

West Midlands Regional Adaptation Network (RAN)

Thursday 9th October 2025



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Combined Authority



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Welcome and Introduction



Purpose of the Regional Adaptation Network (RAN)

To connect and build the skills and knowledge of people who have a role in preparing the region for climate change. The Network is part of the new, wider West Midlands Adapt project.

Mentimeter poll

- What sector do you represent?
- How familiar are you with climate adaptation?



Mentimeter QR code
Join at menti.com



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Agenda

Time	Item	Speaker
13:00-13:10	Welcome and high-level introduction to WM-ADAPT and the RAN • Soft launch of Climate Adaptation Literacy	Beth Haskins & James Hodgson
13:10-13:30	What enables climate adaptation – what is adaptive capacity and capability? • Adaptive Capacity Assessment Tool	Nick Pyatt (Climate Sense)
13:30 – 14:00	Member presentation on impacts and adaptations: • Network Rail Q&A	Ian Russell (Network Rail)
14:00-14:30	Interview Panel Interview panel – member experience of the Adaptive Capabilities Tool	Sarah Greenham (UoB)
14:30-14:40	Room discussion What are barriers to improving adaptive capacity? What tools and resources do you have access to, or would you like to improve your capabilities?	Sarah Greenham
14:40-15:00	Wrap up • Register to undertake the adaptive capacity survey • Climate Adaptation Literacy demo • Forward plan – what's coming up? • Ask to circulate wider invite	Beth Haskins & James Hodgson Katie Jepson

What is adaptive capacity?

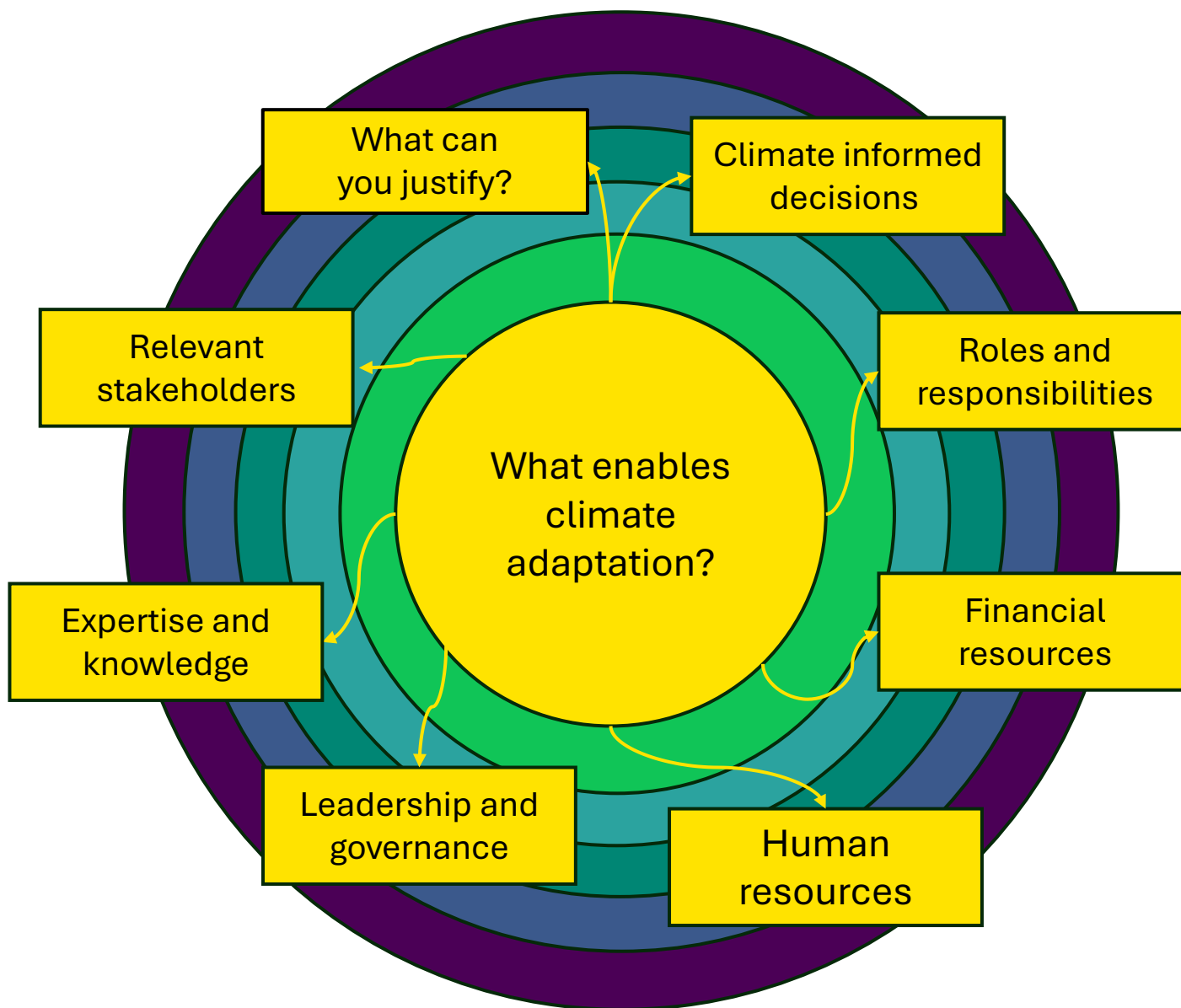
Nick Pyatt, Climate Sense



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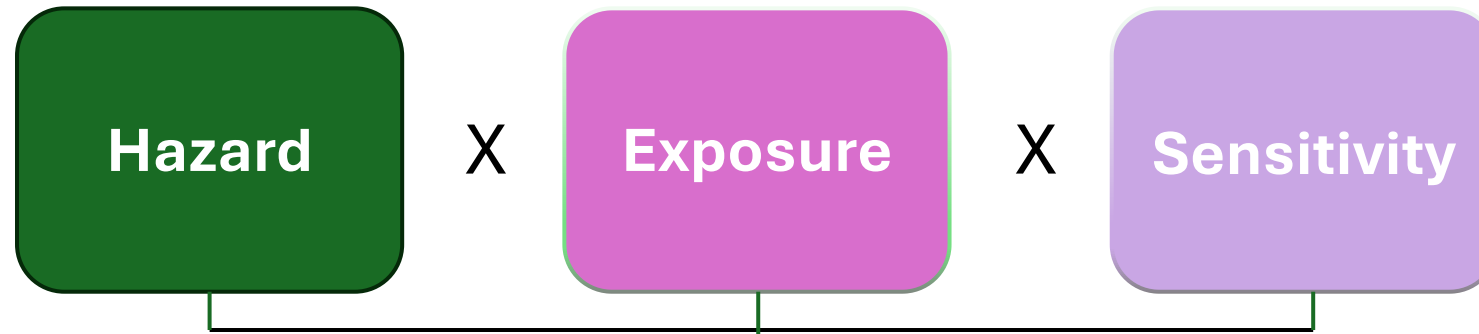


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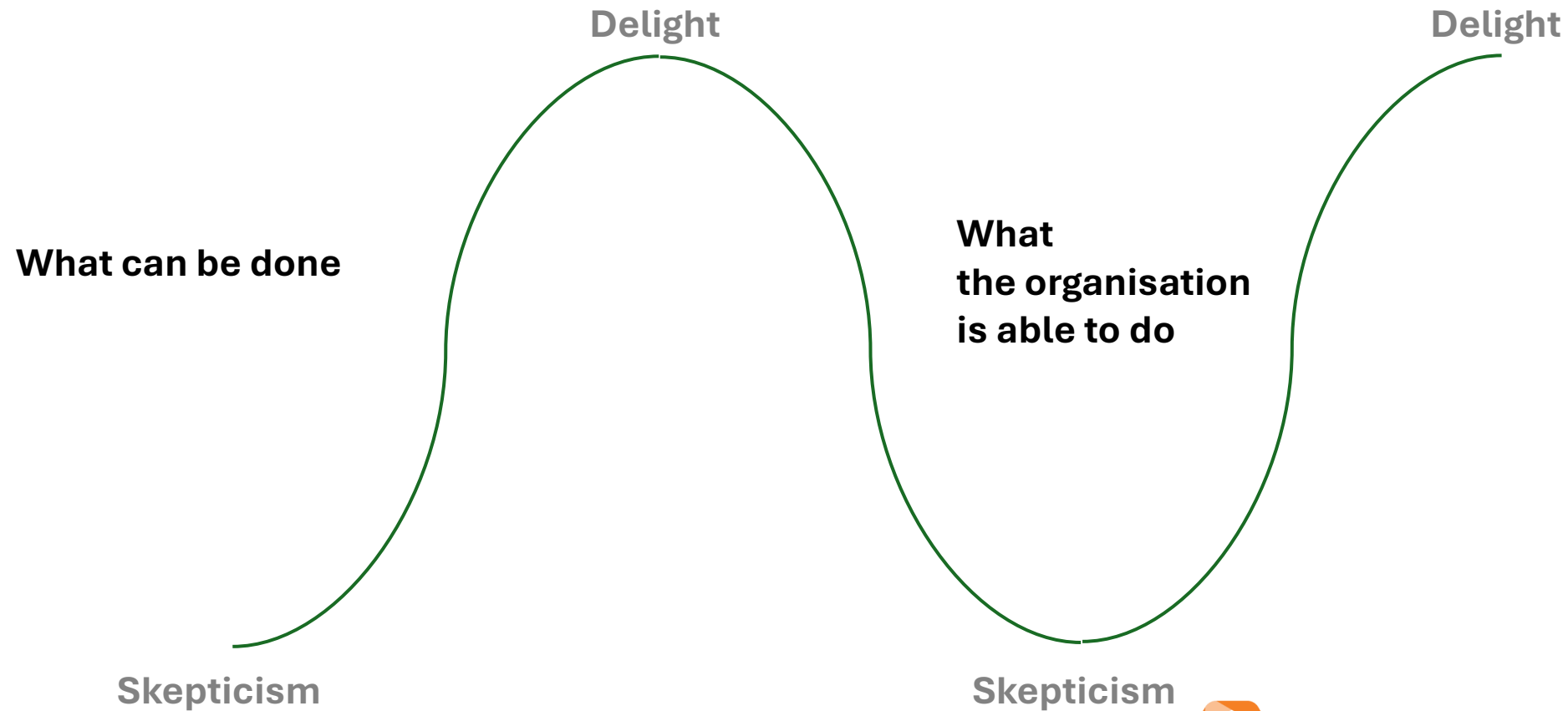


