them.

Level 2: The organisation has little or no capacity to identify opportunities for agency itself, but it can recognise and respond to them when identified and put on the agenda by a respected or feared stakeholder.

Level 3: The organisation can recognise the need to act (e.g. legislation, market trends, etc) and so can initiate rather than respond. However it tends to see this as a duty rather than an opportunity and tends not to be skilled at reconciling the operational need with the strategic possibilities.

Level 4: The organisation can recognise some 'moments of agency' where current organisational priorities overlap with the climate change agenda making change easier and opening up win : win possibilities.

Level 5: The organisation clearly understands how its own cost structures and capacities to adapt to a changing world vary over time and can recognise opportunities for strategic actions to increase resilience.

Level 6: The organisation has a strong grasp of the structure of the climate change agenda and of its own interests, capacities and opportunity space to act, and it has a clear sense of when it is timely and effective to take action on the wider issue of climate change itself.

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Strategic pathway c: Leadership

What do we mean by 'Leadership'? The extent to which the organisation's leadership group can appropriately legitimise, support, integrate and participate in the programme.

Why is it important? Leaders often (perhaps usually) do not initiate change. But they do play a critical role. They bestow (or deny) organisational legitimacy to initiatives, they lock or unlock resources and are normally needed to engage with some key stakeholders. Major changes to processes normally need their support; they also play an important (if not the only) role in the culture of the organisation.

How does Leadership develop through the six levels?

Level 1: Leaders actively discourage action, and may forbid it altogether.

Level 2: Leadership is usually not very active, perhaps expressed through naïve or formulaic policies that do not commit to specific actions but which nonetheless provide some limited scope for action by others.

Level 3: The leadership group is prepared to commit to certain actions but typically delegates these and has little direct involvement itself other than occasional review meetings or discussions. Nonetheless this gives others clear scope to initiate and does provide resources within defined parameters.

Level 4: While not yet committing itself to significant changes of strategic direction, the leadership group actively sponsors certain strategic projects, taking a close interest in them and perhaps even participating themselves.

Level 5: Leadership group sees this as a key part of company performance, including it in the mainstream business processes and strategies. The group takes responsibility for some key actions that cannot be carried out by others.

Level 6:¹ *A critical mass within and around the core leadership group will have a clear idea of the organisation's wider role which it will be able to articulate clearly in terms that make sense to a variety of audiences. While also empowering others, this group will take a lead in key areas (e.g. external relationships at a strategic level)*

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¹ Whenever we use italics, it implies that we have not observed this level ourselves but have made our best estimate of what that level would look like.

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Developmental pathway d: Champions

What do we mean by 'Champions'? The organisation's capacity to identify, develop, empower and otherwise support a group or ecosystem of 'champions' so that they can be effective agents of change.

Why is it important? Improving an organisation's 'adaptive capacity' involves change, and if you want change you had better find a champion – indeed, *'no champion, no change'*. Climate change champions tend to have great passion and a thirst for 'agency' – to make a difference by improving performance. Champions with other interests can be very useful when agendas overlap. Offering 'association' through an 'ecosystem of champions' is helpful.

How does the capacity to develop and support a group of champions develop through the six levels?

Level 1: Champions discouraged and may even be forbidden from working. Change efforts may go underground.

Level 2: Champions may be recognised but not in a systematic way. They have to fight for resources, including for time, and experience little support – e.g. training, access to senior decision makers – in their roles.

Level 3: Champions are appointed, but typically because of managerial role or technical competence rather than because of their commitment. Change challenges are barely recognised. Support offered for professional membership, technical training etc. Some champions may become very personally committed to their work but there is usually little or no recognition of and support for the emotional challenges of the role.

Level 4: The importance of champions in change is beginning to be recognised and attempts are made to hire or to develop them. Networks of champions are supported internally with some senior level sponsorship and with various channels to senior levels. However champions may feel unsupported and at risk of burnout.

Level 5: *Champions seen as a key strategic resource of the organisation, with their change role clearly understood. Their value at key moments of change is appreciated and plans are made to have champions in place ahead of time. There is understanding of the emotional stresses of the work and some support is offered.*

Level 6: *Emphasis shifts to developing an ecosystem of champions, both internally and externally. Attention paid to developing the conditions within which champions can flourish. Examples: processes to pass learning from one person / project to another, mentoring, strategic as well as technical development, etc.*

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Developmental pathway e: Association with stakeholders (internal and external)

What do we mean by 'Stakeholder engagement'? The organisation's capacity to involve, respect the needs of, empower, learn from, accept support from and act in partnership with internal & external groups on this issue.

Why is it important? This pathway has been identified as one of the most important to developing adaptive capacity. On a complex issue such as climate change, no one organisation can succeed in isolation: working with other groups improves the quality of decisions taken and also increases the wider social capacity to respond.

How does Stakeholder engagement develop through the six levels?

