



# PLACE-BASED CLIMATE ACTION NETWORK

# Final report of the Place- Based Climate Action Network (PCAN)

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The views in this report are those of the authors and do not necessarily represent those of the host institutions or their funders. Any errors and omissions remain the authors' own.

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# 1. Introduction

The Place-Based Climate Action Network (**PCAN**) was a network funded by the Economic and Social Research Council (ESRC) that brought together the research community and decision-makers in the public, private and third sectors over the five-year period 2019 to 2024. The main aim of PCAN was to **translate climate policy into action ‘on the ground’** in communities within the United Kingdom.

**PCAN consisted of five interlinked innovative platforms** to facilitate two-way, multi-level engagement between researchers and stakeholders, including:

- **Three city-based Climate Commissions**, in Leeds, Belfast and Edinburgh. The three initial commissions were complemented by a wider network of similar commissions that PCAN supported, called the *PCAN Plus Network*.
- **Two theme-based platforms**, on finance and climate change adaptation.
- **A flexible fund, called the PCAN Fund**, which provided small grants and fellowships to researchers and research users and was the anchor for a wider set of engagement activities.

The three PCAN-supported city Climate Commissions continue to be recognised platforms for climate-related analysis and debate in their locations. They also serve as institutional role models for other local authorities. Our experience with the Commissions continues to be the basis for a rich vein of co-produced research and to inform the design and development of local climate governance in the UK. The two theme-based platforms are working closely with the three Commissions but also pursue broader activities with a wider set of stakeholders.

PCAN was led by an experienced team of researchers with strong track records of engaging with public, private and third-sector decision-makers. They were supported by a network of PCAN Analysts, Fellows and Associates who met every two months to share progress on the PCAN Commissions and platforms and provided wider updates on ongoing work.

PCAN built on the policy connections, networking capacity and research strengths of its host institutions:

- The Grantham Research Institute on Climate Change and the Environment at the London School of Economics and Political Science (LSE)
- The School of Earth and Environment at the University of Leeds
- The Centre for Sustainability and Environmental Governance (SECA) at Queen’s University Belfast (QUB)
- The Edinburgh Climate Change Institute (ECCI) at the University of Edinburgh
- The University of Oxford

This Final Report covers the ESRC-funded activities of PCAN between 2019 and 2024. The report is complemented by PCAN’s entry into ResearchFish, which details outputs and activities item-by-item, and further ResearchFish submissions that will be made for the five years following the end of ESRC’s funding of PCAN.

## 2. PCAN's key achievements

This section provides examples of PCAN's major achievements across its five interlinked innovative platforms, as outlined in the Introduction.

### 2.1. Climate Commissions: Leeds, Belfast and Edinburgh

Climate Commissions are city-wide partnerships bringing together people from the public, private and civic sectors to work collaboratively with a local authority to help drive climate action. Commissions are independent advisory groups and do not have a governance role (for further information, see the PCAN briefing [What is a local climate commission?](#)).

The first Climate Commission was established in Leeds in 2017, chaired by Prof Andy Gouldson (University of Leeds and PCAN co-lead), with a vice chair from Leeds City Council (the Executive Board Member for Climate Change, Transport and Sustainable Development). Two further core PCAN Climate Commissions were launched in Belfast (January 2020) and Edinburgh (February 2020). The Belfast Commission was co-chaired by Belfast City Council and Queen's University, while the Edinburgh Commission was initially chaired by Dr Sam Gardner, Head of Climate Change and Sustainability at Scottish Power, and then by Jamie Brogan of ECCL.

#### 2.1.1. Leeds Climate Commission

Important achievements of the Leeds Climate Commission include:

- Publishing an evidence-based [Net-Zero Carbon Roadmap](#) in 2020 and plan that led to the Council creating the structures that invested £100 million in an energy retrofit programme in their own housing stock and supporting a pilot approach to helping private owner-occupiers reduce home energy demand. The pilot was led by Octopus Energy and financed by Lloyds Banking Group.
- Helping the Council develop new strategic plans on transport and a Local Area Plan reflecting pressure from climate change impacts.
- Providing practical support on developing project finance, including for the award-winning Leeds PIPES district heating scheme.
- Organising a [citizens' jury process](#) in 2019 that secured broader buy-in from across the city for ambitious climate action.
- Publishing two position papers in 2019 that provided independent climate-focused advice for the city on: (a) hydrogen ([Hydrogen Conversion: Potential Contribution to a Low Carbon Future for Leeds](#)) and (b) the highly contested area of aviation ([Expansion of Leeds Bradford Airport and Incorporating Aviation into the Leeds Carbon Roadmap](#)).

#### 2.1.2. Belfast Climate Commission

Important achievements of the Belfast Climate Commission include:

- Publishing in 2020 the [Net-Zero Carbon Roadmap](#), a landmark for the project in Belfast as it has been widely used by policymakers and other climate stakeholders associated with the Commission and the Belfast Resilience and Sustainability Board and helped form the evidence base for the city's Resilience Strategy and the work of the Council's Climate and City Resilience Committee.
- Publishing in 2021 the Commission's research on the [Climate Crisis Youth Survey](#), the first baseline survey of levels of climate anxiety among 13–24-year-olds across the city. This was initiated and designed by the Commission's Youth Working Group.
- Building networks and relationships, led by the Commission and its working groups, which have expressed themselves as a combination of formal and informal links and networks between and within the wider Commission membership. Organisations are as varied as Derry and Strabane District Council, the Northern Ireland Assembly's All Party Group on Climate

Action, Belfast Linen Quarter Business Improvement District, and the Belfast Fridays for Future youth climate strikers' movement.

- Contributing to the implementation of the NI Climate Change Act, with key Commission members being invited by policymakers to offer advice on the implementation of the Act, such as its provision for a Just Transition Commission and an NI Climate Change Commissioner.
- In 2021, the Commission's co-chair John Barry co-authored two policy reports: [The Economic Benefits of Local Climate Action](#) for UK100, and [Mapping a Just Transition in Northern Ireland](#), commissioned by the Energy Division of the NI Department of the Economy.
- Helping the Belfast Climate Commissioner office in 2023 to establish a series of 'Readiness' reports in Housing, Energy and Food.

### 2.1.3. Edinburgh Climate Commission

Important achievements of the Edinburgh Climate Commission include:

- Providing expertise and leadership to help increase the city's climate ambitions and progress towards delivery. This happened initially through the recommendations and publications of the Climate Commission and their input into the city's climate strategy and subsequent action plan, and latterly through ECCI's participation and inputs into city net zero governance and leadership groups such as the Net Zero Edinburgh Leadership Board (NZELB, formerly the Infrastructure Investment Programme Board) and the Chamber of Commerce.
- Bringing together, through NZELB, the city's largest organisations and major energy users alongside utility infrastructure providers to share data and insights for the co-design of future net-zero infrastructure.
- Supporting the growth of the Edinburgh Climate Compact, an expanding group of Edinburgh businesses that have made commitments to accelerate the reduction of their own climate impact and to use their influence to contribute to citywide net-zero action.
- Scaling up the impact and influence of ECCI's work for PCAN in supporting place-based, area-wide approaches to emissions reduction in Edinburgh and the Scottish Borders, through wider engagement across other local authorities and providing clear recommendations from the PCAN-enabled programme. These have been presented and subsequently adopted by senior policymakers at local authority and national levels:
  - ECCI's and the Commission's work supporting Edinburgh to use data to embed climate impact into decision-making led to a programme of work for the Scottish Cities Alliance (SCA).
  - A report and recommendations were published for the SCA on how all eight Scottish cities could be supported effectively and efficiently to deliver area-wide emissions reduction programmes, contributing to and tracking progress towards the net-zero target in the national Climate Change Plan.
  - SCA agreed with COSLA (the Convention of Scottish Local Authorities), which represents all 32 local authorities in Scotland, that these recommendations should be extended across all 32 local authorities.
  - A recommendation to establish a national Climate Intelligence Service was presented through multiple channels and subsequent reports to the Chief Executives of local authorities, senior policymakers and cabinet ministers, which were also fed into and cited by parliamentary committees and statutory reviews. All these groups agreed to act on this policy recommendation (see below).
  - ECCI was contracted to partner with the Improvement Service to lead a national programme to support all 32 local authorities with area-wide programmes for emissions reduction.