What is adaptive capacity?

Vulnerability to climate change



An emotional response to different types of adaptive capacity



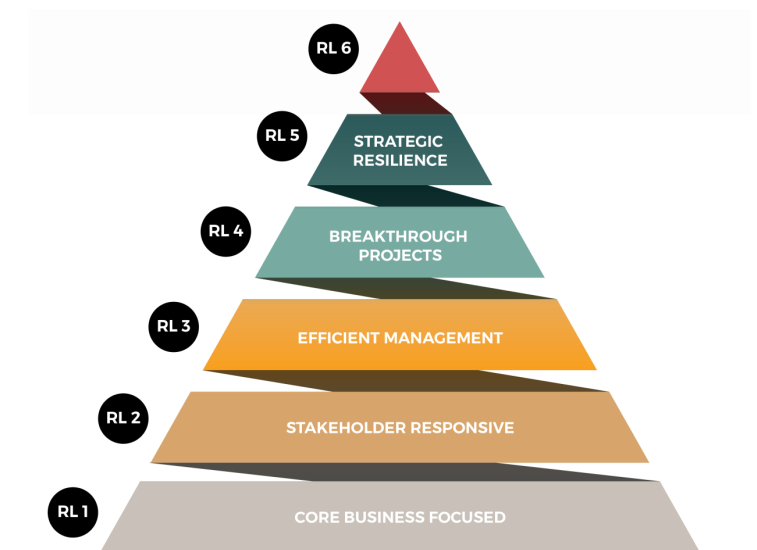
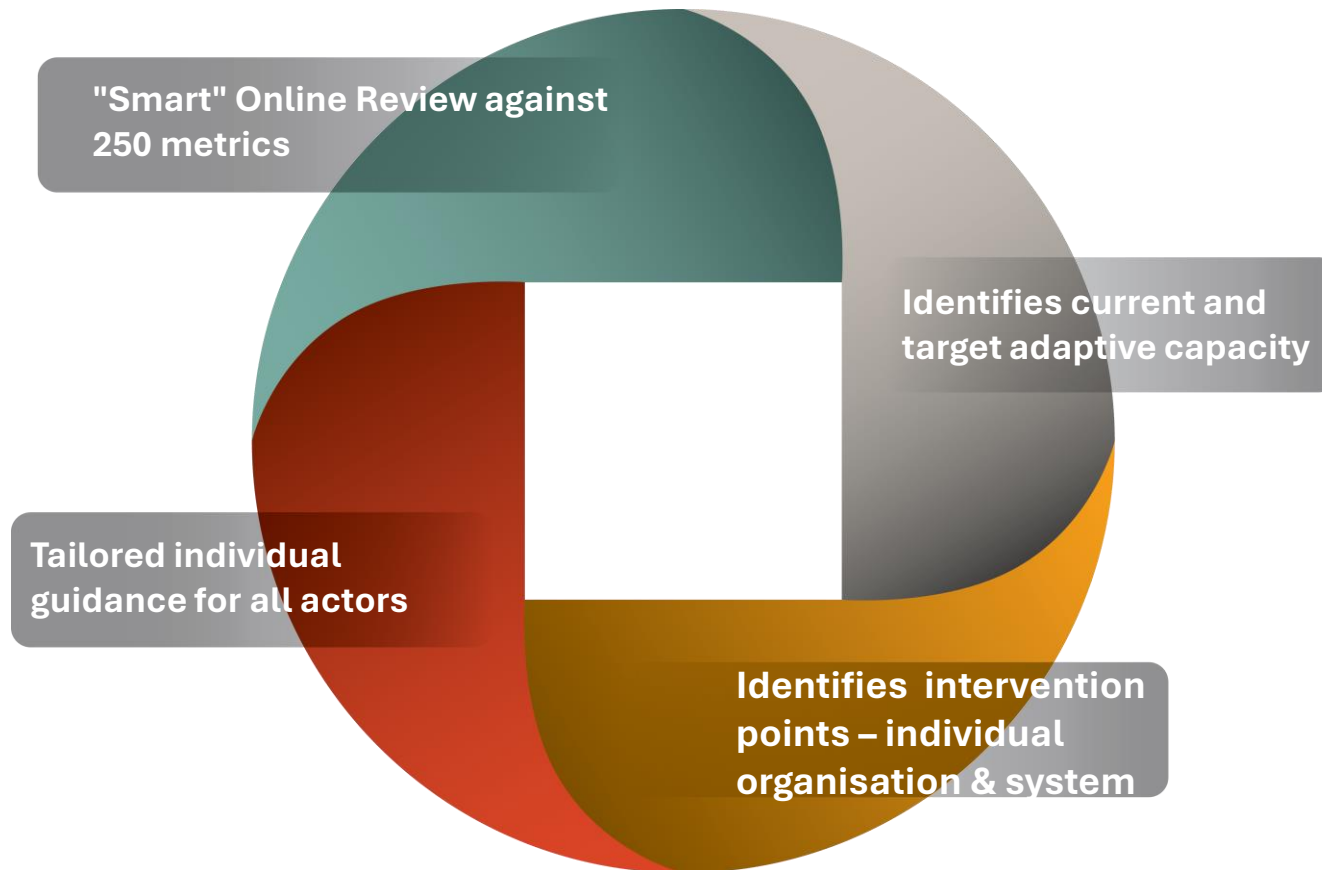
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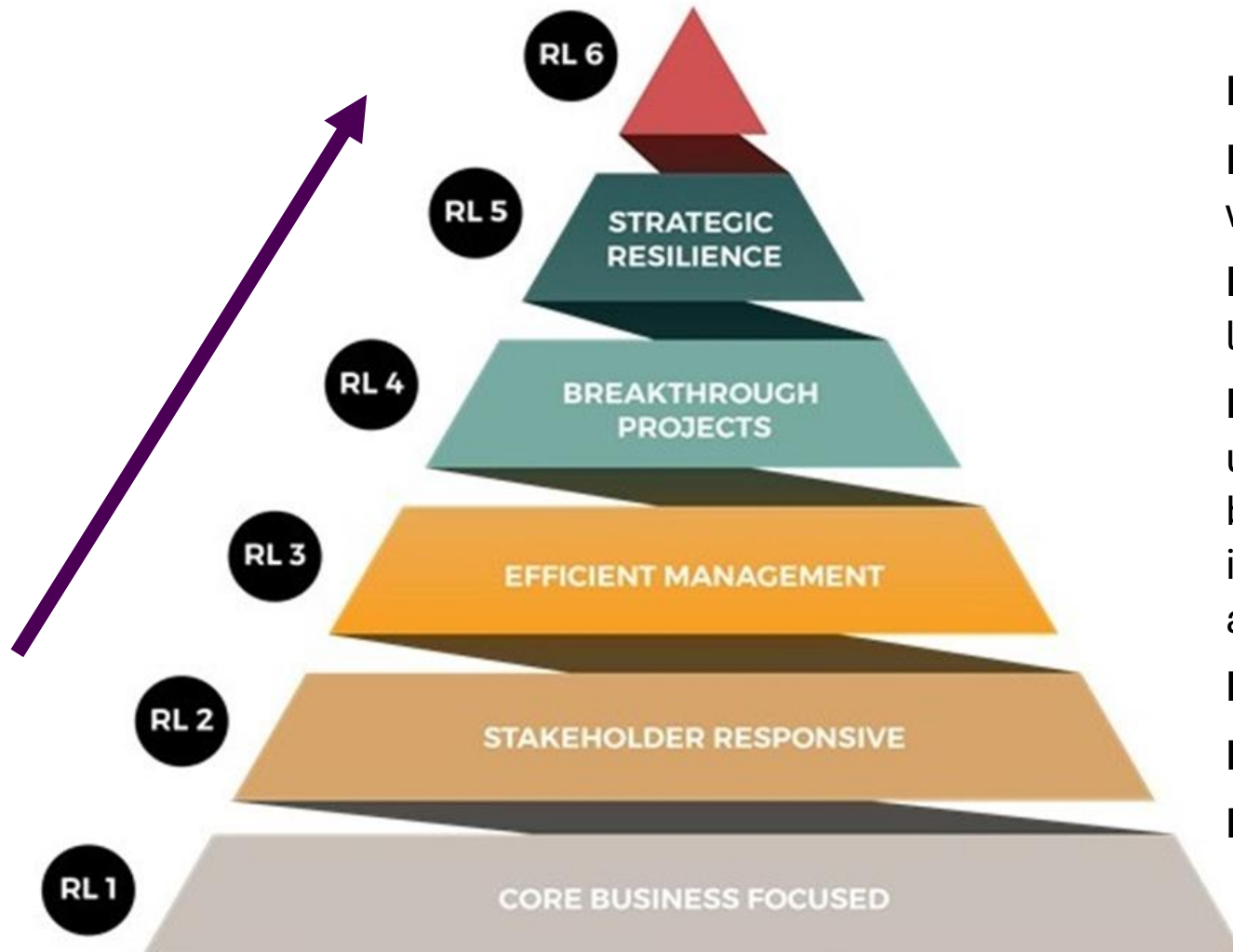
Introducing the CaDD (Adaptive Capacity Diagnosis & Development) Tool