Level 1: External relationships on this issue are actively discouraged. Unavoidable engagement - e.g. for statutory reasons - is formulaic, leading nowhere. External perspectives seen as irrelevant and often as hostile.

Level 2: Discussions limited to those with perceived power - e.g. clients, suppliers. Little assessment of who stakeholders might be (internal or external) and weak processes for engaging with them.

Level 3: Clear mechanisms for engaging but with groups seen as relevant by the organisation (e.g. clients, suppliers, legislators) with little attempt to look more widely. Internal communication strong where relevant to role. Agenda set by the organisation and 'out of frame' perspectives seen as irrelevant. There may be some reporting.

Level 4: Opportunities for project level working with key internal and external stakeholders to develop capacity and learn together are actively sought out. Agenda is open to negotiation; openness to participation of wider group of stakeholders. Unprompted feedback is welcomed. Communication increasingly seen as two-way.

Level 5: More structured and sustained engagement on key issues, developing networks of relationships and increasing participants' capacity to address them. Recognition of complexity of power relations in stakeholder processes; willingness to explore alternative forms of engagement where these might lead to better outcomes.

Level 6: *Organisation understands that stakeholder engagement can never be perfect but that the effort to engage is nonetheless of great value. Serious attempt to understand wider stakeholder needs and perspectives and to find opportunities where interests align. Builds coalitions of interest groups to take on constraints to change and to tilt the rules of the game to favour responsible decisions. Can look at the whole network of relationships around the issue as offering insights that themselves are of considerable value.*

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Developmental pathway f: Action & Reflection

What do we mean by 'Action and reflection'? The extent to which the organisation has the processes and culture to stimulate learning through creative and responsible experimentation, to make sense of outcomes and wider developments and to use them to improve operational procedures and strategies and to clarify its mission.

Why is it important? Action and reflection is the learning process that sustains change in the four 'A's' of the ESPACE report. Unless there is action, no change occurs; without reflection, mistakes of execution or of underlying approach are not recognised and will be repeated. The process also helps identify key contextual blocks to change and the need for other 'pathways' relevant to the specific situation.

How does Action & reflection develop through the six levels?

Level 1: No learning encouraged at all; indeed it may be actively discouraged.

Level 2: While it may be encouraged, learning is done in the individual's own time, without organisational support.

Level 3: The organisation uses operational processes with a learning dimension - e.g. quality systems, post-project audits, benchmarking or similar. 'Learning' is mainly framed as improving skills by learning from experts: e.g. by participating in professional networks. Learning about deeper purposes and limiting assumptions is not supported.

Level 4: Projects are designed with a learning dimension with recognition of the potential relevance to the broader organisation. Action and reflection processes are designed to explore deeper purposes and limiting assumptions and to test alternatives. Opportunities to share learning with key strategic leaders are designed into the process.

Level 5: The organisation provides structured and sophisticated strategic learning processes on a range of projects involving internal and external participants to identify contextual constraints (e.g. political, economic or social) and to refocus activities in the context of what is learned. These have an increasingly 'second person' feel - i.e. they have been designed in such a way as to make action and reflection part of the culture of the organisation.

Level 6: *The 'learning architecture' of the organisation has been designed to identify and test operating assumptions; the organisation acts as a 'community of inquiry', with processes which potentially enable any employee or stakeholder to initiate fundamental changes (subject to disciplines of evidence, testing, etc). The organisation helps to build wider social learning processes to address barriers to change on this issue.*

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Operational pathway g: Operational control

What do we mean by 'Operational control'? The extent to which the organisation can turn plans into effective action on the ground and can recognise and act on the need to improve its capacity to do so over time.

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

How does Operational control develop through the six levels?

Level 1: No responsibility taken for impact of operations. Little or no data is collected and if it is it is ignored. Even if there is a broader management system, this is not used for sustainability issues and the organisation does not modify operations unless valid for other reasons.

Level 2: May be pockets of good operational practice - e.g. in specific projects or in certain work groups. However these are not supported organisationally and remain vulnerable to key staff moving on.

Level 3: A structured approach to the management of these issues is beginning to appear in much of the organisation - e.g. through ISO 14001 or similar. There will be some supplier improvement activity. This is supported by a system of measurement that supports identification of difficulties and the taking of corrective action. There will be some systematic reporting of climate change-related performance.

Level 4: New approaches to operations are actively explored with the scope extending to key customers and suppliers as appropriate. Creative operational experimentation is encouraged when supported by structured analysis. This implies acceptance of the potential value of some variety of approach in operational processes.

Level 5: The system of control includes plans for resilience of assets and core services under realistic climate scenarios, which are tested periodically. Climate risk profiles are analysed and tested as part of the capital investment process for both adaptation and mitigation and operational plans are in place to reduce exposure. There are systems to log the performance of the operational control system itself and to identify areas for attention.

