

# **ANNEX C** SSAC Virtual Roundtable

Place based approaches to adaptation

# SSAC – Who are we?



- SSAC was created in 2002
- **Council** currently chaired by Maggie Gill; along with 12 members plus 2 associate members and *ex officio* CSA; Chief Scientist, Health; CSA ENRA; Chief Social Policy Adviser
- Secretariat Science Advice and Engagement team within SG Industrial Transformation and Office of the Chief Scientific Adviser Division

# Distinctive features of SSAC



- a remit that cuts across all sectors and policy areas;
- we provide independent science advice at "arm's length" to SG ;
- we have no disciplinary or sectoral "agenda";
- we operate as a "collective" (i.e. Members have a responsibility to provide checks and balances within the Council);
- our combined knowledge of Scottish science skills and context enables us to ensure that advice commissioned from outside Scotland is appropriate to the Scottish context

# Principles of engagement:

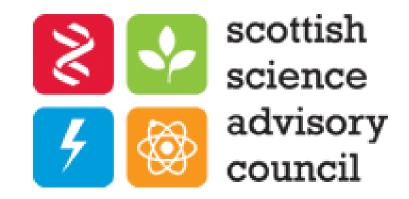


- Our focus is on *science* advice, where science includes social and economic disciplines;
- We need to be thinking of future needs and highlighting the potential value of science;
- We can be both reactive (responding to requests from within SG) and proactive (identifying topics we think are opportunities or risks for Scotland);
- In developing Terms of Reference for specific pieces of work we take into account the broader landscape of advice available (e.g. Centres of Expertise, other advisory committees and organisations, the RSE etc)

# Recent reportsPublications | The Scottish ScienceAdvisory Council



- Use of Science and Evidence in Aquaculture Consenting
- Opportunities and Challenges associated with hydrogen's role in the delivery of future energy systems in the context of a Just Transition
- Quantum Technology: Opportunities for Scotland
- Building on the Science Legacy of Covid-19 in Scotland
- Future Landscapes: Report on Geospatial Knowledge
- Technical Briefing Note Sustainable Chemicals
- Environmental Impacts of the Scottish Manufacturing Industry



The SSAC is hosting this roundtable to gather evidence on on approaches, emerging thinking, and how to engage practically with current and developing place based adaptation in Scotland.

The roundtable is part of a study which has included seeking evidence from the community of stakeholders and which will contribute to an SSAC report.

### Scotland's national approach to adaptation

- The Climate Change (Scotland) Act 2009 requires a programme for climate change adaptation to be set out every 5 years. This must address risks identified in the statutory UK Climate Change Risk Assessments (UK CCRA, which are also independently updated every five years).
- The current programme, SCCAP2, covers the period 2019 2024. It is outcomes-based (aligned to the UN SDGs), with a focus on people-centric and place-based approaches.
- It contains around 170 policies and proposals plus a supporting research programme.

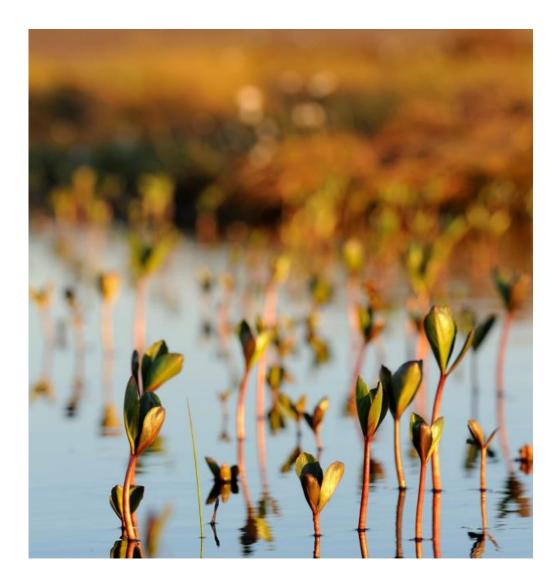


- The Scottish Government funds
  Adaptation Scotland to support capacity building and adaptation action by the public sector, businesses and communities in Scotland.
- Regional adaptation partnerships are a key vehicle for action and innovation.





### Climate Change Risk Assessment 2022 (CCRA3)



"Action to improve the nation's resilience is failing to keep pace with the impacts of a warming planet and increasing climate risks facing the UK."

- 61 specific climate-related risk areas identified.
- Scottish Government is now developing Scotland's next statutory climate change adaptation programme in response.
- Mitigate for 1.5, plan for 2 degrees of warming, assess the risks for 4 degrees.