A rapid & highly scalable automated assessment of the skills, knowledge, resources and overall capabilities you have to manage climate risks. Available to multiple actors in a system - both internally and externally.



Different responses to climate change risk



RL = Response Level

RL6: Champion organisation - goes beyond what we ask most organisations to consider.

RL5: update its operating procedures based on lessons learned from all RLs to retain that capability.

RL4: it's capability to manage climate change uncertainties includes looking out for, and being able to spot emerging risks and opportunities it hasn't had to deal with before, work out how to address it

RL3: it gets the best from its existing processes:

RL2: it is good at compliance

RL1: it pays attention to core business

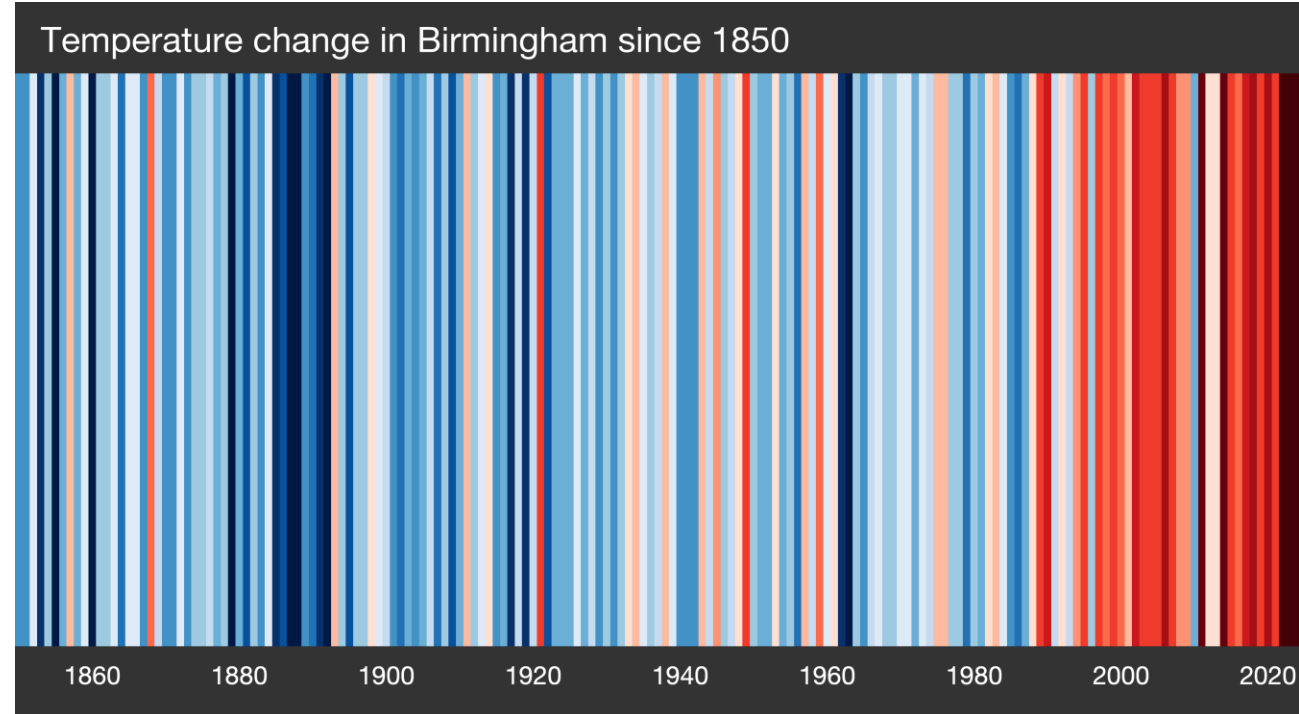
#ShowYourStripes



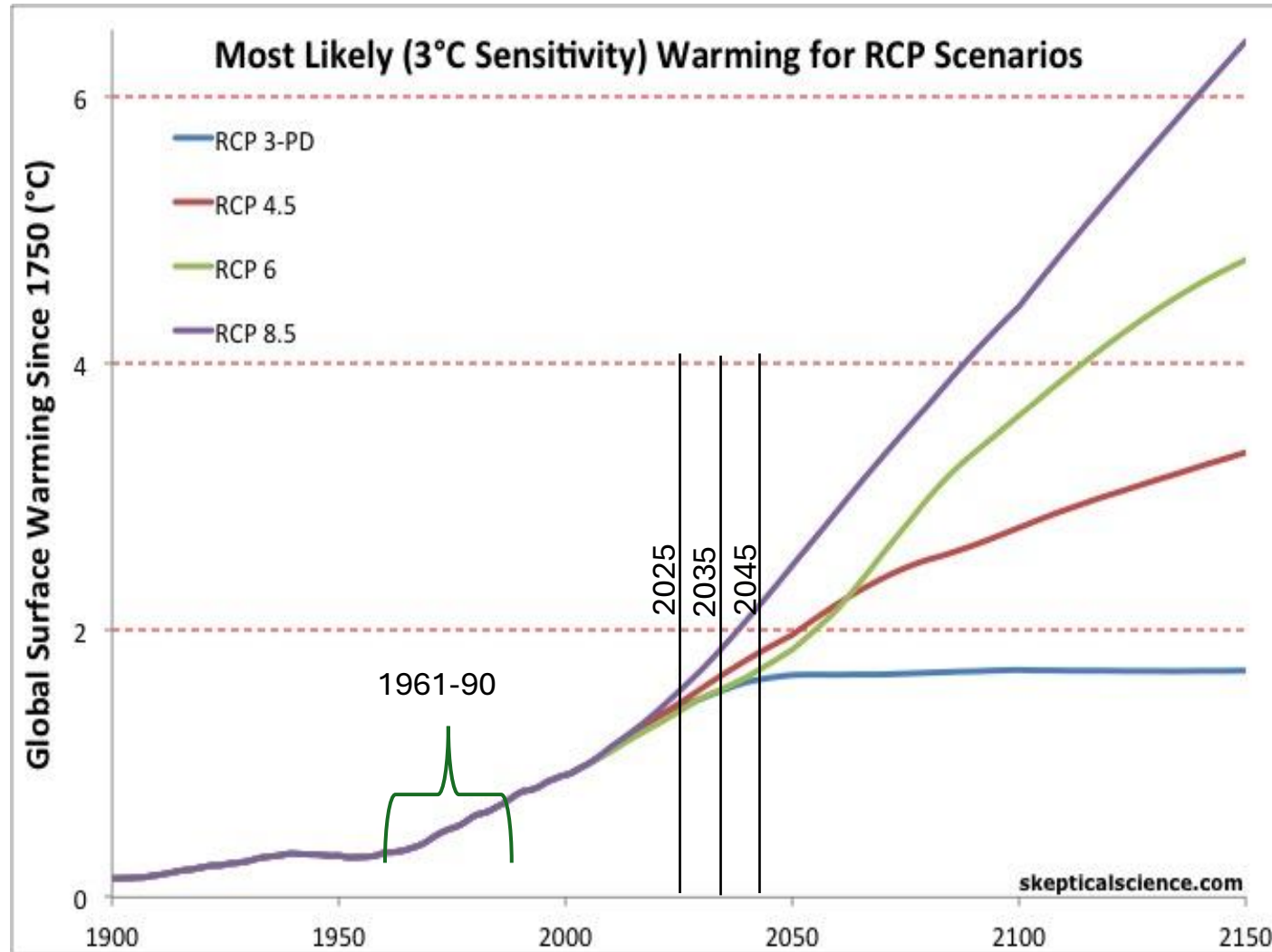
This 'warming stripe' graphic is a visual representation of the change in temperature as measured in Birmingham over the past 100+ years.