Level 6: *We do not know enough to draft this yet. Comments welcome!*

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Operational pathway h: Programme coherence

What do we mean by 'Programme coherence'? The extent to which the organisation can develop and participate in a coherent programme of projects and other activities around the agenda, building on earlier activity and recognising a wider context, the different timescales involved, differing agendas, critical paths, etc.

Why is it important? Climate change responses affect so many different aspects of our society that actions will almost invariably run into constraints (e.g. laws, cultures, economic pressures) that lie outside the defined boundaries of the project. Wider change – and therefore climate adaptive capacity – needs these to be addressed.

How does Programme coherence develop through the six levels?

Level 1: Unwilling to participate in projects, let alone in a programme of activity.

Level 2: Does not take responsibility for a programme of activity either internally or as part of a wider network of activity led by others. Participation in projects likely to be on an ad hoc basis without sustained commitment.

Level 3: Able to log operational issues that arise in projects and address them in future activity within its own operations. Likely to see more strategic implications (e.g. broader contextual constraints to action such as laws and government policy, its own organisational culture) as beyond its remit.

Level 4: Able to recognise aspects of the wider system that are holding responses back and of addressing them within the terms of reference of the project. Able to recommend these to top organisational levels for possible action but the programme is not in place for these to be actioned without further authorisation, so further actions will be as separate projects.

Level 5: Takes responsibility for internal and cross-organisational programmes of action, or supports them where led by others, in areas that are relevant to its own responsibilities and interests. Able to log constraints to action and other learning from experience and to initiate other projects to address them, bringing new stakeholders into the process as appropriate at appropriate times.

Level 6: *Able to log constraints to broader system responsiveness and to refer them to other places within the broader system, well beyond its own sphere of influence. More understanding needed!*

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Operational pathway i: Using expertise

What do we mean by 'Using expertise'? The organisation's capacity to recognise and access the necessary skills, understanding and technical expertise to devise a coherent programme and to carry out effective projects.

Why is it important? 'Requisite variety' – having access to enough diversity of perspectives and skills to handle external changes – is a fundamental principle of organisational resilience. In a changing climate, few people (even supposed specialists) have enough understanding (e.g. of design for resilience under forecast climate impacts or of energy network operations): obviously such skills are needed. It is also necessary to know when unfamiliar skills are needed, because many decisions – once taken – are very expensive to reverse.

How does the capacity to use expertise develop through the six levels?

Level 1: No effort is made to identify let alone acquire the necessary expertise

Level 2: Expertise is accessed on an ad hoc basis – e.g. by using employees' skills from previous jobs or by using consultancies – but without being able clearly to specify the skills that are needed. No systematic training needs identification.

Level 3: Can identify skills and expertise that are required in basic operations and has programmes in place to develop them among staff or, where necessary, to hire them in. However it is not as strong at identifying the expertise that is required in non-standard operations or in changeable future conditions and may have significant blind spots as to what it doesn't know. In these areas it risks acting naïvely while wrongly thinking that it is acting entirely professionally.

Level 4: Recognises that it has blind spots, that these might be important and that many others will have them too. Is therefore willing to use experts and networks to identify them and to find people who can help. This means that it is developing the capacity to handle projects that aim to innovate significantly where the required expertise is likely to be held by few people.

Level 5: *Has processes to identify both the skills that are likely to be needed and, equally crucially, when they can be effectively used - i.e. to be able to act effectively in uncertain situations. Probable investment in networking infrastructure to that end. Recognises possible value of expertise even when its immediate relevance is far from clear. Prepared to support staff in developing interests and capacities without any immediate requirement to show organisational relevance.*

Level 6: *We do not know enough to draft this yet. We would expect to see a willingness to develop expertise in broader networks even where beyond the scope of organisation's own activities. Comments welcome!*

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The pathways at the different levels

So how do the pathways interact at each level? We suggest that they are mutually self-reinforcing, that performance on each pathway is affected by performance on each of the others. If one gets too far ahead of the others, then there will be pressure for it to come back into line. Conversely, if one gets left behind the others, there will be pressure for it to develop as well.

Conversely, when one gets ahead of the others, it may also act as an accelerator. If one gets left behind, it can act as a brake.

Take a look at what happens at each level on the following pages. We think that you will agree that they form a coherent set of practices. But [feedback](#) is always welcome – this is a project in progress!

We would like to stress that we have observed virtually all of these levels at various times in different organisations. They have not always been activated for climate change (particularly at the higher levels) but we know that these levels of performance are in principle achievable.

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Level 1: Resistant – how the pathways interact

(a) Awareness: Head in the sand, don't understand it, don't want to think about it at all.

(b) Agency: Outsiders have to identify the agency opportunities and more or less force the organisation to take them.

(c) Leadership: Leaders actively discourage action, and may forbid it altogether.

(d) Champions: Champions discouraged and may even be forbidden from working. Change efforts may go underground.