### Highest Priority Risk Areas (CCC + SG)

Risks to people and the economy from climaterelated failure of the <u>power system</u> Risks to supply of food, goods and vital services due to climate-related collapse of <u>supply chains</u> and distribution networks

Risks to <u>soil health</u> from increased flooding and drought

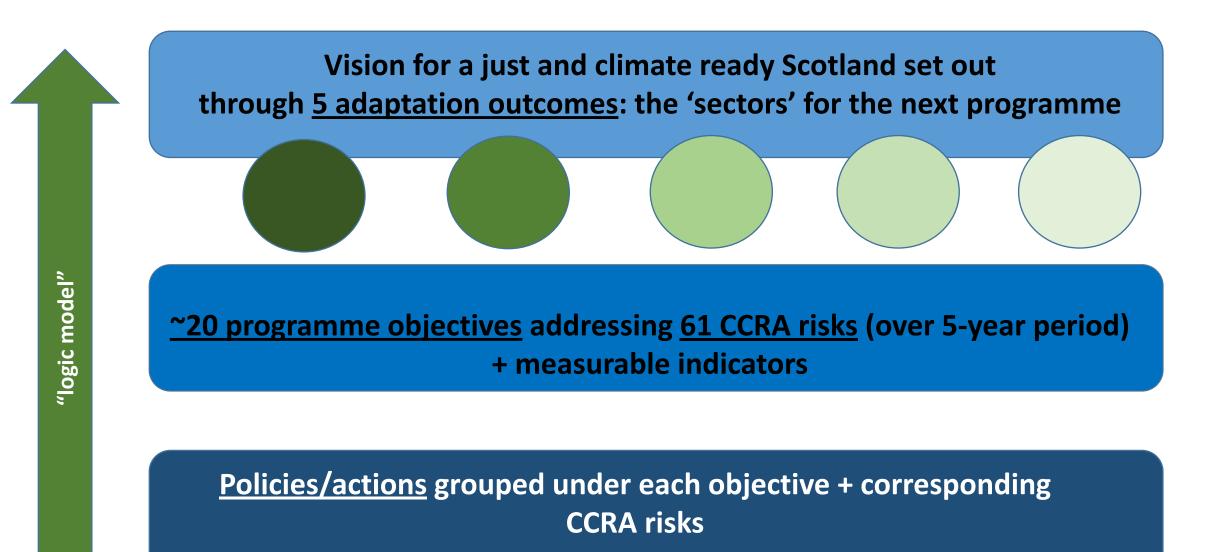
Risks to <u>natural carbon</u> <u>stores and sequestration</u> from multiple hazards leading to increased emissions Risks to the viability and diversity of <u>terrestrial</u> <u>and freshwater habitats</u> <u>and species</u> from multiple hazards

Risks to <u>crops</u>, <u>livestock</u> <u>and commercial trees</u> from multiple hazards

Risks to human health, wellbeing and productivity from increased exposure to <u>heat in homes and other</u> <u>buildings</u>

Risks to communities, businesses and infrastructure associated with <u>flooding and coastal</u> <u>change</u>

### Logic Model for next Adaptation Programme



### National adaptation programme for 2024

We envisage a stronger role for **place-based initiatives** driving effective, inclusive adaptation action across cities, regions and localities engaging a broader range of delivery partners.

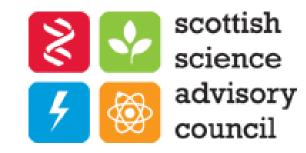
Nature connects	across our land, settlements, coasts and seas
Communities	are shaping places and co-creating climate resilience solutions
Public Services	are person-centred, prepared and building resilience with leadership and collaboration
Businesses and industries	are adapting, realising opportunities and securing supply of food, goods and vital services.
Scotland international role	supports climate justice and enhanced global action on adaptation



# Strength, Weakness, Opportunities and Threat (SWOT) Analysis of Place-based adaptation in Scotland

Presented by : Ashrika Sharma, Intern SSAC 8<sup>th</sup> June 2023

# Aims



- Inform Scottish Government in preparation for the next Scottish Climate Change Adaptation Programme (SCCAP)
- A review of recent research-driven development projects on placebased adaptation
- Evidences of successes, lessons learnt and challenges of place-based adaptation is faced is limited
- Draw from different projects to provide evidences from individuals and groups working in place-based adaptation

### Background Place based adaptation- Concepts



- Differential impacts of climate, the need for a tailored approach
- Focusing on 'place' as a scale for implementing climate actions
  - location, locale, and sense of place
  - a relative measure applies where we can only aim to understand what constitutes as place
  - and engaging individuals and communities in the process
- Adaptation actions are by necessity based in place, but place also affects both the need for adaptation and the ability to adapt.
  - Place-based values could be a point of convergence for diverse stakeholders

### The Scottish policy landscape



- Key principles of place-based working, such as collaboration and partnership, cross-sectoral thinking, and the emphasis on 'place' are reflected in Scotland's National Performance Network
- 'Place,' 'place-based approach' as one of central themes in the Scottish Government's Programmes for Government.