- ECCI have also contributed through policy recommendations to the development of a national framework for net-zero delivery by local authorities and the Scottish Government.
- Establishing the Scottish Climate Intelligence Service (SCIS), a national programme supporting all 32 local authorities to design, manage and deliver area-wide programmes of emissions reduction using a common approach. This will enable them to share learning and capacity-building and to aggregate and monitor progress towards the delivery of the national Climate Change Plan. A national data platform has been procured to facilitate live action planning, revise plans and design future interventions in response.
- Undertaking a nine-month research project to explore the lessons learned from the evolution of the Edinburgh Climate Commission thus far and understand where an independent governance partnership could best support the delivery of climate outcomes in Edinburgh or elsewhere. The research accounted for Edinburgh's current gaps, challenges and needs with respect to climate governance and action. A report, due for publication in spring 2024, will guide future climate action through improved place-based climate governance by setting out an outline framework and principles for the design of future Climate Governance Partnerships.

#### 2.1.4. PCAN Plus Network

PCAN established a **PCAN Plus Network** for Climate Commissions and similar partnership-based groups, local authorities and other organisations seeking to establish a collaborative approach to local climate action. The PCAN Plus Network was chaired by Prof Andy Gouldson and coordinated by Millie Duncan, a Research Analyst at the University of Leeds.

The PCAN Plus Network surpassed PCAN's original commitment, being created in response to an unexpected but very welcome level of interest from communities and local authorities across the UK to understand how the Climate Commission model operated and whether it might work for their contexts.

**The PCAN Plus Network brought together over 15 place-based Climate Commissions, including:**

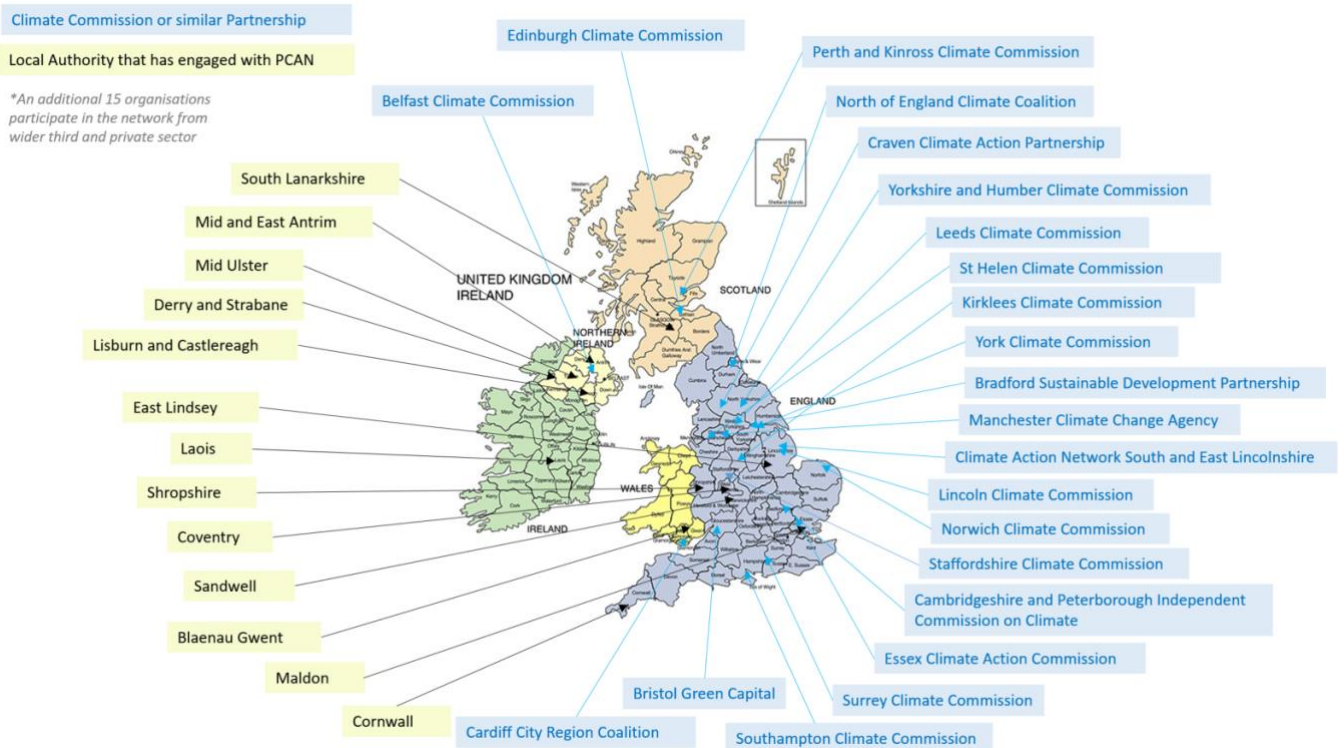
- The three original PCAN Climate Commissions, in Leeds, Belfast and Edinburgh.
- Two regional Commissions, in Northeast England and Yorkshire and Humber.
- Three county-level Commissions, in Surrey, Essex and Cambridgeshire and Peterborough.
- Four city-level Commissions, in Bradford, Lincoln, Norwich and York.
- Two district-/town-level Commissions, in Kirklees and Harrogate.
- Two time-limited Commissions, in Croydon and Doncaster.

The most important achievement of the PCAN Plus Network was to establish a space for peer learning and support, providing opportunities to share experience about specific topics and successful multi-sector processes.

A map is provided on the next page of the PCAN Plus Network.



Figure 1. Map of the PCAN Plus Network of Commissions and partnerships



## 2.2. Theme-based platforms: finance and climate change adaptation

### 2.2.1. Finance Platform

The PCAN Finance Platform was established in 2019 and aimed to build a community of practice that would help to connect the supply and demand for finance at the local and regional levels, starting with the three Climate Commissions in Leeds, Belfast and Edinburgh.

The PCAN Finance Platform was led by Professor in Practice Nick Robins and Brendan Curran at LSE.