Level 1: Resistant
If we keep our heads down, it might go away!

(e) Association: Actively discouraged; any engagement leads nowhere. External perspectives seen as irrelevant and often as hostile.

(f) Action/reflection: No learning encouraged at all; indeed it may be actively discouraged.

(g) Operational control: No responsibility taken for impact of operations; will not willingly modify them. Little or no data collected or used.

(h) Programme coherence: Unwilling to participate in projects, let alone in a programme of activity.

(i) Expertise: No effort is made to identify let alone acquire the necessary expertise

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Level 2: Compliant – how the pathways interact

(a) Awareness: Climate change is happening and someone probably ought to do something about it – but we can't see how it affects us and so it's not on our agenda right now!

(b) Agency: Little or no capacity to identify opportunities for agency itself, but may be able to recognise and respond to them when asked or told to do so by a respected stakeholder.

(c) Leadership: Not very active, perhaps expressed through naive or formulaic policies that do not commit to specific actions but which nonetheless provide some limited scope for action by others.

(d) Champions: May be recognised but not in a systematic way. Have to fight for resources, including for time, and experience little support – e.g. training, access to senior decision makers – in their roles.

Level 2: Compliant
'We don't have much impact on climate change'

(e) Association: Limited to those with perceived power - e.g. senior elected members, legislators. Little assessment of who broader stakeholders might be; weak processes for engaging with them.

(f) Action/reflection: While it may be encouraged, learning is done in the individual's own time, without organisational support.

(g) Operational control: May be pockets of good practice. However these are not supported organisationally and remain vulnerable to key staff moving on.

(h) Programme coherence: Does not take responsibility for a programme of activity. Participation in projects is on ad hoc basis without sustained commitment.

(i) Expertise: Usually willing to learn from people with more experience; unable to specify the skills that are needed. No systematic training needs identification.

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Level 3: Efficient management – how the pathways interact

(a) Awareness: This is an important issue that is likely to affect our organisation in various ways. We need to get the systems in place to be able to manage the issue in the future.

(b) Agency: Can recognise the need to act and so can initiate rather than respond. Tends not to be skilled at reconciling the operational need with the strategic possibilities seeing duties not opportunities.

(c) Leadership: Prepared to commit to certain actions but delegates with little direct involvement other than occasional review meetings. Nonetheless this gives others scope to initiate and to access resources.

(d) Champions: Appointed, but seen as managerial or technical rather than as a change role. Professional development offered but little or no support with the emotional burdens of the role.

Level 3: Efficient management
"We've got this issue under management control"

(e) Association: Mechanisms exist where seen as relevant by the organisation; little attempt to look more widely. Internal communication strong where relevant to role. There may be some reporting.

(f) Action/reflection: Uses operational processes with a learning dimension. 'Learning' is framed as improving skills by learning from experts. Few opportunities for deeper learning.

(g) Operational control: A structured approach is beginning e.g. through ISO 14001. Data collected and used – some supplier improvement activity.

(h) Programme coherence: Able to log tactical issues that arise in projects and address them in future activity. Broader issues likely seen as outside remit.

(i) Expertise: Can identify expertise required for basic operations and has programmes in place to develop them. Much weaker for non-standard operations or in uncertain futures.

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Level 4: Strategic experimentation – how the pathways interact

(a) Awareness: This issue looks bigger than we first thought. We need to find out a lot more about what it means for us all.

(b) Agency: Can recognise some 'moments of agency' where current organisational priorities overlap with the climate change agenda making change easier and opening up win : win possibilities.

(c) Leadership: While not yet committing to significant changes of strategic direction, leaders actively sponsor strategic projects, taking a close interest and perhaps even participating directly.

(d) Champions: Their importance for change is beginning to be recognised. Networks of champions are supported internally with some senior level sponsorship. However some may still feel unsupported.

Level 4: Strategic experimentation
'We need to learn what this agenda means for us'

(e) Association: Opportunities to work and learn with internal and external stakeholders with different views actively sought. Agenda more negotiable; unprompted feedback welcome. Communication more two-way.

(f) Action/reflection: Projects designed for learning, recognising potential relevance to whole organisation. Reflection processes designed to explore deeper purposes and assumptions and to trial alternatives.

(g) Operational control: Creative operational experimentation, supported by structured analysis. The strategic value of process diversity is recognised.

(h) Programme coherence: Can recognise and address project-level constraints. Can recognise broader level constraints but needs top management support to act.

(i) Expertise: Aware that there are probably blind spots, that these might be important, and that many others will have them too. Is therefore willing to use experts and networks to identify them and to find people who can help.

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Level 5: Strategic responsiveness – how the pathways interact

(a) Awareness: Climate change is a huge issue which will affect every aspect of our organisation. We need to take the implications into account in future planning and in decisions with long run implications.