# Methods:

1) Outline the theoretical rationale for place-based adaptation

- Literature review was expanded to understand the theoretical rationale of placebased planning and placebased policies.
- Six broad themes were identified.

2) Identify adaptation projects with place-based approach in Scotland

Scoping exercise

 <u>UKRI (UK Research and</u> <u>Innovation) database</u>, university web pages, <u>Sniffer</u> to help identify relevant projects and practitioners



3) Identify strengths, weaknesses, barriers, and threats across the placebased adaptation projects

- Online questionnaire for the SWOT analysis.
- Semi structured interviews

# SWOT Analysis- Results

#### Internal



#### Strengths

 Place-based adaptation has established some groundwork for good collaboration and partnership.
 Flexibility associated with placebased approaches
 Effective means to participate, and equitable access to adaptation and acts as development opportunities for vulnerable groups.



#### Weaknesses

 Communicating Adaptation.
 Difficulty in capturing long term impact, legacy and reach
 Ensuring representation
 Addressing Social Justice



#### Opportunities

 Strengthening 'adaptation' discourse in 'resilience' policy framing can translate into effective actions for adaptation
 Capitalizing on community assets

 Building national skills and increasing capacity and local level

 4) Policy and financial support to sustain long term partnership.
 5) Diverse leadership



#### Threats

 1) Information flow
 2) Scale of governance can be a challenge in carrying out regional adaptation
 3) Financial, short -term, piecemeal and current budget cuts

4) Lack of coherent policy
 5) Dealing with uncertainity.

# SWOT Analysis : Strengths



Collaboration and partnership

Viewed as outcome that the place-based adaptation has helped foster, as well as opportunities of promising alliance that could influence how adaptation initiatives evolve in the future



Flexibility associated with place-based approaches

Flexibility to determine the specific geography for adaptation, providing workable framework for addressing climate change impacts in a contextspecific and locally relevant manner



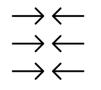
Addressing issues of inclusion, ensuring effective means to participate

The processes are broadly participatory and aim to be representative of diverse interests.



# SWOT Analysis : Weakness





#### **Communicating Adaptation**

Climate risks information appeals to reason, which is most often not the primary motivator for human behaviour.



#### **Ensuring representation**

Engaging representatives from every local group involved or willing to participate, leading to engagement of only a handful of active groups in such processes.



# Difficulty in capturing long term impact, legacy and reach

Lack of effective monitoring and evaluation and lack of funding allocated for that purpose.



#### **Addressing Social Justice**

Limited guidance on how normative criteria on justice can be integrated into adaptation planning.

# SWOT Analysis : Opportunities









Strengthening adaptation discourse in resilience policy framing

To instigate more direct action rather than indirect.

# Capitalizing on community assets

Community assets as not only the physical structures or places, but also importantly community leaders, groups, services, and businesses.

#### **Diverse leadership**

Diverse leadership can play a crucial role in promoting shared power by distribution of decision-making authority, balancing multiple interests.



# SWOT Analysis : Threats



Information flow



Lack of coherent policy



Scale of governance can be a challenge in carrying out regional adaptation



Dealing with uncertainty



Financial, short -term, piecemeal and current budget cuts



# Conclusion

- A demand for improvement and more opportunities to invest in place-based adaptation, particularly through more research & collaboration with education institutions
- Emphasis on the significance of climate justice, shared power and capacity building.
- Further work in improvement should also focus on aspects such as making policy and funding information accessible to local community groups.

### Place based adaptation - insights from practice

Anna Beswick Head of Climate Leadership, Sniffer

### Overview

- Introducing Sniffer
- Climate Ready Placemaking Sniffer's approach
- Place based adaptation examples and insights
- Research and practice collaboration

### A flourishing and fairer future for all

We act as a catalyst, fostering collaboration across sectors and places to support transformation towards a flourishing and fairer future for all in a changing climate.