Important achievements of the Finance Platform include:

#### 1. Building awareness and generating evidence on the strategic importance of place-based investment for the delivery of the UK's climate goals and on the structural barriers to this delivery

During 2019 and 2020 the Finance Platform hosted seven place-based finance workshops to examine the practical risks, opportunities and challenges of financing a place-based transition to net zero. These addressed the needs of the three Commissions and also looked to other parts of the UK. The onset of COVID-19 stopped face-to-face convenings and outreach. The workshops covered:

- **Edinburgh:** How banks and investors can channel capital for climate action in the city of Edinburgh and in Scotland more broadly (see the commentary [How Scotland Can Mobilise Finance for a Just Transition](#)).
- **Birmingham:** The needs of small and medium-sized enterprises (SMEs) to gain access to capital to deliver a just transition.
- **Bristol:** The potential for green finance innovation at the local level, learning from Bristol's City Leap process and from leading banks and investors in the city.
- **Leeds:** How finance can be raised to make all buildings net-zero and resilient, in ways that give priority to ending fuel poverty.
- **Cornwall:** The need for anchor institutions such as the new South West Mutual to meet the needs of local households and businesses in the transition.



- **Belfast:** The role of the finance sector in ensuring a just transition in Northern Ireland at QUB (see [news story](#)).
- **Cardiff:** To understand the critical issues facing Wales in terms of place-based just transitions for climate action.

The Finance Platform's research and engagement identified a lack of information on the employment and job impacts of net zero at a local level as a major barrier to getting traction with policymakers and financial decision-makers. To fill this gap, the **Just Transition Jobs Tracker** was published in 2021, quantifying the jobs exposed to the decarbonisation of the economy at the local level, and was quoted by the Climate Change Committee (CCC).

From 2022, Brendan Curran deployed the Finance Platform to deliver a detailed evidence base assessing the ecosystem for mobilising investment in local climate transitions. This generated several reports:

- **Growing Clean: Identifying and investing in sustainable growth opportunities**, as part of the Economy 2030 Enquiry with the Resolution Foundation.
- 3Ci WP4: Assessment for a Knowledge Sharing Platform.
- **A Pathway to our Renewable Future**, a report examining systemic changes needed to deliver the clean energy transition in Northern Ireland.
- **Local Net Zero Projects** (Innovate UK – PWC, LSE) .

## *2. Using additional funding from the ESRC to leverage further funding to deepen impact and put PCAN in the vanguard of understanding the spatial dimension of the just transition*

This included forming a dedicated community of practice, the Financing a Just Transition Alliance, which continues to operate. The additional funding from the ESRC enabled LSE to leverage further funding (notably from the Friends Provident Foundation and Thirty Percy Foundation) to put place at the heart of financing the just transition. This mobilised investors, banks and other stakeholders, including academia, trade unions and civil society, to take action. Important outcomes and progress include:

- **Showing how investors can support place-based just transition:** LSE worked with PCAN partner the University of Leeds, the Principles for Responsible Investment and the TUC to **examine the critical steps** for institutional investors to support a just transition in the UK.
- **Harnessing UK banks for a place-based just transition:** LSE partnered with PCAN, UK Finance and HSBC to **examine how banks could support a just transition** to net zero.
- **Mobilising the bond market for local action:** LSE also explored the potential for the Northern Ireland Housing Executive to **use the bond market** to raise capital for net zero goals in ways that would benefit residents, workers and the wider community.
- **Building a UK community of practice:** LSE in partnership with PCAN established the **Financing a Just Transition Alliance** in November 2020. This now comprises more than 50 banks and investors, trade unions and civil society plus academic organisations. A flagship report, **Just Zero**, contained 18 practical case studies of just transition finance, with place-based action as a strong cross-cutting theme; the report also profiled the work of PCAN. A second report focused on making **net-zero transition plans just** (including at the local level) and a third addressed the fundamentally place-based dynamics of financing the just transition in **UK agriculture**.

## *3. Contributing to advancing practical examples of place-based climate finance, during PCAN and afterwards*

This research and engagement stimulated practical examples of financial innovation to meet local needs during the climate transition, including:

- **Raising municipal green bonds:** The UK is an outlier in Europe in not having a local authority bond market. PCAN played a role in the development and expansion of municipal green bonds in the UK. PCAN-funded [research](#) in 2020 enabled green fintech company Abundance to better understand how local residents and others could be mobilised to invest in local climate action through municipal bonds. Since then, Abundance has worked with eight councils to raise funding through municipal bonds at attractive rates for local climate action
- **Designing a local authority green investment prospectus:** Launched in 2024, a new applied research programme, [From Westminster to Cumbria: Attracting Investment into Local Climate Transitions](#), will advance the investment readiness of a green investment prospectus for these two areas.

### 2.2.2. Adaptation Platform

The PCAN Adaptation Platform, established in 2020, was led by Dr Candice Howarth and sought to enhance place-based climate adaptation, contribute to improving the UK's climate resilience policy framework, and improve the country's adaptive capacity by exploring how best to integrate climate adaptation and mitigation. The platform aimed to ensure its work reflected the needs of end-users and helped inform local decision-making and action around climate adaptation. The platform has shown overall success in helping to bring the topic of climate adaptation and resilience into wider conversations on climate action. This has helped Climate Commissions and wider cross-sectoral stakeholders understand the need to better plan and prepare for the impacts of climate change and integrate these plans with broader climate action and policy issues.

**Important achievements of the Adaptation Platform include:**

#### 1. Improving understanding of the need to prepare for extreme heat

Dr Howarth secured a number of small grants to further support the work of the platform on preparedness for extreme heat:

- Supported by PCAN Adaptation experts, Dr Howarth analysed responses to the 2022 heatwaves in the UK through 35 interviews and four focus groups with 200 policymakers, first responders, civil society actors and utilities who were all affected by and involved in coordinating responses to the heatwaves during the 2022 summer.
- The work was built on a review [paper published in WIREs Climate Change](#) and was written up as a [policy brief](#), an [evidence report](#) and academic papers.
- It also formed the basis of discussion at stakeholders' workshops, a Policy Roundtable in May 2023, the PCAN Conference in June 2023, and [submissions to Inquiries and Calls for Evidence](#).
- The work has received significant media and policy attention and formed the basis of a British Academy Research Innovation Fellowship, which funded Dr Howarth to explore how to integrate adaptation and mitigation approaches to cooling during periods of extreme heat in London.

#### 2. Contributions across topics including emergency declarations, citizens' juries, and the feasibility of adaptation targets

- Platform members analysed the landscape of climate emergency declarations, with a specific focus on London boroughs, and the extent to which they covered adaptation. Outcomes from this work were published as an [article in Climatic Change](#) at the end of 2020 and discussed at a roundtable event in early 2021.
- PCAN adaptation experts were part of the national steering group for the Environment Agency's pilots of place-based citizens' juries, exploring the value of water in specific locations. Three pilots took place, in the Upper Thames, the North East and Yorkshire.

- Members of the platform were involved in a small project led by a PhD researcher at the University of Edinburgh looking at the feasibility of adaptation targets in the UK. This included a survey and workshop and has resulted in an academic publication.
- Academics, practitioners and experts working on adaptation met every two months to discuss ongoing work, identify opportunities for influence and collaboration on outputs, and join funding applications.

### 3. Merging the Adaptation Platform with the Adaptation Community of Practice, led by the University of Exeter and co-led by Dr Howarth, as PCAN comes to an end

- The **Adaptation Community of Practice** is a convened space where practitioners from across different sectors and geographies can come together and share their perspectives and expertise to support the collective advancement of adaptation work. The content includes practical tools, case studies and research, plus critical assessment of what is and is not working. It also creates space for an assessment of the barriers to adaptation action and what needs to shift in the wider landscape to support the members in their work.
- The Community of Practice has over 300 members, with between 40 and 70 attending each session depending on its relevance to their work. Membership is mixed, including business and community, with the largest representation coming from local government, the health sector and other public bodies. The Community is led by its members, who decide on topics to be covered, and is self-propagating, with new members invited by existing ones.