(b) Agency: Clearly understands how cost structures and capacities to adapt to a changing world vary over time and can recognise opportunities for strategic action to increase resilience.

(c) Leadership: Leadership group sees this as a key part of corporate performance, including it in core processes and strategies and taking direct responsibility for some key strategic actions.

(d) Champions: Seen as a key strategic resource, with their change role clearly understood. Plans are made to have champions in place ahead of time. Support for emotional stresses is available.

Level 5: Strategic responsiveness
"Rethinking how we can operate in a radically changing world"

(e) Association: Long term engagement on key issues, developing networks & building participants' capacity on the issue. Willingness to explore alternative approaches where might improve outcomes.

(f) Action/reflection: Structured, sophisticated strategic learning processes with more of a 'second person' feel - i.e. designed to make action & reflection the cultural norm.

(g) Operational control: Plans for resilience under realistic climate scenarios,. Climate risks included in capital investment with plans to reduce exposure.

(h) Programme coherence: Leads & supports internal & cross-organisational programmes of action in areas relevant to its own responsibilities & interests.

(i) Expertise: Develops networks & processes to identify & source skills likely to be needed at key points. Supports people & groups to develop interests & capacities even when payoff not yet clear.

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Level 6: The champion organisation – how the pathways interact

(a) Awareness: This issue is among the biggest that our planet, let alone our species, has ever faced. We cannot adapt for ever. We might or might not make it but we have a responsibility to do what we can.

(b) Agency: Has a strong grasp of the structure of the climate change agenda. Understands its own capacities and opportunities to act on the wider issue of climate change itself & when it is timely to do so.

(c) Leadership: Core group has a clear idea of the organisation's wider role which it can articulate clearly in terms that make sense to a variety of audiences. While empowering others, group takes responsibility itself in key areas.

(d) Champions: Emphasis shifts to developing an ecosystem of champions, both internally and externally. Attention paid to developing the conditions within which champions can flourish.

Level 6:
The Champion Organisation

'We need to build the networks to sustain change'

(e) Association: Serious attempt to understand wider stakeholder needs & to build coalitions to take on constraints to change, tilting odds to favour good decisions. Knows effort can never be perfect but that it offers great learning.

(f) Action/reflection: 'Learning architecture' designed so that organisation acts as 'community of inquiry', and to build wider social learning processes to address barriers to change on this issue.

(g) Operational control: *We do not know enough to draft this yet. Comments welcome!*

(h) Programme coherence: Can log broader system constraints & refer them to suitable places, well beyond its own sphere of influence. *More needed in this area!*

(i) Expertise: Probable willingness to develop expertise in broader networks even where beyond the scope of organisation's own activities. *More needed in this area!*

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Challenges to this approach

There are obviously questions about an approach like this. For instance:

- Are these levels what we see in practice?
- Do we have to go up the levels step by step or can we leap ahead?
- Are these the only important pathways?
- What's the point of doing this work – does it risk paralysis by analysis?

The ESPACE continuation project will help to answer questions like these, as well as develop these ideas into an operational tool that can be used to take stock of the current situation and to make plans for improvement. And we would appreciate your own [questions or challenges](#). But here is a first response to the questions above:

Are these levels what we see in practice?

Broadly yes. We first observed that progress took place in levels in a successful environmental improvement project in industry between 2000 and 2003. Dexter Dunphy published research that was consistent with our earlier experience, and on which we have drawn, in 2003. We have added level 4 because the stretch from level 3 to 5 seemed too wide to us, because other research (from Elliott Jacques) suggested that there was a missing level and because experience in HCC suggested that another level made more sense. Of course other levels may emerge, but we anticipate that they will be higher (e.g. between levels 5 and 6) rather than lower.

Do we have to go up the levels step by step or can we leap ahead?

A bit of both! In practice, in earlier projects, we have seen most activity proceeding step by step, with performance on the pathways moving broadly in parallel. If one pathway lagged, then progress tended to lag overall. However we see progress as being more like climbing a ladder than climbing stairs. Although there may be some movement ahead of the status quo as the hands move onto higher rungs, most of the weight is borne by the feet. So although there might be some experiments at level 4 or even beyond, for most organisations today much of the work is still at level 3 – getting good operational management in place is a never ending process!

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Challenges to this approach (continued)

Are these the only important pathways?

We expect that the pathway descriptions are more likely than the levels to change and develop in the ESPACE extension project. We do not think that they are currently wrong, more that we will identify some gaps and that some redefinition will be necessary as a consequence. We are already wondering how best to include some qualities. For instance, 'association', a key element of the 4 'A's' for change, is currently covered under the pathway of stakeholder engagement – is this enough, or is it fine as it is? The pathways are also quite pragmatic at present. We know that organisational cultural aspects do matter but think that the current pathways already implicitly include many of the qualities that help move cultures forward. On the other hand, we could add a cultural pathway – but this seems more likely to be contentious. Again, [feedback or comments](#) welcome!