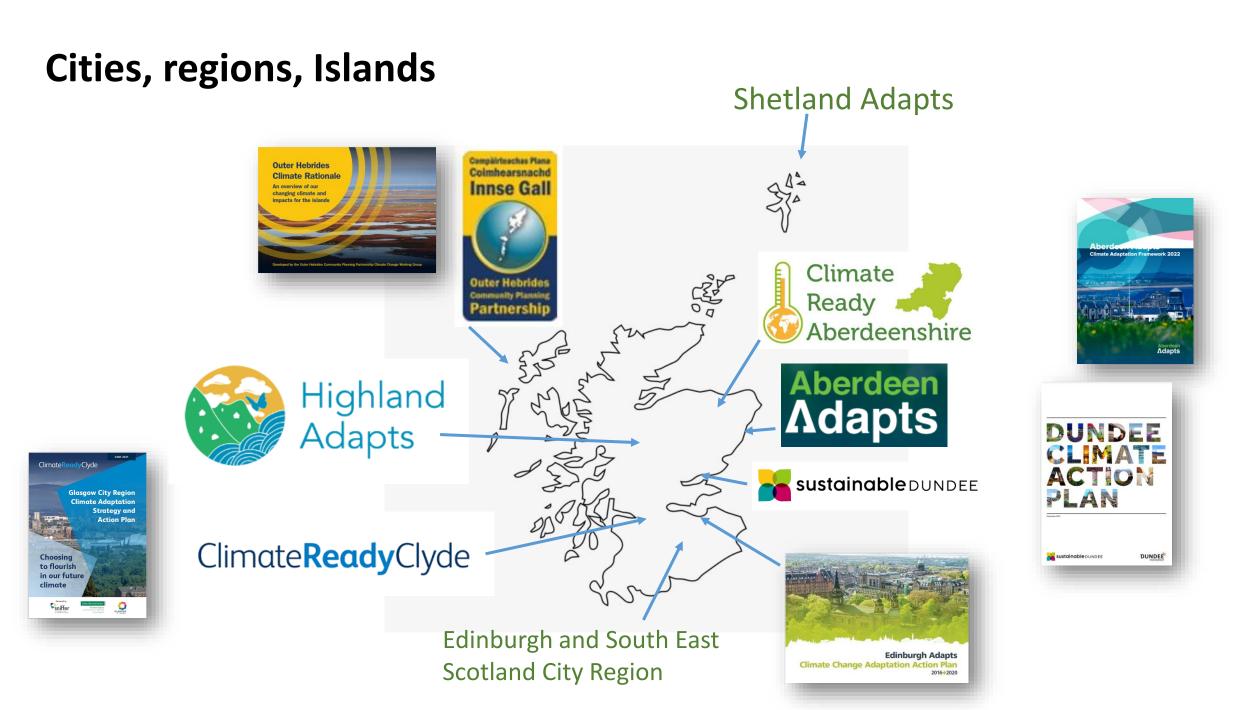
- bringing communities and different organisations together so they can better understand what climate change means for their place, and what can be done about it.
- building local leadership and catalysing change through our expertise, tools and networks, fostering innovation and collaboration.

Taking a place-based approach means working collaboratively across sectors and organisations, and understanding the systems and relations that shape where we live. It also means paying attention to people's identities, local knowledge, histories and values.

*Climate ready placemaking Sniffer's approach to creating flourishing and fairer places in a changing climate* 

https://www.sniffer.org.uk/Handlers/Download.ashx?IDMF=2 9da73bb-9df1-4172-97f8-2886986fe6fb