Each stripe or bar represents the temperature in that country, region or city averaged over a year.

For virtually every country, region or city, the stripes turn from mainly blue to mainly red in more recent years, illustrating ***the rise in average temperatures in that location.***



Identifying the adaptive capacity needed

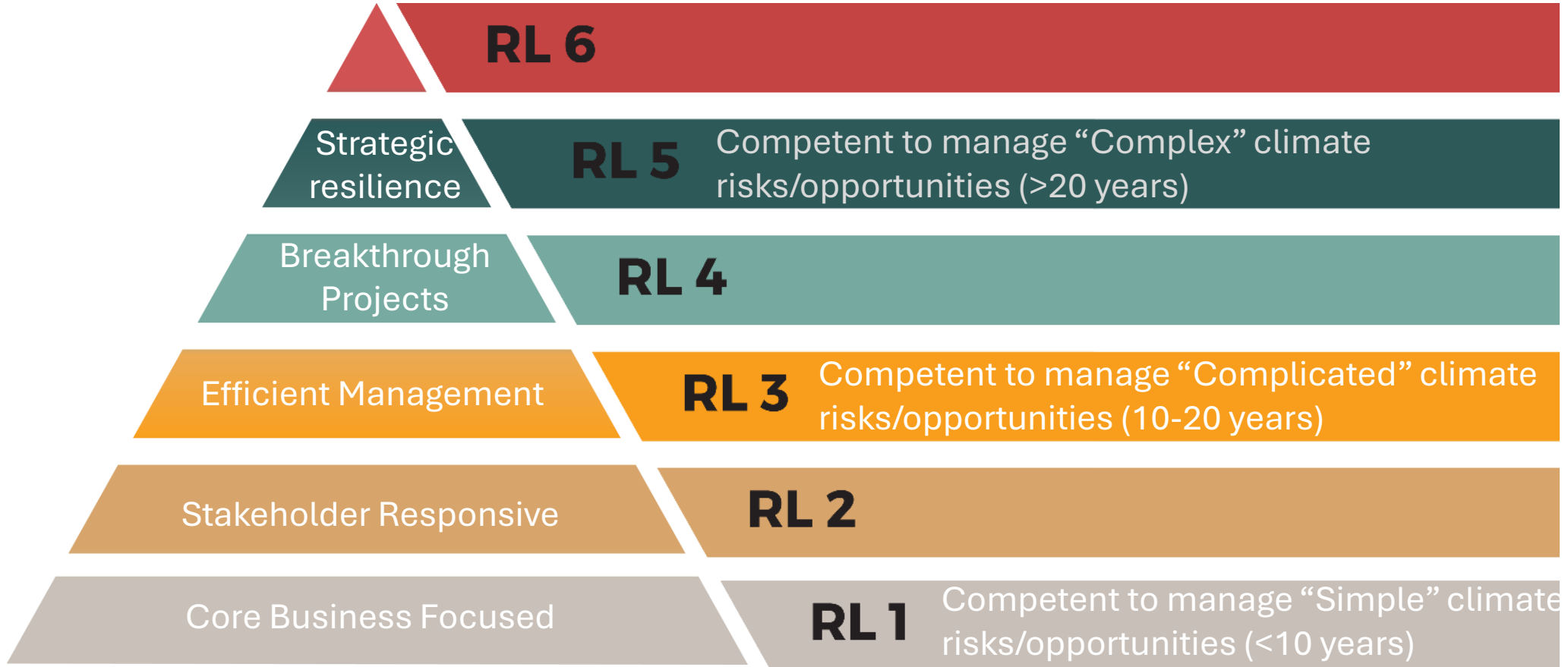


RCPs – models of different levels of greenhouse gas emissions and the level of global warming they create.

Higher global warming drives more intense climate change.

Notice that the higher the RCP number the higher the global warming it generates.

Identifying the adaptive capacity needed

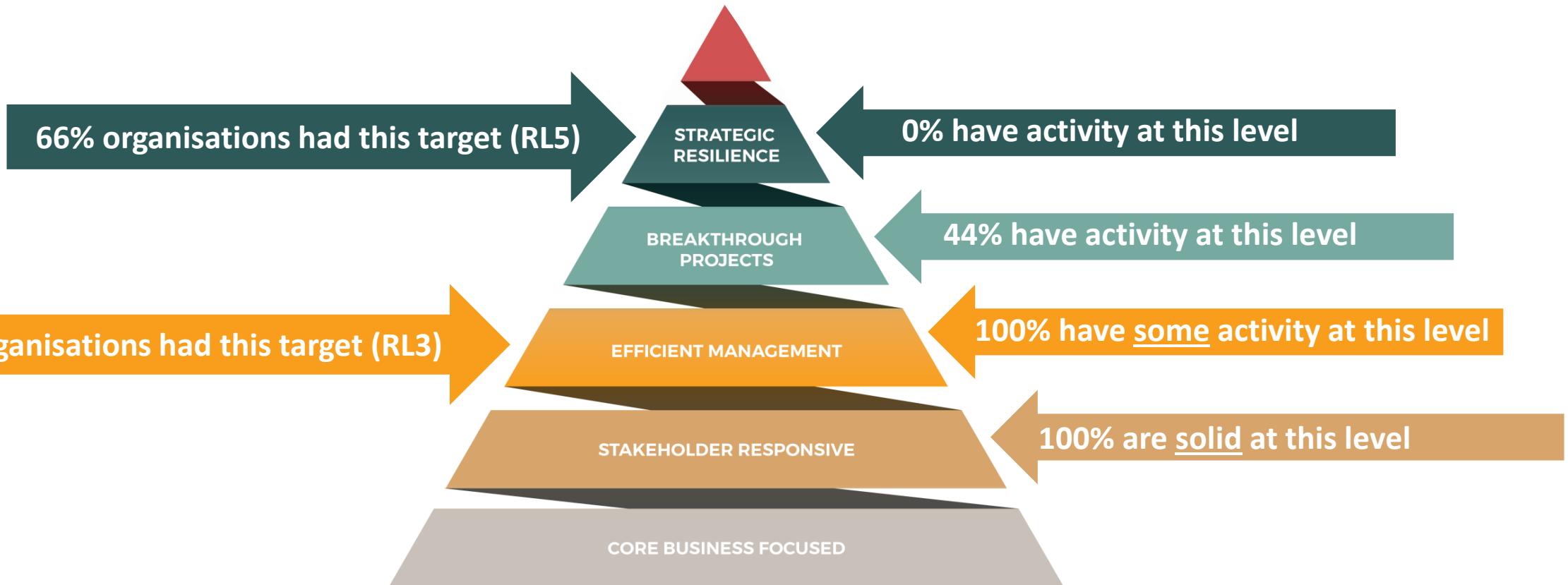


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Case study – Environment Agency / SEPA permit holders