What's the point of doing this work – does it risk paralysis by analysis?

Backed by the experience of our successful project from 2000 to 2003, we think that this is useful in taking action. Rather than risking paralysis by analysis, we found that managers appreciated the chance to make sense of where they currently stood and that this helped them to consolidate progress and to take the next step.

We think that much activity on climate change has got stuck at level 3. While work at this level is undoubtedly helpful, we think that it is not enough and that a nudge forward is needed. This project is aimed at building realistic ambition to encourage organisations to move forward!

We think that this tool can be useful to many types of people, including: top managers, who want to make sense of progress; change agents, who want to know where to put their attention; external and internal consultants and advisers, who need to be able to identify and argue for work that is likely to make a difference; and to citizens who need to identify and request the help that they need to take the next step.

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Early experience of using the tool

We have used this tool in both South East Climate Change Partnership and in Hampshire County Council.

Hampshire County Council. We conducted this work in parallel with developing a strategy and action plan for climate change. We helped Doogie Black of the Environmental Futures team to develop an appreciative questionnaire that he was able to take into discussions with senior departmental managers. This process both used draft pathways (developed from prior experience and from a review of wider research) and tested and improved them – we found some descriptions that needed clarification, particularly at level 2. This reflective process showed that many of the descriptions worked well but that level 3 was too broad; level 4 was developed to address this problem, supported by wider research evidence. Results of the questionnaire process were then reviewed in detail for four departments.

South East Climate Change Partnership. Following initial experience with HCC, we were asked to review how the tool might apply to a partnership. This required us both to consider the difference inherent in partnership working, also the needs of partner organisations, which are obviously at different levels. We held conversational interviews with individuals involved in the partnership with a good overview of SECCP's work and the development of the organisation as well as specific knowledge and expertise with various sub groups. We fed back conclusions to these people for their comments and additions. We also briefly explored ESPACE experience. We then held an in-depth review meeting with Mark Goldthorpe, the then SECCP Manager, exploring what might enable the partnership to go further.

A well-known fast moving consumer goods company. We used the draft tool in a reflective strategic discussion (exploring level 5 strategic issues in order (probably successfully) to set up a level 4 project) in the UK subsidiary of one of the world's best-known fast moving consumer goods companies. The participants were two levels of reporting away from the UK CEO and from the Global Corporation's Board of Directors.

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Lessons from using the tool

- **The tool has high initial credibility.** People are generally open to the idea of the levels and the pathways. The tool has a perhaps paradoxical 'mainstream' feel, despite its pointing the way to levels of organisational functioning that are far beyond the status quo. The tool takes a little time for someone to understand, but then quickly helps to develop a language for change.
- **The initial credibility of the tool rests on case examples, but there are plenty of these.** Many of the descriptions are of what we have seen or done ourselves, but they fit with other people's experience as well.
- **People can place their own organisation at an appropriate level quite quickly.** Working with collaborative users, they are able to self-assess quite quickly, and to do so reliably.
- **The tool produces credible results, helping users go beyond first impressions.** Analysing levels across the pathways tends to suggest that performance does improve across the pathways roughly in parallel. Using the tool helps to distinguish between a keen early stage level 3 (which makes a good impression) and a later stage (e.g. ready to enter level 4) where there is more questioning, less early enthusiasm.
- **Using the tool helps to clarify where a difference can be made.** In particular, since so many organisations are stuck at level 3 and below, using the tool helps to clarify the value of level 4 initiatives and to frame an intervention at that level. The level 4 and higher dimensions are often new to people.
- **The tool has been shown to work well with motivated and informed users but as yet needs testing in less supportive relationships.** We have worked primarily with people who have a strong wish to improve organisational performance. They welcome the tool. Developing a structured gathering of evidence in less collaborative relationships is important; this will be addressed as part of the ESPACE extension project.

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Initial results – Hampshire County Council

David Ballard of ABL and Doogie Black of the Environment Futures Team in HCC met to analyse interviews from four contrasting service areas that the latter had interviewed during his action planning exercise. Useful insights were gained; these analyses will be fed back to those departments for comment and review.

Here is a brief description of three of them.

Service area A: In department X, this service area has significant capital and service responsibilities with direct relevance to climate change. The management appreciates that it cannot look backwards but lacks familiarity with the processes (e.g. strategic leadership and action and reflection) to move forward. It has high levels of awareness (moving beyond 4 towards 5) and recognises agency opportunities where actions can be taken cost effectively (level 4). On the other hand, action and reflection processes are much weaker (level 2, moving on to 3). No provisional score could be allocated for two attributes; the others were all provisionally scored at 3.