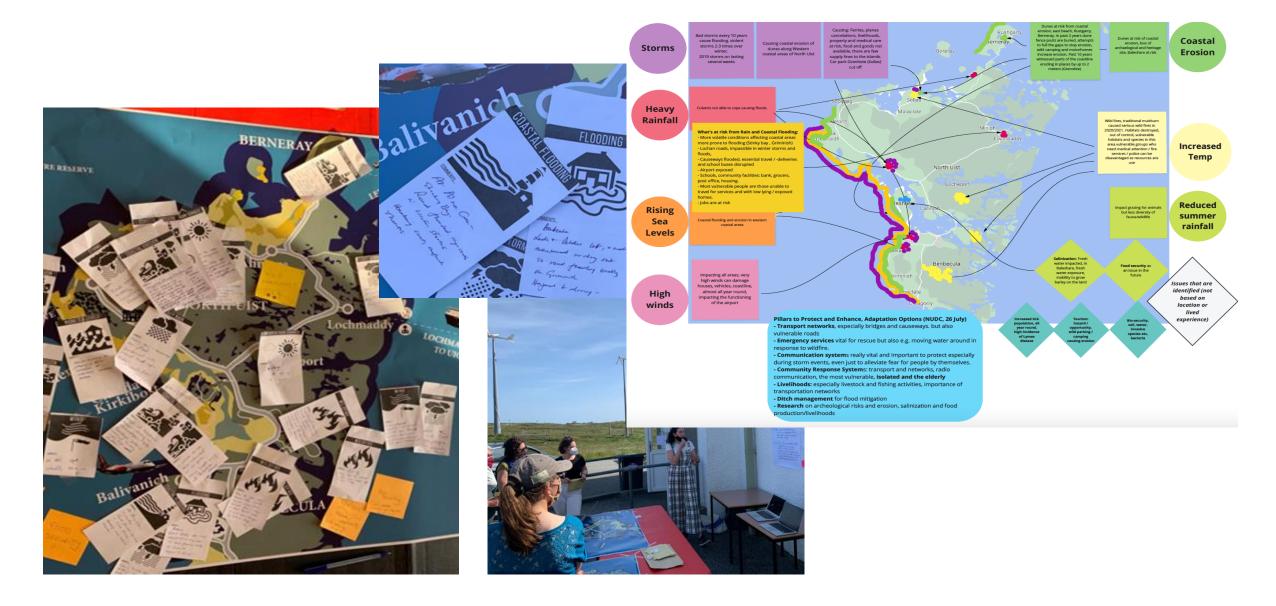




### **OH CPP Climate Change Working Group & Climate Beacon**

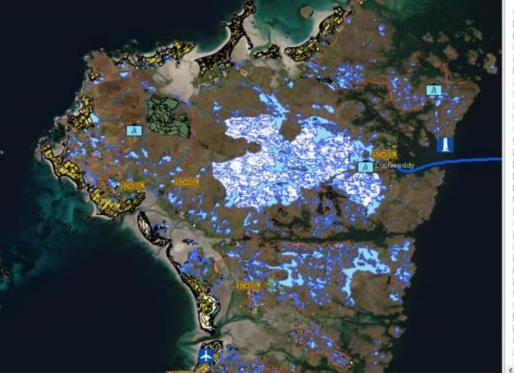


### North Uist pilot: Community mapping





### North Uist pilot: Combined scientific & community map



HABITAT Broadleaved deciduous wo Buildings of cities, towns a Coastal dunes and sandy sl Coastal saltmarshes Coastal shingle Coniferous woodland Constructed, industrial and Dry grasslands Extractive industrial sites Flood swards and related c H1220 - Coastal vegetated H1330 - Atlantic salt mead H2120 - Shifting dunes H2130 - Fixed dunes H2150 - Decalcified fixed d H2190 - Humid dune slack H21A0 - Machairs H3140 - Hard water bodies H6230 - Species-rich Nards H7130 - Blanket bogs H9180 - Tilio-Acerion fores []] H91A0 - Old sessile oak wo H91E0 - Alluvial forests Highly artificial coniferous Inland surface waters Mires, bogs and fens Sand beaches above the dr Shifting coastal dunes Surface running waters Surface standing waters Temnorany lakes nonds an

### **Insights from PBA at locality scale**

Climate adaptation must be **framed sensitively** – impacts are deeply personal.

**Collaboration and interdisciplinary perspectives** crucial to creating honest and hopeful engagement.

**Opening up dialogue** on climate risks and connections to livelihoods is part of a process of building understanding and paving the way for locally led adaptation in the years ahead. This process connects to social dimensions of system change and transformation.

**Cultural and creative practice** helped people connect and share how climate impacts affect the islands and their hopes and concerns for the years ahead.



### **Insights from PBA at locality scale**

**Local leaders will emerge**. Address imbalances in power, build capacity for shared leadership and support new mechanism that enable community involvement beyond traditional public sector leadership spaces.

Climate adaptation is not a stand alone challenge, it should be addressed **as part of wider efforts for resilient communities.** 

Support provided through the Adaptation Scotland programme has built the capacity and the **confidence** of local partners to lead adaptation work in the Outer Hebrides

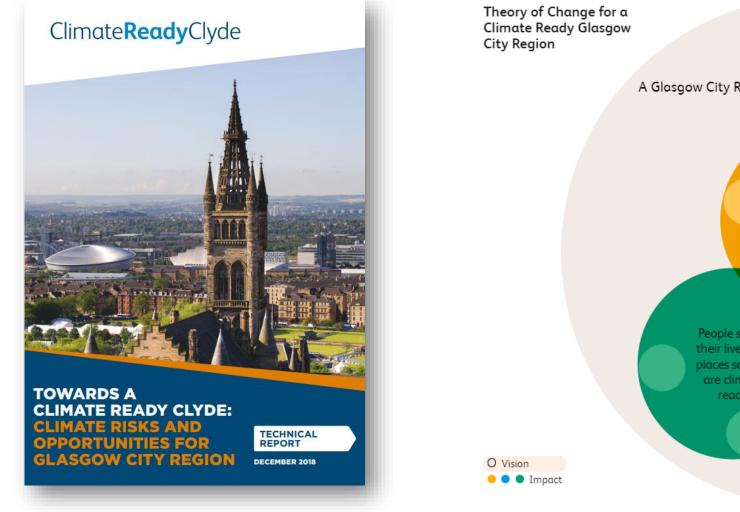
"Putting it simply – we would not be in the position we are in today without the advice and support we have received from Sniffer through the Adaptation Scotland programme".