### 2.3. PCAN Fund

PCAN set aside a budget of **£400,000** for a flexible fund to support place-based research and engagement activities beyond the core PCAN platforms. The key features of the PCAN Fund were:

- Three competitive rounds, held in 2019, 2020 and 2021.
- Maximum project size of £35,000 for project durations of 12–18 months.
- Dedicated window for PCAN Fellowships, aimed at involving early career researchers in the network.
- Open to both researchers and practitioners.
- Administered by LSE but involving all PCAN locations.

Over the three rounds, PCAN awarded **11 projects and four fellowships**. **Two further projects** were awarded directly in 2023 with underspent funds. The successful projects were selected from some 250 submissions. The average project size was just under £25,000. Each project and fellow was allocated a PCAN mentor to ensure successful delivery and adherence to ESRC policy. Fellows also participated in the PCAN fellowship meetings as a way to be involved actively in the network.

**Table 1 below** contains a list of projects funded by the PCAN fund.

In the last round, in 2021, £28,000 was set aside for an **evaluation study** of the three PCAN City Commissions. The study was awarded competitively to CAG Consultants (Rhona Pringle and team). The work was overseen and guided by a core PCAN Advisory Committee led by Dr Candice Howarth (LSE) and including Prof Sam Fankhauser (University of Oxford), Prof Andy Gouldson (University of Leeds), Jamie Brogan (ECCI), and Prof Dan van Der Horst (University of Edinburgh). The project was completed in January 2023, with a **final report and summary of findings produced**. The evaluation was published and provides a detailed, arms-length assessment of the challenges and rewards of place-based Climate Commissions, with findings subsequently feeding into PCAN research.

Ahead of COP26 in Glasgow, PCAN received a top-up grant of £500,000 to award four **COP26 Fellowships**, giving award-holders the opportunity to engage directly with the COP26 organising team. Three of the recipients were awarded to female early career researchers. This turned out to be a powerful springboard and engagement opportunity. For example, COP26 Fellow and early career researcher Dr Jessica Omukuti (previously University of York, now at Oxford) was subsequently

invited by the UN Secretary General to join the UN High-Level Expert Group on Net Zero Commitments by Non-State Actors, chaired by the former Canadian Environment Minister Catherine McKenna.

**Table 1. PCAN Fund projects and fellowships, 2019–2023**

2019	Climate assemblies and juries: the how and why	Peter Bryant
2019	Climate change risk and vulnerability assessment of Edinburgh World Heritage Site	Yann Grandgirard
2019	Building local green investment markets using community municipal bonds	Karl Harder
2019	Capacity Building on Climate Resilience and Financing the Green Future in Belfast	Clare McKeown
2019	Supporting local officers and politicians to implement rapid climate action	Becky Willis
2020	Developing effective climate policy in a multi-authority local area – learning from new approaches to climate policy governance in Surrey	Ian Christie
2020	Place as adaptation: understanding neighbourhood resilience in the aftermath of COVID-19 (Fellowship)	Matt Lane
2020	Contribution of regional adaptation and insurance expertise to climate resilience	Nick Pyatt
2020	Building back better: towards a participatory and place-based economy (Fellowship)	Lina Brand Correa
2020	Place-based climate action in north-east Scotland: investigating climate action where 'urban' and 'rural' meet (Fellowship)	Alice Hague
2020	Integrating climate resilience and social justice into a framework for recovery in Preston after COVID-19	Mark Dooris
2021	Building a rural resilience network in Northern Ireland, aware of climate risk and resilience options and preparing for a just transition for the agricultural sector	Jade Berman
2021	Building an understanding of how local citizens perceive the co-benefits of climate action	Neil Jennings
2021	Enabling place-based climate action to address consumption-based emissions	Anne Owen
2021	Understanding place-based risks, impacts, and options for effective climate adaptation within the Yorkshire health system (Fellowship)	Bianca van Bavel
2023	Rural resilience project for Northern Ireland: supporting farmers with adaptation to climate change	Jill Montgomery
2023	Informing place-based decision-making on extreme heat in the UK	Candice Howarth

These projects have facilitated dialogue, collaboration and increased understanding, as well as has led to a range of impacts including on policy and practice (e.g. engaging with local authorities, informing Edinburgh’s World Heritage Site Management Plans, informing COP26 processes), increased awareness of the impacts of climate change, pathways to reduce emissions, and financing

of climate solutions, among many. The Fellowships also contributed to the career progression of the Fellows through important data collection filling evidence gaps, raising the Fellow's profiles, joining expert groups, publication of academic journals, briefs and commentaries as well as engagement and presentations at relevant events.

## 3. Outcomes and impacts

This section provides examples of the outcomes and impacts achieved from PCAN's five years of operation across areas including the economy, policy, society, culture, health, environment and quality of life.

### 3.1. Climate Commissions: Leeds, Belfast and Edinburgh

#### 3.1.1. Production and impact of Carbon Roadmaps

PCAN produced **Net-Zero Carbon Roadmaps** for the three cities covered by the core Climate Commissions and 51 roadmaps in total for different locations over the duration of PCAN. Each of the roadmaps shows the pathway to net-zero emissions for the respective city's target year: (a) 2030 for Leeds and Edinburgh, and (b) 2050 for Belfast (the same as the national UK target year for reaching net-zero emissions).

The roadmaps illustrate each city's share of the global carbon budget to keep to 1.5°C of warming (i.e. the level of global temperature rise at which we risk triggering dangerous climate change) and show when, at current rates of emissions, this budget will be used up. They also set out cost-effective, ambitious and innovative interventions that will help each city reach net zero by its target date, and demonstrate the benefits – especially financial (in terms of energy savings and additional employment) – that carrying out these actions would bring. The pathways to net zero and benefits are illustrated with a colourful infographic.

- The **Edinburgh** Net-Zero Carbon Roadmap was **published on 7 December 2020** and provided the evidence to underpin and give confidence to the City's 2030 Sustainability Strategy, subsequent citywide Sustainability Action Plan and Net-Zero by 2030 campaign.
- The **Belfast** Net-Zero Roadmap was **launched on 15 December 2020**, alongside the city's first Resilience Strategy.
- The **Leeds** Net-Zero Carbon Roadmap was **published at a webinar on 7 January 2021** hosted by the Leeds Climate Commission, which also featured responses from representatives from the public sector (Leeds City Council), private sector (Business in the Community) and civic sector (Friends of the Earth), along with members of the Leeds Climate Change citizens' jury.

Generating net-zero roadmaps was identified as a powerful starting point for place-based climate action. The 'roadmap maker' spreadsheet-based tool has been updated annually with current datasets and is being made available for future use as a standalone tool.

#### 3.1.2. Leeds Climate Commission – other achievements

- Leeds Climate Commission has informed the policy development of the City Council. For example, when the Council declared a Climate Emergency in 2019, it used the Net-Zero Carbon Roadmap as the evidence base to show how it would reach its target.
- Another example was a piece of work started by the Commission on how to fund renewable energy systems through crowd funding on council buildings and elsewhere. This was developed as a Green Investment Finance project by the Commission and involved private-sector commissioners.
- Supporting other stakeholders to make changes, the Council and Leeds University held a workshop with the city's biggest emitters to ask how they could reduce carbon emissions to meet the 2030 net zero target.



