A Framework-based Exploration of Typologies for Climate Governance:

LESSONS LEARNED FROM THE EDINBURGH CLIMATE COMMISSION

UKRI Economic and Social Research Council

PCAN PLACE-BASED CLIMATE ACTION NETWORK

ecci EDINBURGH CLIMATE CHANGE INSTITUTE

SSN Sustainable Scotland Network

Acronyms

CCC - Committee on Climate Change
CGP – Climate Governance Partnership
ECC – Edinburgh Climate Commission
ECCI - Edinburgh Climate Change Institute
ESRC - Economic and Social Research Council
PCA – Place-based Climate Action
PCAN - Place-based Climate Action Network
PCG – Place-based Climate Governance
SSN – Sustainable Scotland Network

Author

This report was authored, designed and illustrated by Sarah Bryant, a researcher at the Edinburgh Climate Change Institute (ECCI).

The views in this report are those of the author and do not necessarily represent those of the UK Economic and Social Research Council (ESRC) or host institutions. Any errors or omissions are the sole responsibility of the author (below).

Sarah Bryant
Edinburgh Climate Change Institute
Sarah.Bryant@ed.ac.uk

Acknowledgements

Contents

05 Findings 28

06 Discussion 47

07 Conclusions, Limitations and Further Research 53

References 60

Table of Figures

Section 1: Executive Summary

Executive Summary

About this report

This report utilises the lessons learned from the Edinburgh Climate Commission (ECC) to inform the development of a framework that explores 3 typologies for improved place-based climate governance. After selecting a recommended typology, the report goes further to outline 2 practical applications of this in Edinburgh. It also presents a checklist of 17 key considerations that must be accounted for when designing, setting up, running, evaluating and decommissioning a place-based climate governance model.

Background

Place-based climate action (PCA) encompasses activities to reduce greenhouse gas emissions or enhance climate adaptation and resilience, which are driven by people's commitment, attachment and responsibilities to the places where they live, work and socialise, as well as being shaped by the specific opportunities, challenges and constraints of a place (Howarth et al., 2020).

A place-based approach to climate action is increasingly recognised as an important way to bridge the gap between ambition and climate action (PCAN, 2023). This is because climate change is materialising heterogeneously in different places and, therefore, requires an integrated approach that accounts for localised circumstances i.e., local strengths, capacity, knowledge, priorities, weaknesses and threats. By translating national climate risks and targets to a local level, and setting tangible and achievable actions with realisable goals, transformational change can be delivered on the ground.

An emerging model of PCA in the UK is that of 'Climate Commissions'. These are city- or area-wide partnerships that bring together people and organisations from the public, private and civic sectors to work collaboratively and help drive, guide, support and track climate action (PCAN, n.d). The first commission to be established in Scotland was the ECC. The ECC was set up to explore whether introducing an independent form of local governance could help accelerate local climate action, and to stimulate, test and learn from this innovative place-based approach.

According to an independent report conducted by CAG (2023), the ECC demonstrated its value to Edinburgh's climate landscape through policy innovation, convening, knowledge brokering, independent, evidence-based advice, awareness raising, engagement, facilitation and challenge. This was particularly evident as it facilitated and informed Net Zero policy and practice of private sector organisations through the Climate Compact.

Purpose of this report

This research comes at a unique point in time. Despite the commission's positive contribution, the ECC finds itself at a crossroads. The governance gap which it attempted to fill has widened significantly, making it difficult for the voluntary commission to continue. The ECC is also nearing the end of its funding from the Economic and Social Research Council (ESRC) and faces even greater uncertainty for its future.

Meanwhile, the City of Edinburgh Council is off track on its climate goals (Bol, 2024) and lacks a realistic plan on how it aims to meet its 2030 target. Similarly, Scotland is also off track on most of its key climate indicators and has delayed its draft Climate Change Plan, therefore, missing a coherent, transparent, and quantified plan on how it will meet its stretching 2030 target (CCC, 2024).

These factors call for increased PCA and improved climate governance. While Climate Commissions have many limitations, such as a lack of resources and power, they will remain relevant until better models of place-based climate governance (PCG) emerge.

For this reason, this research explores a hypothetical form of PCG, hereafter known as a 'climate governance partnership' (CGP). This is an independent partnership comprised of multidisciplinary representatives who collaborate to steer and mobilise action on climate change in a specific place.

This research uses a CGP to meet the following research aims;

- To better understand if a CGP could continue to uniquely add value in Edinburgh and, if so, investigate where it is best placed to do so

- To explore the lessons learned from the Edinburgh Climate Commissions' journey thus far

- To utilise lessons learned by the Edinburgh Climate Commission to inform the development of a framework of outcomes for improved climate governance