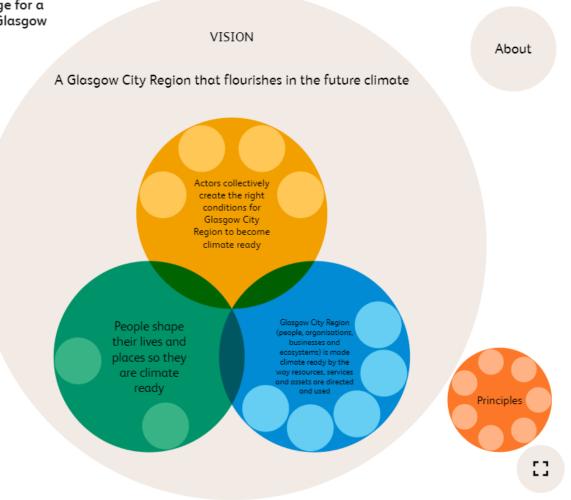
David Maclennan, Head of Operations – West, NatureScot



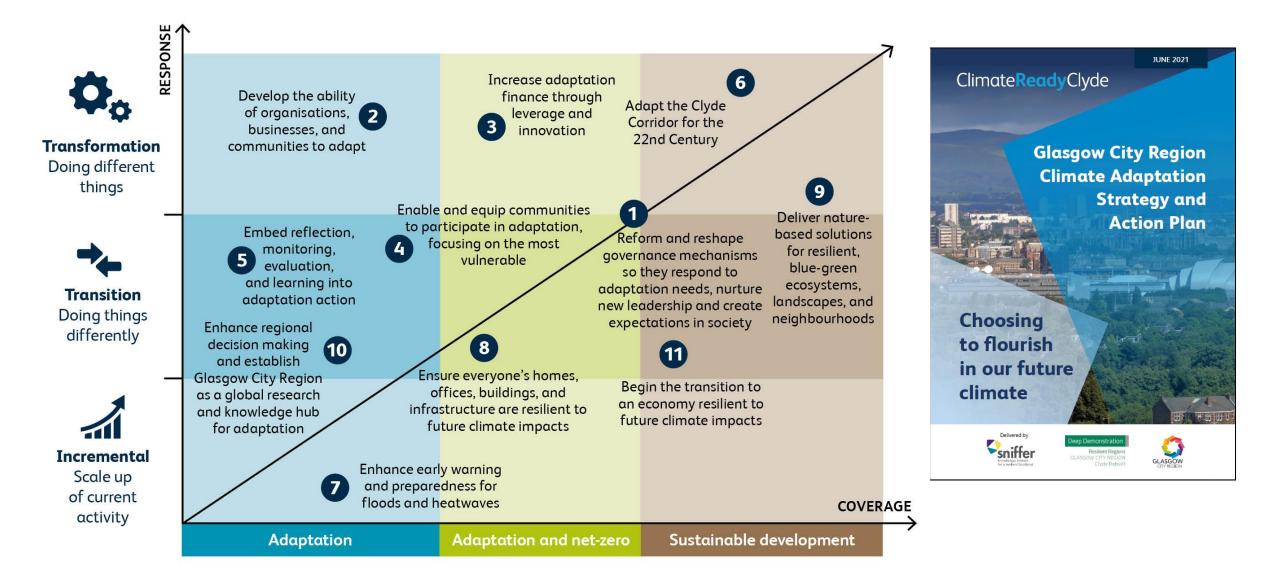
# Climate **Ready** Clyde

Climate Ready Clyde is a cross-sector initiative funded by 13 member organisations and supported by the Scottish Government to create a shared vision, strategy and action plan for an adapting Glasgow City Region.





# Climate **Ready** Clyde



### **Insights from PBA at a regional scale**

'First mover' – first major adaptation initiative formed in Scotland. Glasgow City Region now has one of the most advanced adaptation strategies and actions plans in Europe.

Many helpful examples but no blue print CRC is characterised **by innovation – this can be messy**!

Forming the CRC initiative took years – create **governance mechanism**, co-develop business case and agree financial arrangements. Learning has supported development of other place based initiatives in Scotland and beyond.

Governance and leadership is evolving – widening to support vision and outcomes set out in the theory of change. **Shift towards shared leadership**. Community and business involvement in the initiative needs to be strengthened.

Focus now on delivery – review progress against the action plan and stretch targets.

### **Opportunities for research collaboration**

Firstly – thank you!

- Much more needed and major opportunities to achieve research impact
- Sniffer is able to collaborate with you on research calls access to our expertise and route to impact
- Huge opportunities across place based projects established and emerging

### Thank you

Contact <u>anna@sniffer.org.uk</u>

# New ideas on adaptation: Lessons from the policypractice-research interface

### Place-based Approaches to adaptation SSAC Virtual Roundtable, Thursday 8<sup>th</sup> June 2023

Dr Candice Howarth, Head of Local Climate Action & PCAN Co-Director LSE Grantham Research Institute on Climate Change and the Environment <u>C.Howarth@lse.ac.uk</u>



Centre for Climate Change Economics and Policy



Economic and Social Research Council









THE QUEEN'S

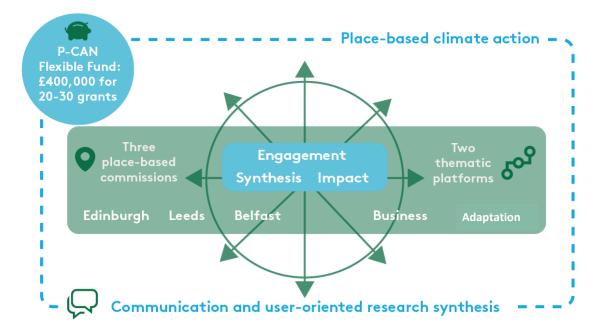
ANNIVERSART PRIZE

# Place-based Climate Action Network

PCAN is a £3.5 million network aimed at translating climate policy into action 'on the ground' in our communities.