Service area B: In department Y, this service area's connection to climate change is less obvious, requiring higher levels of awareness to recognise it. 8 of the 9 pathways could be given a provisional score. All but one of these were at level 3 or slightly below. For instance, management was aware that there are relevant issues but didn't yet know what they were (i.e. it recognised but had not yet begun level 3 work). The leadership recognised that work needed some direction (e.g. by setting targets) but hadn't yet done so (again, entering level 3). Champions were recognised by role and not by commitment or capacity for change (e.g. a known champion was not mentioned). The management was uncomfortable talking to stakeholders until its own house was in order; this however missed the potential learning benefits of joint working. Some use of external experts on a project perhaps pointed to early level 4 engagement on pathway i). Overall, this service area was clearly entering level 3, with most scope to accelerate progress by engaging its senior management on the project that it is entering with external support.

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Initial results – Hampshire County Council (cont)

Service area C: In department Z, this service area has major capital project responsibilities with direct relevance to climate change. We were able to allocate a provisional score to all nine of the pathways. This service area (and, we suspect, other service areas in department Z) seems to have made very strong progress at level 3 and to have entered, or to be expressing a wish to enter, level 4 on most if not all pathways. For instance, there was a strong grasp of the mitigation agenda and recognition that adaptation is important (although the grasp of detail is not yet so great). The service area seems to grasp that there are win: win opportunities (pathway b, level 4) but might still adopt a level 3 mindset to these. We sensed that this agenda is not far from being seen as central to the wider department's core strategy (late level 4). Champions are well supported and there are potentially strong and long-lasting stakeholder processes (again, late level 4). Management has a non-arrogant approach to expertise, recognising its own but also recognising that it has much to learn (level 4). Areas that might lag a little (competent level 3 but articulating the need to move to level 4) include operational control (a wish for more responsible experimentation in projects), action and reflection (post-project audits in place, regular technical seminars, but not yet confident in action experimentation processes) and programme coherence (recognising that it is identifying issues of broader significance, not yet confident in its mandate to explore these in the wider organisation).

Conclusion: This service area seems to be at the very forefront of HCC practices, and of practice more generally, and could provide an important focus to help other parts of the council, including senior officers and top members, plus the wider community, to move quickly to higher levels. We suggest that this would provide a suitable host service area for discussions on how HCC could more rapidly climb the adaptive capacity ladder.

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Some possible next steps: Hampshire County Council

This project, even in the early stages, nonetheless raises important issues and opportunities for HCC. Possible next steps include:

- The analysis in the preceding [section](#) can be shown to the various service areas, and revised as appropriate, so that they can use it to identify questions they want to explore and plans they want to make.
- We suggest that the general results are already strong enough to form an important aspect of a climate change strategy and action plan.
- In particular it seems clear that HCC can build on the strong practice in [Service Area C / Department Z](#) to develop the wider organisation. For instance, they could be invited to participate in the ESPACE continuation project.
- We suggest that the learning from this project is already robust enough to be shared with the HCC Climate Change Commission, involving it and senior officers in discussions as to how the ESPACE extension project can be approached to accelerate responses to climate change within HCC and the County of Hampshire.
- This is an innovative and potentially very helpful change tool that could be of much wider relevance in raising the quality of discussions about climate change responses in the public sector. We would be very interested in participating with senior HCC management in discussing it with appropriate national bodies, including the LGA, the Audit Commission, the Sustainable Development Commission and/or the National School of Government.

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Next steps in developing the change tool

This has been a brief initial project which will set the scene for the more detailed analysis planned for the ESPACE extension project from late 2007 to early 2008. This project will:

- Review this initial report and revise the descriptions of levels and pathways in the light both of experience and of further engagement with literature and research.
- Develop rich descriptions of what the levels and pathways look like in practice for public bodies with spatial planning responsibilities that relate to climate change.
- Develop detailed protocols for gathering evidence and for assessing current performance in a rigorous way, capable of supporting conclusions in a corporate environment that is not necessarily as actively and positively interested as our early partners have been.
- Understanding more about how this tool can be made available as quickly as realistically possible for internal use by ESPACE partner organisations and others.
- Agreeing and carrying out initial surveys in a selection of ESPACE partners, currently including SECCP, Hampshire County Council, the UK Environment Agency and VROM in the Netherlands.

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How you can get involved

This project is an early output from a research project that will continue as part of the ESPACE extension project (www.espace.org) which will run from the autumn of 2007 to the Spring of 2008. While conclusions are likely to be of broader relevance, this project will focus this work increasingly on issues of adaptation and mitigation to climate change in a spatial planning context. The intention is to create a self and peer-assessment change tool that can be used by ESPACE partners either immediately or (more likely) after an initial period of training.

A wider range of ESPACE partners will be involved in this main phase of the project. We would be keen to hear from other organisations, in public or private sectors, who might be interested – with no commitment on either side – in exploring whether participation might be possible.

Please contact David Ballard at the [address at the end of this report](#) or Doogie Black at Hampshire County Council (01962 846237, doogie.black@hants.gov.uk) if you would like to discuss further.