- The Commission has run a project development and financing initiative, working with businesses in the city over a three-month period to prepare a business case for low-carbon investment.
- It has also supported the expansion of the district heating scheme, which provides heat from renewable sources to 4,000 homes in Leeds, and the development of a green bond for the city.
- The **Yorkshire and Humber Climate Commission**, set up by the Leeds Commission, established a programme of 'Delivering Impact' sessions that ran through to early 2024 with a focus on net zero, climate resilience, nature recovery, and fair and inclusive transitions in the region.
- The Yorkshire and Humber Commission launched a Climate Action Pledge (the first regional pledge of its kind) covering climate resilience, reducing carbon emissions, enhancing nature and biodiversity, and promoting a just transition.
- The Yorkshire and Humber Commission has set up a new digital stakeholder consultation platform on climate action along with a Local Authority Adaptation Programme for Climate Support Officers in the region, drafted a national policy statement to the Prime Minister, and organised a Climate Summit event that 200 people attended.

### 3.1.3. Belfast Climate Commission and PCAN team – other achievements

- An indirect outcome of the Belfast Climate Commission and some of those members of the Commission and PCAN Belfast (particularly Policy Analyst Dr Amanda Slevin) was their role in **Climate Coalition NI**, which helped propose and progress Northern Ireland's first Climate Change Act in 2022. There was an overlap in memberships and interests between the wider Belfast Climate Commission and those in Climate Coalition NI, which was positive for this process.
- Co-Chair of the Belfast Commission, John Barry, is a regular commentator on energy transition and climate change in the local media, notably BBC Radio Ulster.
- The PCAN Fund supported research on community wealth-building, doughnut economics and place-based climate action (completed by QUB PCAN staff and colleagues at the University of Central Lancashire), which has been used by the Department for Communities' Community Wealth Building (CWB) team in progressing the implementation of CWB strategies across Northern Ireland.
- The Belfast PCAN team and the Commission have presented their work to Belfast City Council's cross-party Climate Change group and the NI Assembly's All Part Group on Climate Change, helped both to develop their evidence base. The Commission's work is also credited with helping the city achieve an 'A' rating for its climate action in 2022 and 2023 awarded by the Carbon Disclosure Project, and it supported Belfast Chamber of Commerce to produce a **report on business and climate change** in 2021.
- The Belfast team has increased the visibility of and support for climate mitigation and adaptation at the local council level in Northern Ireland by giving many presentations to elected representatives and officers and having informal discussions with local council officers across the province and the Republic of Ireland.
- The Belfast team has helped support the work of the Green Arts Collective, hosted by Belfast City Council, including John Barry being CI on a recent art-based *Black Mountain Shared Space Guerrilla Gardening* project (part of Belfast 2024), and he co-authored **Belfast Business Sustainability Survey** for the Belfast Chamber of Commerce.
- The Belfast team has published several academic outputs, including a co-edited volume, *Addressing the Climate Crisis: Local Action in Theory and Practice* (2022).

### 3.1.4. Edinburgh Climate Commission and ECCI – other achievements

- The local and national workstreams have culminated in ECCI being asked to lead on setting up the Scottish Climate Intelligence Service (SCIS), a national programme to support all 32 local authorities to design and deliver effective programmes for area-wide emissions reduction. These target the 40.3 million metric tonnes of CO<sub>2</sub> from the UK greenhouse gas inventory that can be attributed to territorial emissions from local authority areas in Scotland. Over the period September 2023 to April 2024, ECCI engaged all those local authorities, along with some other regional place-based stakeholders, in the co-design of their data and service requirements to support effective delivery of local climate action.
- The SCIS will support the local authorities to effectively deliver programmes that decarbonise their regions with the overall aim of removing their global climate impact by becoming net-zero regions. This will inform the effective design and delivery of local policy and action on climate. The service will also help local authorities to quantify and realise the co-benefits of local climate action, in particular for the local economy, community cohesion and resilience, and public health and wellbeing. These benefits will be vital in securing shared commitment and investment for local climate action.
- Edinburgh’s place-based programme legacy from PCAN is concentrated on helping the recently established Net Zero Edinburgh Leadership Board to improve its planning of net zero infrastructure and investment, in particular to use Geographic Information Systems (GIS) mapping to bring place-based approaches and a better understanding of place needs and characteristics into net zero planning and delivery. The Edinburgh team continues to support and engage critical local place stakeholders, and is scaling up regional and national impact through the Edinburgh and South East Scotland City Regional Deal, the SCIS and the Sustainable Scotland Network (SSN).
- The development of a report on place-based climate governance, to be published in Summer 2024, has outcomes relating to knowledge sharing and guiding future policy improvements. This research report collated, analysed and presented findings from 14 stakeholders across Edinburgh on the effectiveness of climate governance to date. It offers a thorough analysis of the context in which stakeholders are currently operating and highlights the real-time challenges, risks, gaps and needs of place-based climate governance. It also builds on stakeholders’ feedback to set out potential pathways for improved climate governance in Edinburgh. The report will be used to form the foundation of a proposal that argues the importance of the Edinburgh Climate Commission in the city’s climate governance landscape in conjunction with the Net Zero Edinburgh Leadership Board, the Community Climate Forum and the Edinburgh Climate Compact. It will also be used to share more widely the learning from Edinburgh for the design and development of place-based climate governance partnerships across the UK.

### 3.1.5. PCAN Plus Network

The PCAN Plus Network had met online 12 times over five years (see **Table 2** below for details), involving around 20 Climate Commissions and similar organisations:

- An additional 13 Local Authorities considering the Climate Commission model or similar
- Over 15 UK Partnership Organisations, including:
  - Abundance Investment
  - UK 100
  - Catapult Energy
  - Local Government Action
  - C40
  - Climate NI
- Over 165 individuals across these organisations



**Table 2. Meetings of the PCAN Plus Network**

1	June	2020	What climate commissions are (and what they are not)
2	December	2020	Net Zero Roadmaps
3	April	2021	Local climate action and the 6th Carbon Budget
4	July	2021	Adaptation and Climate Communication
5	October	2021	How to mobilise resources and engage with politics
6	February	2022	How can Climate Commissions reach and engage diverse communities?
7	June	2022	How to reach and engage diverse communities
8	October	2022	Delivering net zero on the ground
9	February	2023	Evaluating the impact of climate commissions
10	May	2023	Place and governance in climate action
11	August	2023	Best practice and innovation for place-based adaptation and resilience
12	November	2023	PCAN Plus legacy and proposal post funding

### 3.2. Theme-based platforms: finance and climate change adaptation

A summary of the platforms' achievements is as follows.

#### 3.2.1. Finance Platform

- Raising awareness across the UK and the financial system of the need for a place-based approach.
- Strengthening the evidence base with numerous reports and the Just Transition Jobs Tracker.
- Understanding needs and opportunities in key places and financial markets through active engagement and analysis.
- Building a community of practice, the Financing a Just Transition Alliance.
- Championing the place-based dimension in the wider agenda of just transition finance.
- Supporting the development of a new financial product for financing place-based climate action, the municipal green bond.
- Supporting local authorities with the development of a green investment prospectus.

#### 3.2.2. Adaptation Platform

- Advising the Climate Change Committee with insights on the analysis of preparedness for heat and heat wave conditions, and how the Committee should consider the integration of adaptation and mitigation in its next Climate Change Risk Assessment.