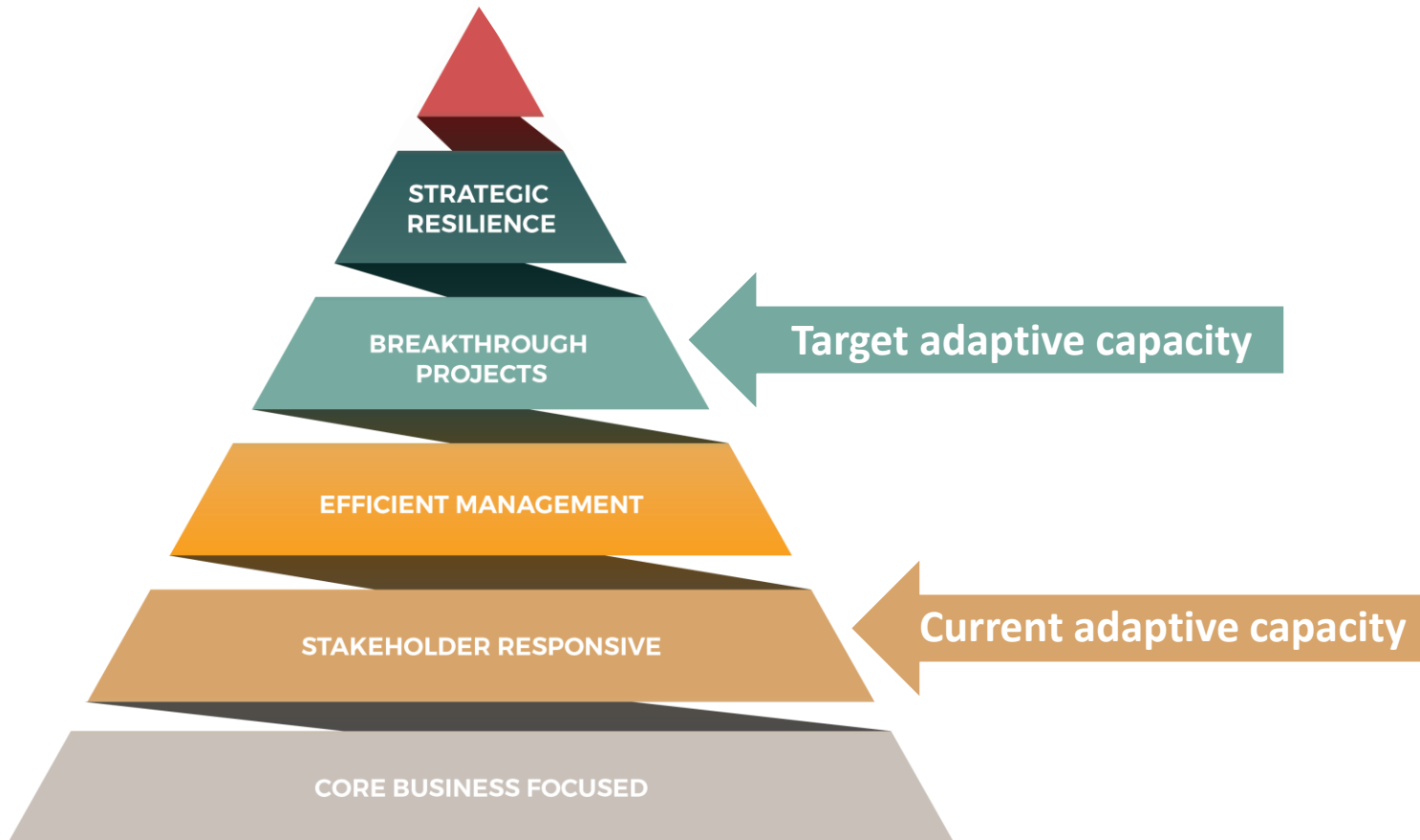


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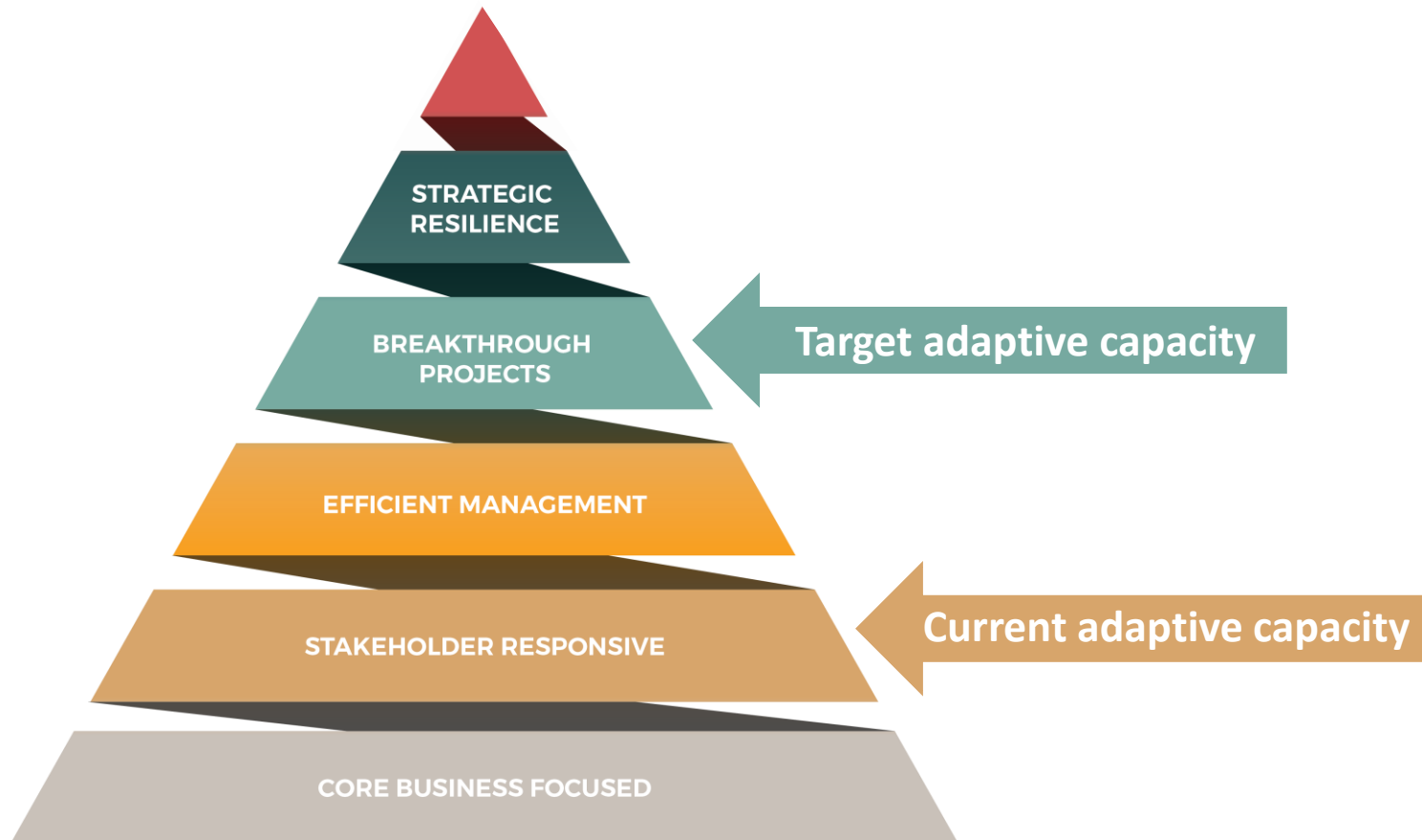
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Benefits of using CaDD in your organisation



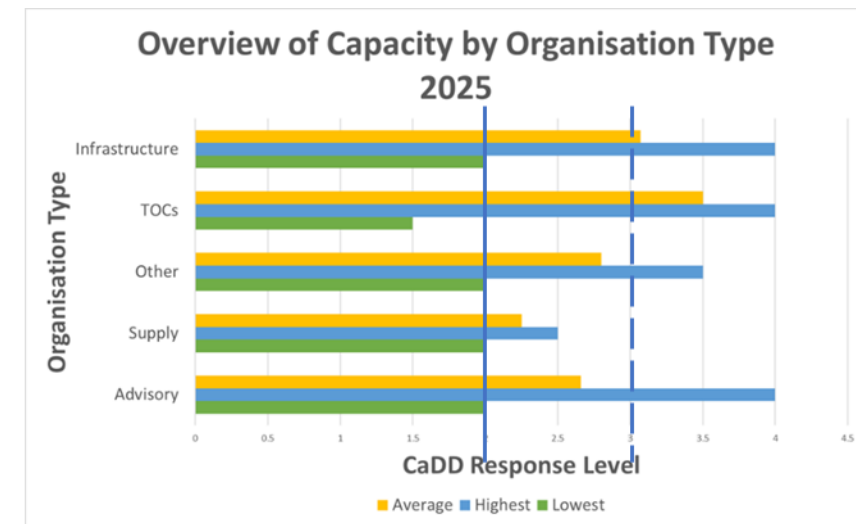
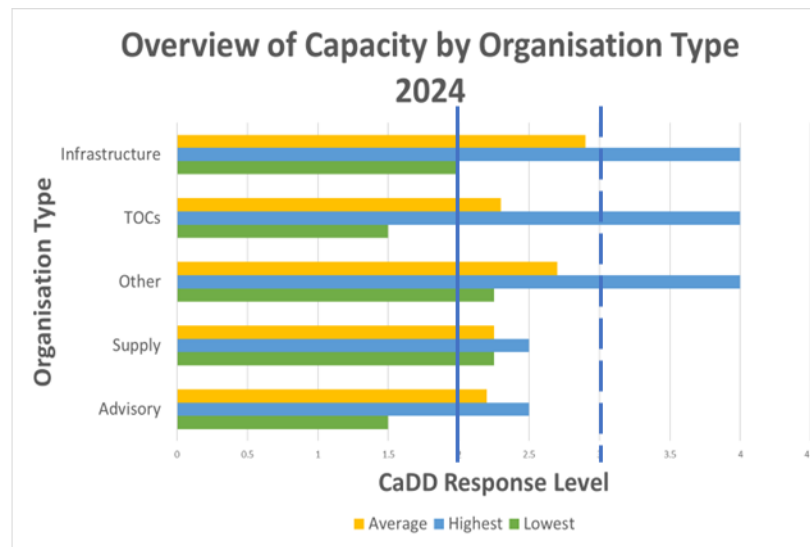
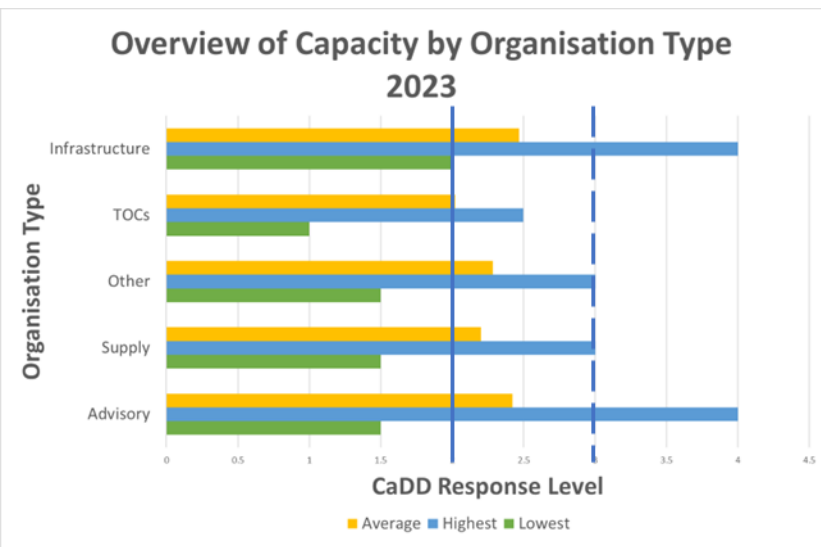
- Assess your **current abilities** to manage climate risks
- Assess your **target abilities** to manage climate risks
- Assess **current strengths** to build on
- Understand **what you can improve** to achieve your “target” capability level
- Receive **bespoke, prioritised "next steps"** to work from current to target adaptive capacity