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About the authors

This work was undertaken by David Ballard with contributions from Rupesh Shah (for the work with SECCP) and from Susan Ballard, all of Alexander Ballard Ltd.



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We were also greatly assisted by our colleague Melanie Newman, who was engaged in a complementary project in Hampshire County Council at the same time: melanie@alexanderballard.co.uk.

Our biographies can be found at www.alexanderballard.co.uk/people.php

The work would have been impossible without the active participation and encouragement of our clients. These were Doogie Black of the Environmental Futures Team of Hampshire County Council's Environment Department and Mark Goldthorpe, Manager of the South East Climate Change Partnership until March 2007.

We also thank the members of ESPACE, SECCP and HCC who gave us time during this initial phase of the project.

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Feedback

We would very much welcome comments, criticisms, feedback or suggestions in any form that you wish.

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Appendix One: The brief for this project

INTRODUCTION / BACKGROUND

Hampshire County Council (HCC) as a partner in the ESPACE Project has requested that Alexander, Ballard & Associates (ABA) furthers their work with HCC in delivering our next ESPACE Action. Building upon the behaviour change principals and understanding ABA have developed in both the ESPACE work and the HCC “Champions” contract we would like to develop HCC as ESPACE Partner Action 9, entitled: “Develop Mechanisms and Techniques to Influence Planning Networks at the Local Authority Level Whilst Engaging Those at a Regional”.

If funding is made available from the South East Climate Change Partnership then value will be added and the application of the work broadened.

The following brief details the aims and objectives of the work to be carried out.

Aim & Objectives:

1. Develop Hampshire County Council’s understanding of its existing ability to adapt to the consequences of climate change (i.e. developing a better understanding of HCC’s “adaptive capacity”
2. Develop Hampshire County Council’s understanding of existing ability to mitigate the effects of climate change.
3. Using ‘Matrix & Pathways Analysis’, develop pathways descriptions that can assist, influence and inform Hampshire County Council when making spatial planning and strategic development decisions about climate change mitigation and adaptation.
4. Increase organisational and individual aspirations through articulating a vision of what truly excellent climate change practice might look like.
5. Make recommendations on how this work can be used to develop future steps in HCC.

n.b. although this work is not limited to “spatial planning”, as it forms part of the ESPACE Project, a spatial planning dimension will need to be present and clearly identified.

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Appendix Two: List of work undertaken

In this initial project we undertook the following actions:

Activity

Project management

1. Preparatory

- Developing preliminary definitions

2. Scoping

- Scoping research – e.g. background reading
- Reviewing ESPACE / SECCP sources
- Clarifying 'agency space' for local authorities and other bodies in this area

3. Early development

- Support Doogie Black interviews in HCC
- Identify external case examples

4. Making sense together

- Joint meetings with Doogie Black

5. Develop pathways

- Drafting and checking against internal interviews
- Checking against early examples of external best practice
- Final drafting

6. Closing down

- Documenting conclusions, including this report.

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Appendix Three: Some of the key sources used

A large number of theoretical and research sources were used in developing this change tool, reinforcing the learning from internal interviews and from prior experience. As with the research approach described in the 2005 ESPACE Behavioural Change Project, we believe that this blend of academic research and applied theory, of direct experience and of the results of action experiments in HCC and other organisations gives high and increasing validity to the project's outcomes.

Core sources include:

- Elliott Jacques & Stephen D. Clement, 1994. Executive Leadership: A Practical Guide to Managing Complexity. Cason Hall & Co.
- Dexter Dunphy, Andrew Griffiths & Suzanne Benn, 2003. Organizational Change for Corporate Sustainability: A Guide for Leaders and Change Agents of the Future. Routledge.
- Dalmar Fisher, David Rooke & Bill Torbert, 2000. Personal and Organizational Transformations through action inquiry. Edge\Work.
- Yossi Sheffi, 2007. The Resilient Enterprise. The MIT Press.
- Michael Carley and Ian Christie, 2000. Managing Sustainable Development. Earthscan.
- W. Ross Ashby (1956) on Requisite Variety in 'An Introduction to Cybernetics'. Chapman & Hall.
- Our own work on behavioural change (and the sources quoted therein) undertaken through the ESPACE project ('How can local authorities stimulate and support behavioural change in response to climate change'), plus our work on Champions ('Warm Hearts and Cool Heads: the Leadership Potential of Climate Change Champions'), with the Environment Agency on water and on analysing context in change for sustainability.
- Various papers and research reports, including Nonaka's (1994) 'Dynamic Theory of Organisational Knowledge Creation', Miblin's (1976) Organization Development: Public Sector Theory & Practice and Berkhout & Hertin's (2004) Business and Climate Change: Measuring and Enhancing Adaptive Capacity: The ADAPT project.

A fuller list of sources may be obtained by [contacting David Ballard](#). He would welcome any suggestions for further reading.

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