- Contributing to the Environmental Audit Committee's [Call for Evidence on Heat Resilience and Sustainable Cooling](#) and to a Call for Evidence for the [London Climate Resilience Review](#).
- Establishing a network of more than 200 stakeholders from the public, private and third sectors seeking to deepen their understanding more of how to consider the UK's response to future extreme heat risk.
- Ensuring climate adaptation, resilience and preparedness had more prominent coverage and consideration in wider climate action strategies.
- Building a community of academic practice and merging this with the Adaptation Community of Practice to continue engagement on adaptation with UK policy, practice and academic actors.

### 3.3. Reports and events

PCAN produced two flagship reports:

- Howarth C, Brogan J, Curran B, Duncan M, Fankhauser S, Gouldson A, Owen A, Stuart-Watt A (2023) [Enabling Place-Based Climate Action in the UK: The PCAN Experience](#). A report by the Place-based Climate Action Network (PCAN), UK.
- Howarth C, Barry J, Dyson J, Fankhauser S, Gouldson A, Lock K, Owen A, Robins N (2021) [Trends in Local Climate Action in the UK](#). A report by the Place-based Climate Action Network (PCAN), UK.

Prof Fankhauser led the production of a report to the ESRC on [UK Research on the social science of climate change. A synthesis of ESRC and related investments](#) in 2019, synthesising social science research on climate change that was supported by the ESRC and the other research councils that form part of UK Research and Innovation (UKRI) between 2008 and spring 2019. Prof Fankhauser and Dr Howarth contributed to a report by the Adaptation Committee on [Adaptation Finance in the UK](#), which was launched in early 2023. Prof Fankhauser was invited to chair the advisory group for the report. He also led the production of the chairman's report, a background paper to the main report, which featured a series of case studies to showcase climate change adaptation and finance in action. Two of the five case studies concerned place-based adaptation action at the local level, firstly in Glasgow City Region and secondly through the PCAN-supported Climate Commissions in Leeds, Belfast and Edinburgh. The PCAN case study was drafted by Dr Howarth.

PCAN Analysts coordinated an [online mini conference](#) in September 2020, in collaboration with the Royal Geographical Society's Climate Change Research Group, on the 'climate praxis', which led to the publication of a Palgrave Pivot open access book, [Addressing the Climate Crisis: Local action in theory and practice](#), edited by the PCAN team, which to date has over 45,000 downloads.

PCAN organised a [large national conference](#) on 19 June 2023, at the Royal Society that was attended by 150 stakeholders from the public, private and third sectors, including UK Climate Commissions, local authorities, think tanks and universities. Attendees discussed topics such as the importance of a place-based approach, how to accelerate it, and building effective climate governance. The jam-packed conference featured a welcome address from British journalist and former science editor of the BBC, David Shukman, keynote speeches from MP Chris Skidmore and Co-Director of PCAN, Dr Howarth, along with panel discussions and breakout sessions.

Other flagship events organised by PCAN included:

- March 2020: [Should public deliberation about climate change be included at every stage of climate policy design and implementation?](#), a workshop with 50 participants held at LSE in collaboration with PCAN and the Centre for Climate Change and Societal Transformation (CAST). The workshop explored the extent to which citizens' assemblies and juries are effective in giving a voice to citizens on climate change, and the conditions under which they have an impact.
- May 2023: [We've declared a climate emergency, now what?](#), a roundtable led by LSE that brought together 20 experts to examine how stated intent for ambitious climate action can be

thwarted in some councils by the lack of resources, skill and capacity to deliver this, which runs the risk of the declarations becoming symbolic acts rather than platforms upon which further action is delivered.

- June 2023: **Joining-up local responses to adaptation and mitigation**, a workshop at the Royal Society in London, which applied a ‘world café’ or ‘carousel’ approach with approximately 65 participants to co-produce an assessment of the complexities of developing responses to extreme heat risk.
- September 2023: **Priorities for a UK heat resilience strategy**, held at LSE and bringing together 70 stakeholders to reflect on experiences of extreme heat in 2022 and 2023, assess the impacts of heat on urban areas, workers and productivity, farmers and food production, communities, and on London and Paris. Discussion was had on what the top priorities for a UK heat resilience strategy should be.

Table 3 lists further events.

**Table 3. Selection of PCAN events, 2019–2024**

Month/Year	Event
June 2019	Financing for society: local authority (Training workshop)
November 2019	How ready are cities for net zero? (Festival)
August 2020	Accelerating retrofit (Webinar)
September 2020	Local climate praxis: bridging the gap between theory and practice on local climate action (Online mini conference)
November 2020	Assessing and building city-level readiness for climate action (Webinar)
March 2021	Enabling rapid climate action: lessons from local government (Webinar)
March 2021	Trends in local climate action in the UK (Webinar)
May 2022	Climate resilience, social justice and COVID-19 recovery in Preston (Webinar)
June 2023	Local climate action: moving out of silos (Conference)
February 2024	Turning up the heat (Online event)

## 4. Examples of leveraging investment and partnerships

This section provides examples of how PCAN has helped leverage investment and partnerships.

### 4.1. Climate Commissions: Leeds, Belfast and Edinburgh

#### 4.1.1. Leeds Climate Commission

- On stakeholder engagement, 150 organisations inputted into the regional climate action plan, and using the 'Common Place' platform is opening up more opportunities for inputs.
- The University of Leeds undertook a study in conjunction with the ESRC-supported Leeds Institute for Data Analytics (LIDA) and Leeds City Council's housing team that helped the Council present the financial case for retrofitting 50,000 council homes in the city. This was used by the Commission in discussions with the Council that led to it committing to a £100 million retrofit scheme, which prioritised investment (from its maintenance budget) into different categories of council housing with different levels of energy efficiency.
- Using the trust and social capital that the Commission accrued through its ways of working and considered inclusive approaches, the Leeds-based PCAN team was able to pivot to create and support the Yorkshire and Humber Climate Commission, established in 2021 and covering an area with a population of 5.5 million. The University of Leeds is investing £1.9 million into this Commission over four years through its Climate Plan, and the Y&H Leaders Board (all the political leaders of all 16 local authorities) has committed £100,000 to the Commission. Initially funded through the University of Leeds Climate Plan, the Y&HCC is entering a second phase and is on its way to becoming an independent and financially sustainable body.

#### 4.1.2. Belfast Climate Commission

- Having access to and knowledge of the wider UK PCAN research team has been invaluable in providing local policymakers and other members of the Commission and their organisations with access to key experts, such as Professor in Practice Nick Robins on climate finance and place-based local finance, and Brendan Curran in relation to proposals for the NI Housing Executive to finance home retrofitting.
- The work of the Belfast PCAN team has helped informally establish greater links between officers in central and local government and Queen's University Belfast. The project team's consistent presentation of its work as being part of the public sector and not something separate from it has helped overcome a division between university research and policymaking.
- Links and partnerships built with other local councils in Northern Ireland led Derry and Strabane District Council to develop a North West Climate Action Framework based on input from the wider PCAN network and engagement with and learning from the experience of the Belfast Climate Commission.

#### 4.1.3. Edinburgh Climate Commission

- PCAN has led directly to the Commission's programme of work with local authorities across Scotland to set up the Scottish Climate Intelligence Service and support the delivery of the national Climate Change Plan. Co-founding the Edinburgh Climate Commission as part of PCAN with the City of Edinburgh Council developed the team's working relationship with local authorities, and from there it has built a programme of place-based action on area-wide emissions that will be scaled up across Scotland. Over £4 million of investment has been approved which has been leveraged from the Scottish Government and all 32 local authorities.