- Three Core City Climate Commissions: Belfast, Edinburgh, Leeds
- Outer network of Climate Commissions: regional, county level, district, time-limited
- Thematic platforms on: Climate Adaptation and Finance

on Climate Chanae







ANNIVERSART PRIZE

# Turning climate rhetoric into action

 $\bigcirc$ 



Dynamism from 2019 has been overshadowed by aftermath of COVID-19, cost-of-living crisis, rise in energy prices

- Resulted in a shift in local authority priorities and limited resources to deliver and advance climate action
- Support from national government has become intermittent
- However these crises have made businesses and consumers aware of the need to reduce energy consumption

New forms of climate governance (e.g. local climate commissions) play an important role in supporting effective, inclusive and fair place-based climate action











LONDON SCHOOL

ECONOMICS AND

# Adaptation in local climate action

- Local climate action tends to prioritise mitigation of emissions and targets to reach net zero
- However, climate adaptation efforts are growing and are being given a larger, if not equal, seat at the table
- ➢ Climate impacts are experienced locally → place-based adaptation is essential to ensure local values, knowledge and priorities are incorporated into responses
- Local authorities are increasingly recognising the importance of addressing climate risks through adaptation strategies and plans, although impact of these is patchy

Local adaptation shares many of the same challenges as local net zero efforts

Limited fit-for-purpose information Weak governance Siloed approaches Lack of knowledge, skills and capacity Goals Securing finance



THE QUEEN'S ANNIVERSARY PRIZES For the second construction 2021





Economic and Social Research Council







### Case study: Summer of 2022 extreme heat

- <u>19 July:</u> Temperature exceeded 40°C
- <u>18-19 July</u>: level 4 heat health warning issued for first time
- Five 'heat periods': 16–19 June, 10–25 July, 30 July–5 August, 8–17 August, 23–25 August
  - 2,803 excess deaths recorded among those aged 65 years and over & 3,271 excess deaths among all (excluding COVID-19 deaths)
  - the **highest excess mortality figure** during heat periods recorded since Heatwave Plan for England introduced in 2004
  - Over 17–20 July, ~1,012 excess deaths for those aged over 65 in England