Benefits of using CaDD – "Advisory" Organisation (2)



- A **benchmarkable comparative analysis** of current and target adaptive capacity (see next slide)
- A shared, **neutrally generated analysis** which is the basis for a partnership/mentoring relationship
- Effective **peer to peer learning partnerships**. The most effective learning partnerships are between organisations 1 RL apart

Case Study - UK Rail Industry Roadmap



Climate Change Adaptation

West Midlands Regional Adaptation Network

Ian Russell, Regional Head of Sustainable Growth (NW&C)

9th October 2025



North West
& Central

Simpler.
Better.
Greener.

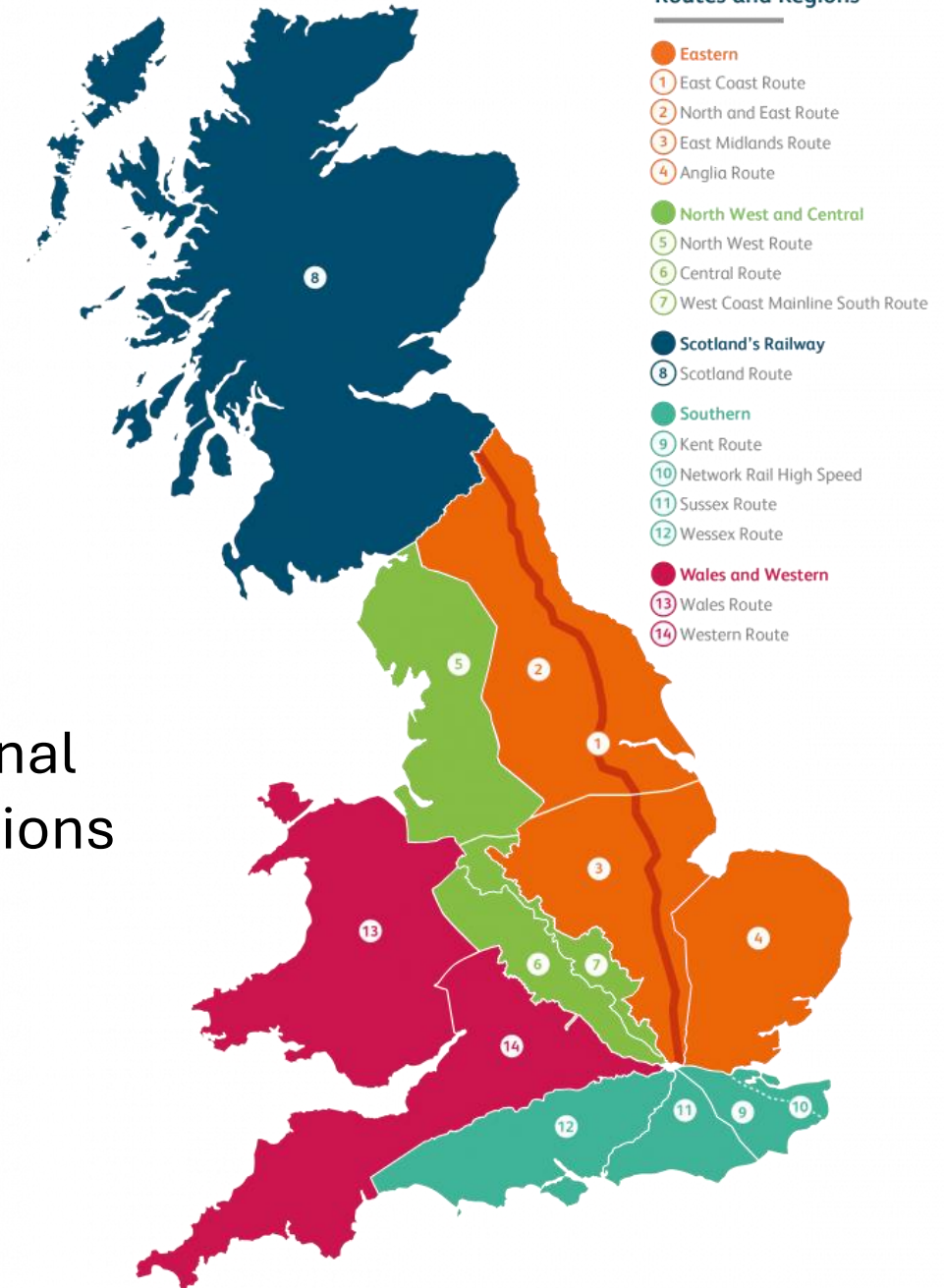
What I will be covering today

1. How Network Rail is organised and run
2. How we are building our adaptation maturity in Northwest & Central Region
3. Reflection on use of the CaDD maturity tool

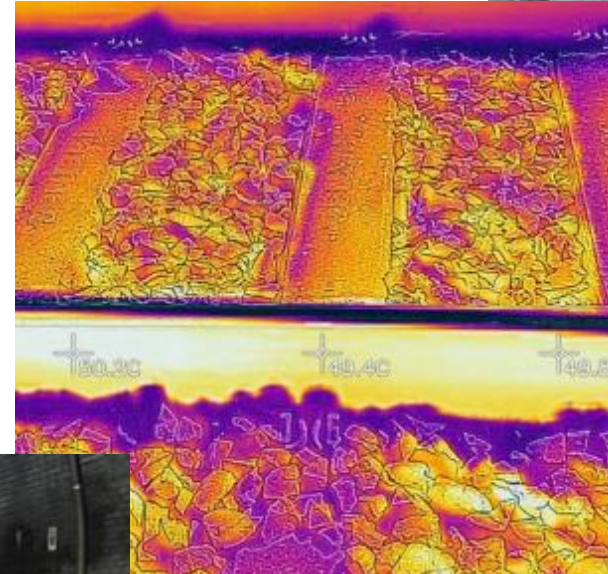
Our organisation

- Infrastructure Managers
 - 5 x Regions
 - Route Services
- Advisory Organisations
 - System Operator
 - Technical Authority
 - Finance – Planning & Regulation

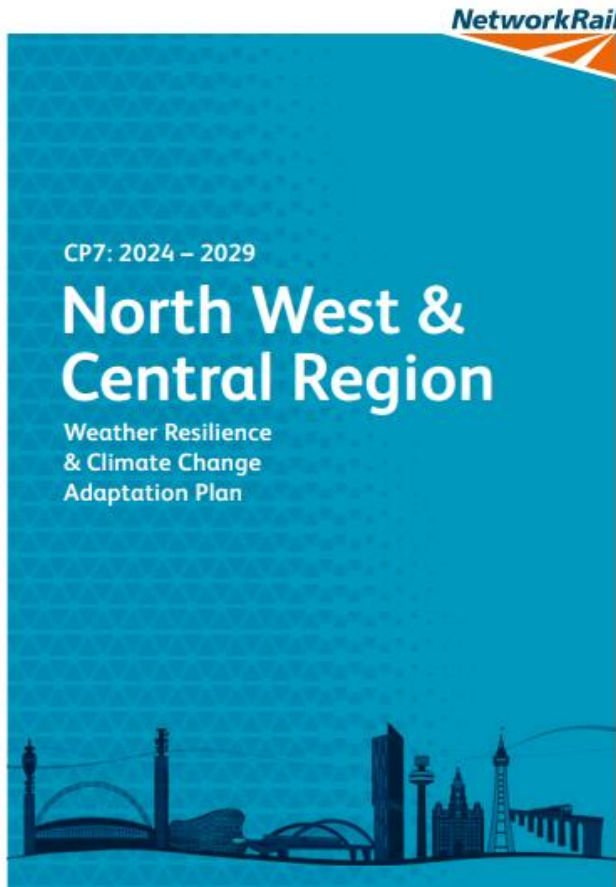
National
Functions



Main climatic risks to our infrastructure



Putting Adaptation into practice in NW&C



Three main areas we are tackling the impacts of climate change

- 1. Where climate change is impacting us now – use of technology to better manage operational response**
- 2. Where we are renewing infrastructure, making it more resilient to climate change**
- 3. Longer term planning through Climate Change Adaptation Pathway Strategies**