- PCAN has enabled a programme of work supporting local authorities and other place-based partners to assess the wider benefits of climate action, use city- and regional-scale mapping for net-zero infrastructure investment, and embed climate impact into their decision-making. This has drawn further investment from The Data Lab, local authorities and their regional partners, and infrastructure providers such as Scottish Power Energy Networks, Scottish Gas Networks, Vattenfall and Scottish Water. The programme has also facilitated greater collaboration on data-sharing for future investment.
- The Commission has leveraged the established networks, working relationships and routes to engagement of the Sustainable Scotland Network. SSN is a practitioner network of over 600 sustainability professionals across Scotland's 180-plus public bodies.
- The research project on climate governance in Edinburgh involved stakeholders from a variety of backgrounds throughout. This has included perspectives from local government (Edinburgh City Council), academia (University of Edinburgh), National Health Service (NHS Lothian), utility providers (Scottish Power), businesses (Edinburgh Chamber of Commerce), and consulting (A Future Worth Living). Further partnership work was evident when delivering a workshop as part of this research, which engaged partners from ECCI, SSN, PCAN, Climate Springboard, the emerging SCIS and the Net Zero Edinburgh Leadership Board. Drawing on multiple viewpoints served to mirror the multidisciplinary nature of local climate change issues and underscored the importance of partnership working.

#### 4.1.4. PCAN Plus Network

- We have opened discussions with the Thirty Percy Foundation about taking the PCAN Plus Network forward. The foundation has indicated that it would like to commit up to £500,000 to the network over the next two years.
- Surrey Climate Commission has applied for funding from the Advancing Capacity for Climate and Environmental Social Science (ACCESS) programme to enhance its activities.
- PCAN Plus Network experience has underpinned Arup winning the contract for Big Lottery Fund Climate Action Fund programme support, with PCAN academics at Leeds and LSE involved in the 'evidence' strand of this work, worth approximately £500,000 over seven years.

## 4.2. Theme-based platforms: finance and climate change adaptation

### 4.2.1. Finance Platform

- The platform has used ESRC funding to raise funding from other sources, including the Friends Provident Foundation, Thirty Percy Foundation, HSBC and others.
- We have leveraged partnerships with 3Ci, PWC, Columbia University, Jacobs Consulting and others to contribute to our research.
- We have leveraged the platform to engage with various investors, bankers and other financial institutions to test our research and give feedback, in particular on the work on local net-zero projects (funded by Innovate UK).
- There is ongoing dialogue and active development with critical stakeholders in Scotland, including the Scottish Government, to establish a technical assistance facility for place-based climate action projects.
- In the future, the project with Westminster and Cumberland councils may be successful in attracting finance for their local net-zero projects/portfolios. However, it is too early to claim any such success.

### 4.2.2. Adaptation Platform

- The platform has secured £250,000 in additional funding (£130,000 from the British Academy Research Innovation Fellowship with Dr Howarth as PI, and £120,000 for three individual

projects from the LSE Urgency Fund, Research and Impact Fund, and Regional Innovation Fund) to build on the work on heat resilience.

- We have leveraged the platform to establish a **Heat Resilience and Preparedness Hub** at LSE's Grantham Research Institute to act as a conduit for all heat-related research and further enhance an established partnership with the British Red Cross and other organisations.

## 5. Lessons learnt

This section provides reflections, insights and lessons learnt, captured under five main themes.

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**Lesson 1. Climate Commissions must have comprehensive understanding of power dynamics, governance structures, leadership representation and strategic tactics.**

**“We’ve demonstrated how the model of an independent body can support place-based action, enabling cross-sector working where local authorities have no capacity.”**

– Leeds Climate Commission

**The level of power** held by Climate Commissions is crucial, as it determines their ability to effectively bolster activities and overcome barriers. For instance, in Edinburgh, the Commission’s independence was compromised as it relied on the local council for funding, support and credibility. This interdependence was challenging due to the limited power of both the Commission and the Council, stemming from insufficient devolved power from the Scottish Government and Westminster.

Furthermore, a review of local versus national powers in Scotland revealed areas where powers may not be enabling.

- **Lesson: A mandate for governance from the local council could significantly enhance the power of Commissions.**
- **Lesson: Understanding power dynamics in specific locations, particularly in relation to net-zero delivery and policy, is essential.**

**Governance** is a vital driver of place-based climate action, but it should not be expected to solely deliver on climate goals. Instead, it is crucial to consider governance synergistically with a delivery mechanism.

- **Lesson: Clear and well-defined governance structures, communicated both internally and externally, are essential for effective coordination and implementation of climate initiatives.**

**On leadership**, Climate Commissions must recognise the significance of membership representation and its impact on Commission activities. It is important to note that local Climate Commissions and partnerships are not substitutes for policy and political leadership. While they enable shared responsibility across all actors, national and local policymakers must lead the delivery of climate action and facilitate interconnections across scales. Moreover, regional-scale Climate Commissions, such as Yorkshire and Humber, have the potential for increased leverage and influence, especially if they include and work closely with mayors.

- **Lesson: National and local policymakers must lead the delivery of climate action; involving mayors may help at the regional level.**

**Clearly defining the scope of work**, achievable targets, timelines and activities is imperative. This ensures objectives are well-defined and measurable, providing a roadmap for the implementation of climate initiatives. Additionally, the presence of conflict resolution mechanisms is crucial for addressing conflicts of interest that may arise during the implementation of climate initiatives and derail efforts.

- **Lesson: Establish clear targets and timelines so stakeholders can track progress and hold accountable those responsible for the execution of climate action plans.**
- **Lesson: Have mechanisms in place to address and resolve conflicts of interest in a fair and transparent manner.**

**Strategically**, the challenges associated with transitioning from ambitious climate strategies to concrete action must be acknowledged and addressed. This includes the translation of high-level strategies into actionable steps, the measurement of progress against set targets, and ensuring transparency and visibility throughout the process. Measuring progress against set targets is essential for evaluating the effectiveness of implemented measures and making informed



adjustments as necessary. Moreover, transparency and visibility are crucial for fostering trust and accountability among stakeholders, and for garnering support for climate action initiatives.

- **Lesson: The translation of strategy into action requires careful planning and coordination to ensure that intended goals are effectively pursued.**

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## **Lesson 2. There are complex challenges to mobilising financial support for place-based climate action.**

**“Saying there’s not enough money being invested is not helpful and you need to think about resourcing the next steps to move that problem.”**

– Edinburgh Climate Commission

**The barriers** to financing place-based climate action are multifaceted and extend beyond previous understanding, encompassing structural and systemic challenges. These barriers include the excessive centralisation of the UK’s financial system, compounded by the absence of place-based financial institutions, and the sustained reduction in the capacity of local and regional authorities to support place-based finance due to successive funding cuts by the UK Government since 2010. The convergence of governance, power, funding, investment and resources underscores the complexity of the challenges faced in mobilising financial support for place-based climate action.

Moreover, the imperative for place-based climate investment has received greater recognition than PCAN initially expected, particularly from within the banking and investment sectors. The acknowledgment of the UK’s status as the most regionally unequal country in Europe resonates within the financial community, who perceive this disparity as a significant impediment to achieving net zero and broader sustainability objectives, emphasising the critical interplay of funding, investment and resources.