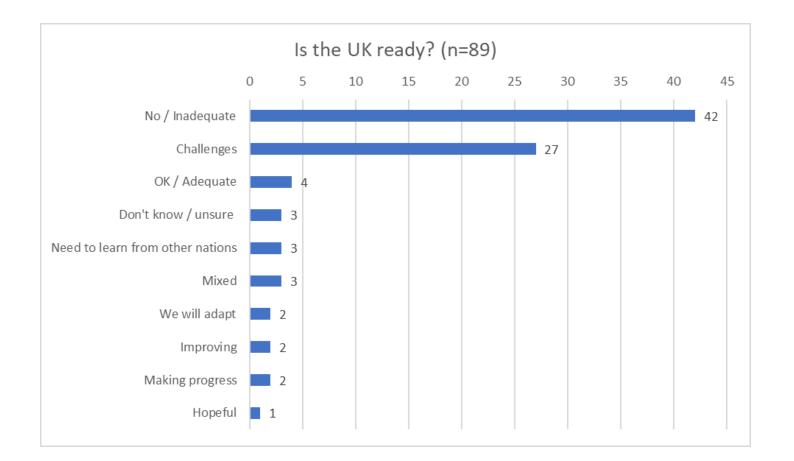




In association with



### UK preparedness to extreme heat



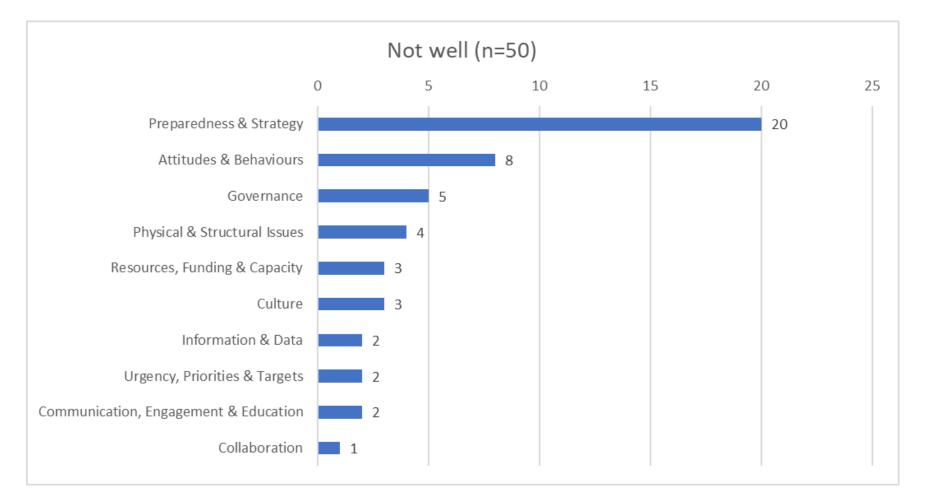
"No. Absolutely not. There's just absolutely no way that this has been properly accounted for in this – it hasn't, has it? No, it's not been considered. People haven't been considered. There's been nowhere near enough investment in it. Our laws, our policies, our balances of power, are all set up completely wrongly for this. And they better look sharp and think on, because there's – it's a real issue. It's a real problem."



In association with



# 2022 heatwave responses: what didn't go well







### Barriers to responding to heatwaves

### Funding & capacity

- Skills
- Manpower
- Finance
- Community networks

### Coordination

- Lack of a plan & joined up thinking
- Managing expectations
- Short term solutions & knowledge gaps
- Staff wellbeing/health
- Conflicting priorities

#### Governance

- Lack of political will & not a priority
- Long time needed
- Lack of flexibility
- Disconnected solutions
- Mismatched experience

### Hazard

- Viewed positively
- Magnitude
- Silent killer
- Lack of understanding

### Behaviour

- Apprehension
- Need targeted approach
- Cascading impacts

### Communication

- Messy messaging
- Warnings overload
- More engaging
- Not tailored



In association with



# Communication & engagement

"

The co-benefits considered most important by the UK public are improving air quality and health, providing homes that are more affordable to heat, improving energy security, and reducing inequality"



- Place-based climate language is vital in communicating with and mobilising the public. Climate assemblies & universities can help
- Place-based solutions derive from a deep understanding of, and engagement with, the expectations and concerns of local people and communities.
- A transparent, local, place-based approach is critical, with honest conversations about the potential 'losers' that could arise from the transition.
- Co-benefits may result from climate action (e.g. improving air quality and public health; reducing fuel poverty), but there is a gap in research on how UK public perceive such co-benefits.



Centre for Climate Change Economics and Policy



Economic and Social Research Council









THE QUEEN'S ANNIVERSARY PRIZ For the second due for the 2021

Local authorities should

- 1. Develop locally supported, evidence based climate action plans that tackle both adaptation and mitigation
- 2. Adopt a partnership-based approach to local climate action
- 3. Embed climate action in broader local strategies to emphasise co-benefits of climate action and connect climate adaptation and mitigation
- 4. Adopt integrated approach to financing climate adaptation and mitigation needs











Economic and Social Research Council





THE LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE

#### Local communities and stakeholders should

- 5. Broaden the scope of climate action beyond emissions reductions to create synergies to reduce physical climate risks, tackle wider societal challenges, and reduce social and economic inequalities
- 6. Utilise structures such as **climate commissions as an effective method** for delivering evidence, advice and local collaboration
- 7. Collaborate with local universities / knowledge agencies to utilise data and evidence to inform local action plans and progress reports
- 8. Participate in networks and platforms to share experiences and learn from each other















THE QUEEN'S Anniversary Priz For the server Force Force





Local businesses should

- Help support and lead place-based climate action recognising that this cannot be delivered alone 9. by local authorities and public investment alone
- Address the climate impact of their own operations and use their local influence to reduce area-10. wide emissions
- **Recognise changes to current operations and practice are necessary**, but can also present 11. opportunities for efficiencies, improvements and long term investments
- Seek active collaborations with local partners to share knowledge, skills and investments 12.







Economic and Socia













#### National government and devolved administrations should

- **13.** Put in place a coherent framework to support local climate adaptation and mitigation measures backed by appropriate funds, resources and skills
- 14. Tackle institutional and policy barriers holding back local climate action, to prevent national policy uncertainty and top-down approaches hindering local climate action ambition
- 15. Leverage the agency and power of local communities in the fight against climate action
- **16.** Support platforms to enable local climate action groups to share experience, learning and resources to unlock action









Economic and Social Research Council









THE QUEEN'S ANNIVERSARY PRI For the server Former Former 2021

### Thank you

PCAN Report being launched 19th June 2023



Grantham Research Institute on Climate Change and the Environment

Centre for Climate Change Economics and Policy



Economic and Social Research Council





THE LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE



THE QUEEN'S ANNIVERSART PRIZES For the server of the first server 2021