3rd WRCCA plan, following CP5 and CP6

Use of Technology



Convective Alerting Tool (CAT)

AIVR – Automated Intelligent Video Review



Balance Weight Detection

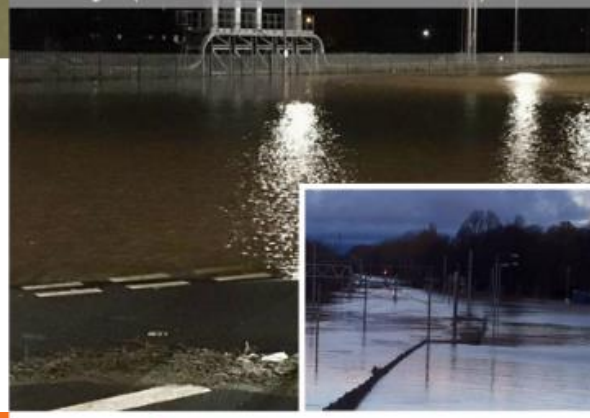
Adapting the infrastructure through renewals

Thrimby Grange River Leith Restoration.



Caldew signal cabinets: WCM (nr. Carlisle)

Resilience is: reopening WCM after 24hrs (Feb 2020, Storm Dennis and Ciara) rather than; 14 days (Dec 2015, Storm Desmond)



Signalling equipment on stilts helping storm-proof West Coast main line (networkrailmediacentre.co.uk)

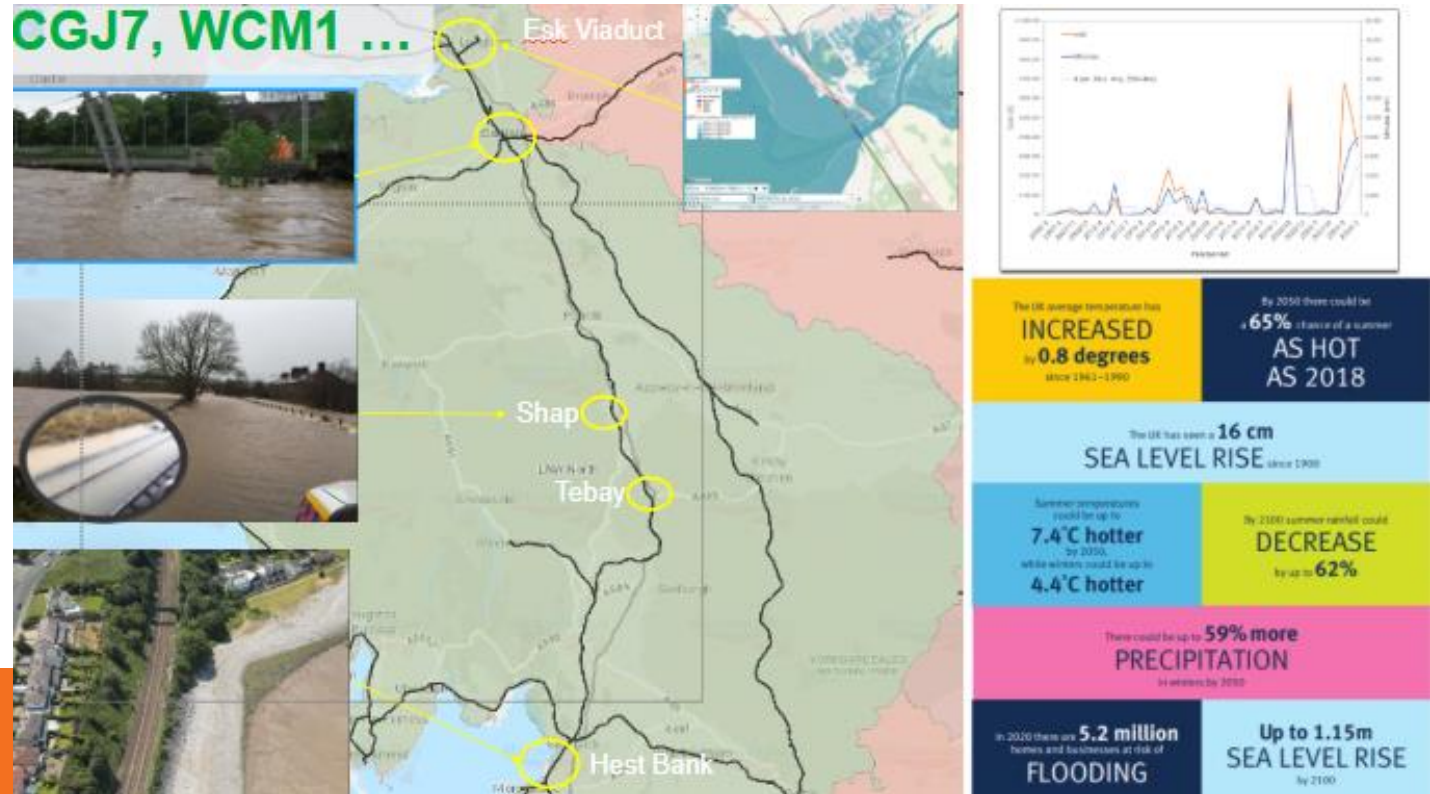
Climate Change Adaptation Pathway Strategies

Detailed assessment of what the climate risks are to the infrastructure and range of intervention options identified to manage the risk in the future

Our approach is to prioritise the areas where we know climate risk will be most prevalent and on parts of the network where impacts will be greatest

Key areas of focus:

- Lancaster to Scots Border, particularly hot spots of Hest Bank, Tebay, Shap and Carlisle
- Cumbrian Coastal Line
- Manchester to Liverpool
- Euston to Hanslope
- Cherwell lines