**The potential** for scaled-up investment in place-based climate action exceeds previous estimations, necessitating profound policy and market reforms, and adequate public finance.

- **Lesson: The financial sector’s capabilities for supporting place-based climate action need to be strengthened and their accountability for their local climate impacts enhanced.**
- **Lesson: Greater regional diversity must be promoted within the UK financial system, including through establishing regionally-based financial institutions and funds.**

**Securing funding** and establishing a dedicated secretariat are also crucial for the effective functioning of Climate Commissions. The provision of funding for a secretariat would not only facilitate coordination but also bring a diverse range of skills to deliver various activities, including public affairs, net-zero analysis, adaptation programmes, climate pledges, policy representation and community engagement. The expansion of the Yorkshire and Humber Climate Commission’s secretariat from one full-time equivalent (FTE) to six FTE underscores the significance of adequate staffing for Commission activities.

- **Lesson: Funding for a full-time secretariat comprising at least two individuals is essential, to ensure Climate Commissions’ operations are not perceived as secondary to other responsibilities.**

**Local government recognition** of the value added by Climate Commissions, along with a mandate for governance, can significantly drive Commission activities, especially if accompanied by financial backing.

**Exploring innovative funding models** and diversifying funding sources is imperative to provide stability and reduce dependency on any single contributor. However, sustaining these models poses challenges, including issues related to time, enthusiasm and resourcing, which can impact their long-term impact and effectiveness.

- **Lesson: Diversifying funding sources to support Climate Commissions is key to ensure stability but requires careful consideration of their long-term sustainability.**

**Reliance on informal mechanisms** for place-based climate governance can also cause issues, as evidenced by the difficulties faced by local Climate Commissions in maintaining climate action work. The varying funding scenarios, such as the University of Leeds funding the Leeds and Yorkshire and Humber Climate Commission Secretariats, and the York Climate Commission's reliance on volunteers due to the absence of funding from the University of York or City of York Council, exemplify the diverse funding landscape and the challenges associated with securing sustainable financial support for climate commissions.

- **Lesson: A more formalised and better-resourced mechanism for place-based climate governance is needed.**

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### **Lesson 3. Focus on collaboration for net zero must be maintained in the face of conflicting organisational needs and the inclination to adopt a critical stance.**

**“It takes effort and thought to keep the tone positive and the intent collaborative rather than becoming a strident critic who can easily be overlooked or sidelined.”**

– Leeds Climate Commission

The **imperative for collaboration** in partnership meetings is often overshadowed by the return to role priorities defined within organisational parameters, hindering the facilitation of collaboration focused on achieving net-zero targets. The operational scope of organisations, rather than their broader influence, often limits the net-zero focus, impeding effective collaboration between stakeholders, yet this is crucial for achieving the necessary scale and pace of delivery. For instance, the Net-Zero Edinburgh Leadership Board, established as a collaborative body, encountered difficulties in setting up processes like data-sharing among partners, as processes designed to protect individual institutions act as barriers to cross-organisational collaboration.

The momentum observed in 2019 following climate emergency declarations from local councils and communities has waned, and national and devolved climate policies often overlook the crucial role of local communities. More than half of local Climate Commissions interviewed by PCAN perceive ad hoc and intermittent national policies to be a challenge to place-based climate action.

Conversely, the significant value of a collaborative approach has been demonstrated by PCAN's researcher-led analysis on national and place-based responses to extreme heat.

- **Lesson: The role of local communities in the effective and equitable delivery of climate targets must not be overlooked in collaborations.**
- **Lesson: Co-producing research design and outcomes can enhance a project's credibility and rigour and foster deep partnerships across sectors.**

**Maintaining a positive** and collaborative approach, rather than adopting a critical stance, requires conscious effort to avoid being overlooked or side-lined. Evidence from Yorkshire illustrates how a Climate Commission can end up in a marginalised position, emphasising the need to maintain a collaborative approach to avoid such pitfalls.

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### **Lesson 4. Attention to aligning and integrating adaptation and mitigation is needed for effective place-based climate action, rather than balancing a range of siloed initiatives.**

**“Work on adaptation needs to go further still with considerations for how to better align adaptation and mitigation efforts to avoid issues relating to unintended consequences.”**

– Adaptation Platform

**Local context** and community involvement were championed through the initial activities of the Net-Zero Roadmap and the citizens' jury processes undertaken by the Leeds Climate Commission, which exemplify a socio-technical approach. Notably, the Yorkshire and Humber Commission prioritised adaptation and resilience, recognising the limitations of addressing these issues solely at the city scale and benefitting from the expertise of a co-director who had worked at the Environment Agency. However, challenges persist in addressing land use and biodiversity in alignment with net-zero plans.

- **Lesson: Place-based action is fundamental in driving effective climate initiatives, as abstract ideas need to be rooted in specific locations and benefit from a bottom-up, cross-sector approach.**

The establishment of the Adaptation Platform following the inception of PCAN acknowledges the need to bridge the gap in climate action efforts, which have previously focused more on mitigation. Over time, adaptation has gained more prominence in climate action discussions, but further efforts are required to align adaptation and mitigation strategies to avoid unintended consequences and promote co-benefits across the two. This includes co-producing climate action where adaptation and mitigation efforts and implications have been carefully considered across sectors and by stakeholders (e.g. building retrofits, transport infrastructure, health initiatives), which can help tackle wider societal challenges and therefore support a just transition.

While the climate focus of local councils and communities is expanding to encompass broader climate strategies, including preparedness against current and future climate impacts, adaptation planning is still in its early stages, and there is untapped potential for synergies between adaptation and mitigation activities at the local level.

- **Lesson: Continued efforts are needed to fully exploit the synergies between adaptation and mitigation as integrating these strategies can broaden the scope of climate action at the local level, addressing not only emissions reduction but also emphasising co-benefits and reducing risk from climate impacts.**

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#### **Lesson 5. The collaborative engagement of university staff with local authorities as peers in the civic space has been pivotal in driving impactful climate action.**

**“There is a pressing need for climate literacy amongst all sectors: academia, public sector, private sector and civil society.”**

– Belfast Climate Commission

**Climate and carbon literacy** is increasingly evident as an imperative across all sectors, including academia, the public and private sectors and civil society. However, there are still notable gaps in capacity and depth of knowledge that hinder the effective implementation of place-based climate action, particularly in elevating the priority of climate adaptation alongside mitigation efforts. Partnerships play a pivotal role in developing this knowledge and capacity at every level of the local context but achieving effective collaboration within organisational parameters requires a cultural shift in setting priorities and boundaries, necessitating deliberate and coordinated efforts to enable such collaborations. While organisational structures and partnerships with shared climate aims are emerging to facilitate collaboration and knowledge-sharing on climate action, they encounter challenges related to longevity and resource sustainability, mirroring the experiences of climate commissions.

For example, the parallel initiatives of PCAN and the University of Leeds Climate Plan have been instrumental in the success of the Leeds and subsequently the Yorkshire and Humber Climate Commissions. This contrasts with the more traditional approach of universities focusing solely on their own estate, operations and curriculum, highlighting the value of universities as providers of independent evidence-based expertise in advising on policy and driving transformative change.

- **Lesson: There is a critical role for universities as local civic actors in knowledge-sharing, fostering collaborative partnerships and active engagement with other stakeholders to advance effective place-based climate action.**

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