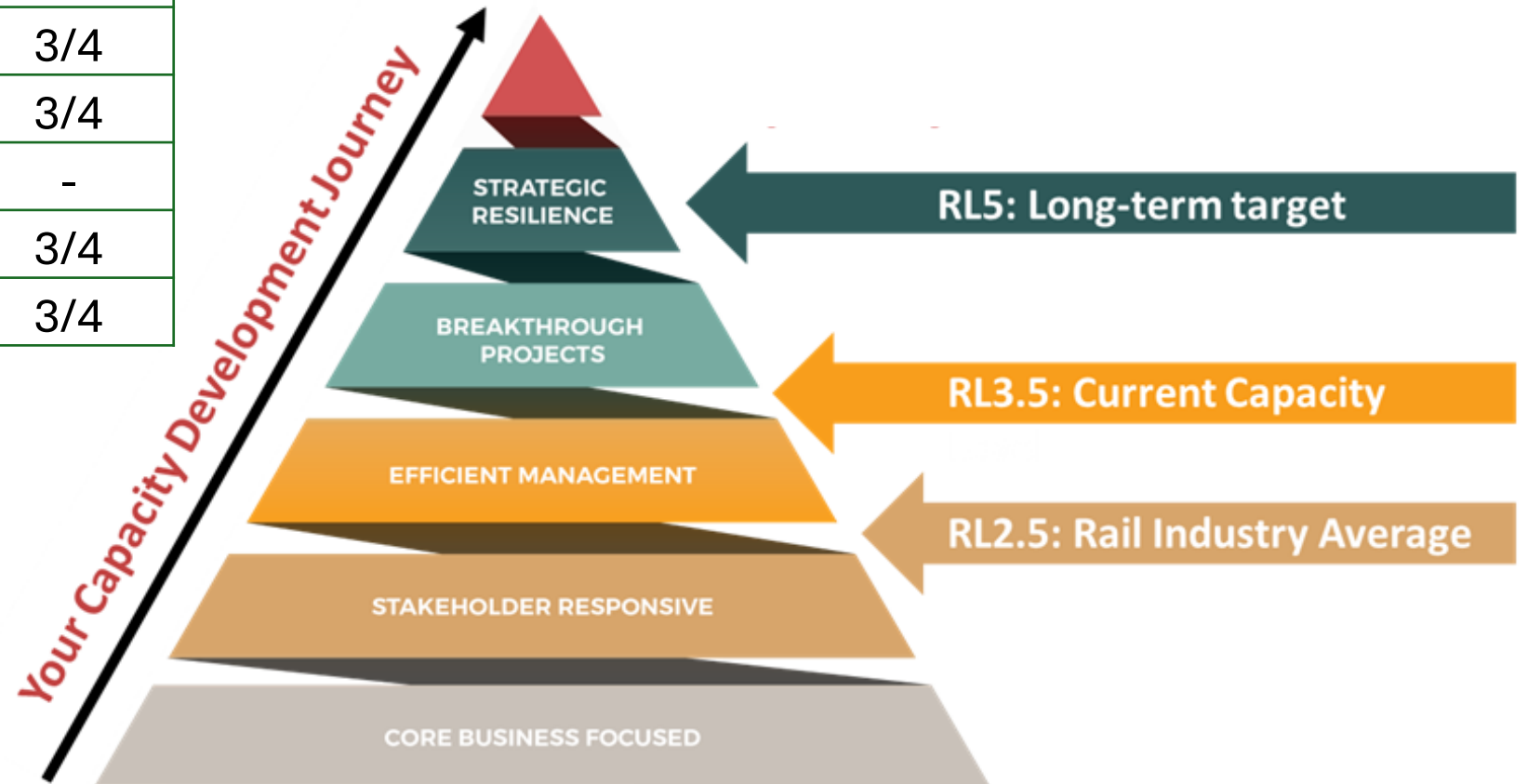
CaDD - Our changing adaptation maturity

Region/Function	2023	2024	2025	Change since 2023
Eastern	2	2/3	3/4	↑ 1.5
North-West and Central	2/3	2/3	3/4	↑ 1
Route Services	-	2	2	→
Scotland	2/3	3/4	3/4	↑ 1
Southern	2	2/3	3/4	↑ 1.5
Technical Authority*	3	4	-	
Wales and Western	2	3/4	3/4	↑ 1.5
National*	-	-	3/4	

* Shift from joint infrastructure manager and advisory survey under Technical Authority to advisory only has led to drop in score for National Functions. Overall adaptive capacity of National Functions as a whole has increased but bringing in some lower capacity teams means overarching capacity not as high as the central adaptation team.

Network Rail Adaptive Capacity Score 2025

Region/Function	2025
Eastern	3/4
North-West and Central	3/4
Route Services	2
Scotland	3/4
Southern	3/4
Technical Authority	-
Wales and Western	3/4
National	3/4



Key Messages from 2025 Reports

- Climate adaptation maturity is growing.
- Leadership engagement and resource allocation are critical for progress.
- Change agents and structured learning build and sustain adaptive capacity.
- Collaboration and innovation are key to transforming systems.
- Consistent priorities: risk assessment, decision reviews, and resilience planning.

We're moving up quickly but that is a few individuals rather than the majority

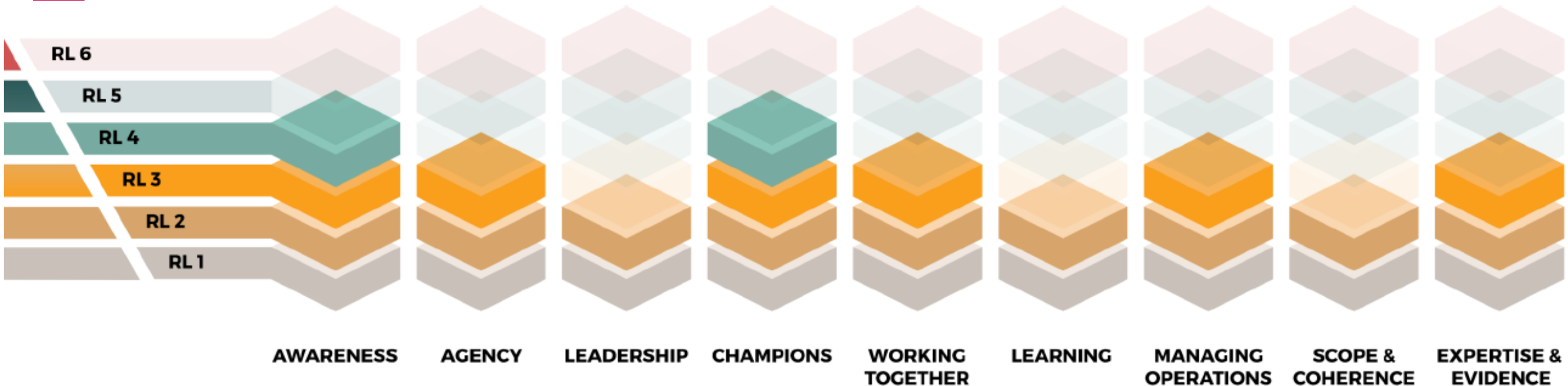
Scores vary depending on how people think about their work

- The more they know, the less they think they're doing – score goes down...

Outputs useful but generic when trying to compare different parts of the organisation

- Where are the weaknesses in the 5 regions that each scored 3/4?

We're considering doing a deep dive to get a much more nuanced understanding of strengths and weaknesses across the different categories



Panel discussion: Adaptive Capacity (CaDD) Survey Pilot Orgs

Chair

Sarah Greenham

Panellists:

Ian Russell, Network Rail

Dan Wilkinson, Environment Agency

Thomas White, Severn Trent

Nick Pyatt, Climate Sense

Questions for the room

- What are the barriers to improving your adaptive capacity?
- What tools and resources do you have access to, or would you like, to improve your capabilities?

Opportunity: Apply the CaDD tool to your organisation or remit

Raise your hand if you would like to complete the CaDD survey to receive tailored feedback on your levels of adaptive capacity.

Climate Adaptation Literacy

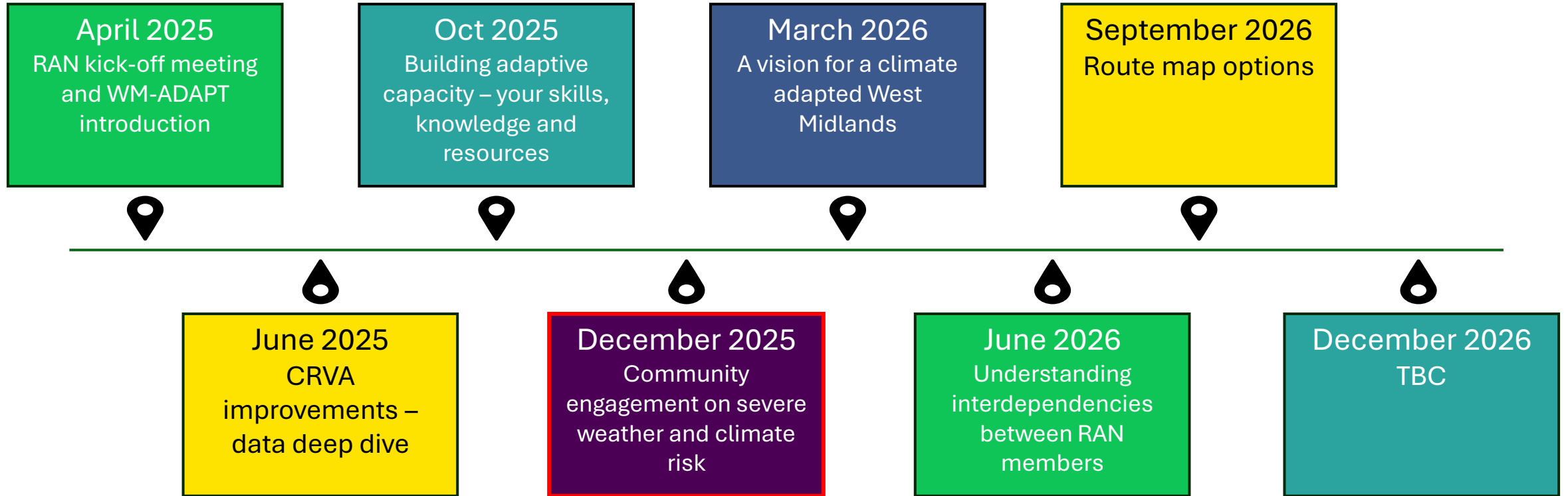


- Online, self-led e-learning course
- CPD accredited
- Receive a CPD certificate and digital badge upon assessment
- Est. time – 30-45mins per module
- Complete at your own pace
- Three modules:
 1. Climate change in the UK and why adaptation matters
 2. Zooming in – Climate impacts in the West Midlands
 3. How can we adapt to climate change?

Available here: [West Midlands Climate Adaptation Literacy Training](#)



What's coming up?



Any other business

- [Register your interest to take part in adaptive capacity self assessment](#)
- [Feedback on today's meeting](#)
- Reminder: [RAN Terms of Reference](#)

Next meeting: **11th December 2025, 13:00-15:00**

- Exploring community experiences of severe weather
- [Sign up to the RAN's December meeting](#)

Climate Adaptation Literacy Course

- West Midlands specific
- 3 modules of self-led content
- Upskill on climate risks and adaptation options
- CPD accredited upon assessment
- No cost
- Available here: [West Midlands Climate Adaptation Literacy Training](#)



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