Overall, this report can be used to guide the direction of future climate action and potentially justify the need for increased financial investment into improved PCG models.
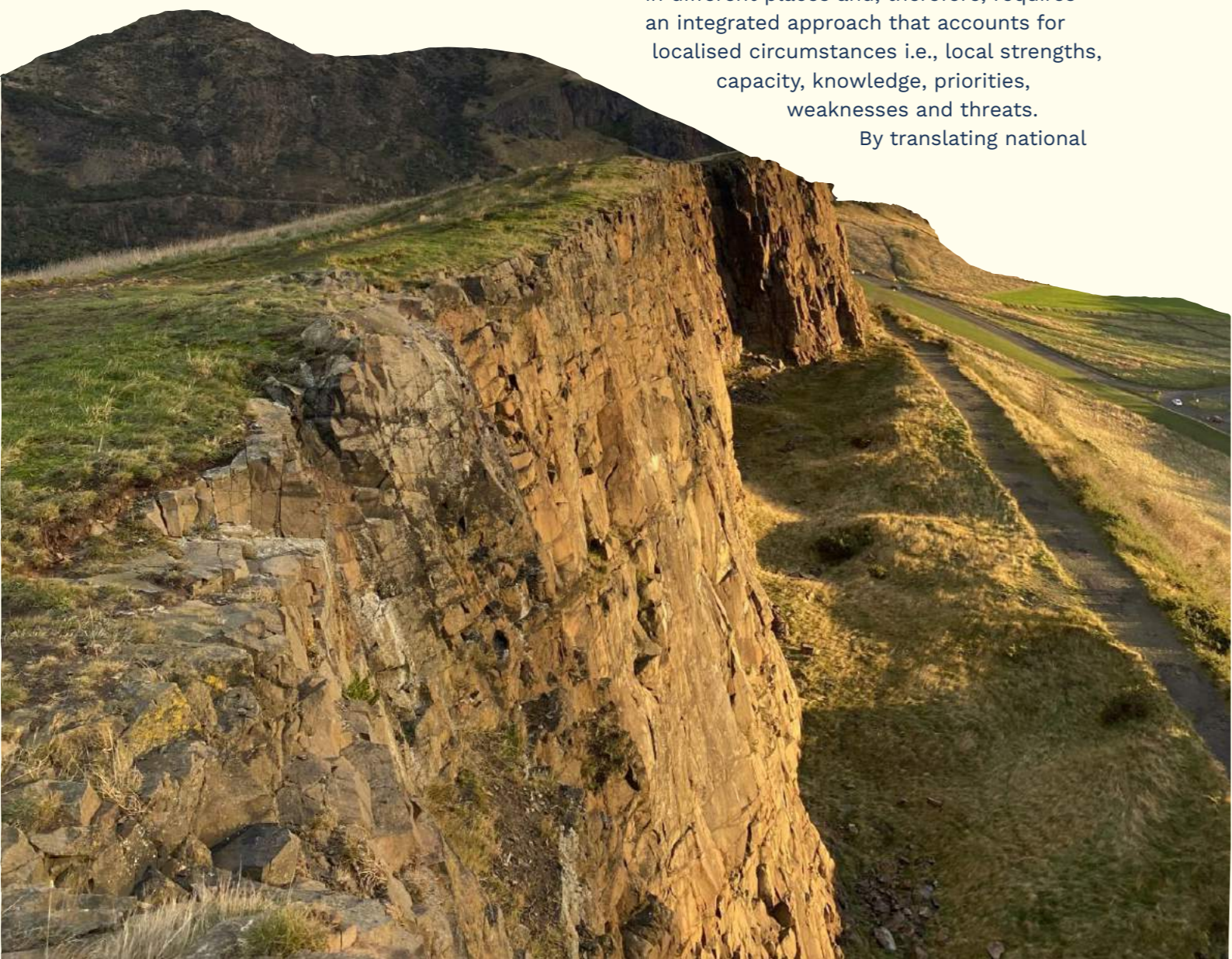
Key Findings

The majority of stakeholders believe **there is ample opportunity for an independent CGP** to continue adding value in Edinburgh.

Stakeholders believed that **the main outcomes a CGP should deliver** include better informed stakeholders, increased trust and credibility, improved decision-making, increased place-based climate action, scrutiny and challenge, improved coordination, stakeholder empowerment and collaboration.

A single framework of outcomes was not a feasible output of this project. This is because, while stakeholders easily agreed on the outcomes which a CGP is best placed to deliver, there were discrepancies in how a CGP should achieve these outcomes. This called for the rationalisation of the crowded governance landscape in Edinburgh and the identification of future typologies.

This report presents a **framework to explore 3 typologies** that could be adopted by an independent CGP to achieve different climate outcomes. The framework encompasses the following aspects;

- The stakeholders that will be engaged
- The level at which it will operate
- The key activities it will deliver
- The feasibility of these activities
- The gaps it will fill
- The outcomes this can lead to
- The ways it can maximise impact

The 3 potential typologies for improved climate governance are based on commonalities drawn from stakeholders' suggested activities.

These include:

Community-Focussed Typology

Critical Friend Typology

Task and Finish Group Typology

Recommended Typology

The recommended typology for climate governance in Edinburgh is the **'Task and Finish Group' typology**. This is because it is the most integrated, adaptive and dynamic pathway and efficiently targets key stakeholders at the epicentre of Edinburgh's climate response. It confronts contemporary and shape-shifting issues in the place and enables solutions to be relevant and applicable in real time.

This pop-up group operates as a problem-specific and time-sensitive group. It collaborates with key stakeholders to implement certain activities at a specific level, which are best suited to the issue at hand.

Activities could include facilitating partnership-working, providing independent expertise and advisory support, conducting policy analysis and providing recommendations that are routed in place-based climate action.

This typology addresses **gaps** such as insufficient climate action, ad hoc collaboration and a lack of a place-based approach, joined-up action, scrutiny, emphasis on delivery, and stakeholder engagement.

This CGP can deliver **positive outcomes** related to improved coordination and collaboration, stakeholder empowerment, scrutiny and accountability, better informed stakeholders and enhanced decision making.

This typology encompasses activities of varying feasibility depending on financial resources. It can be de-risked by collaborating with pre-established organisations that are deeply rooted in the place, having a clear mandate for governance and by having a clear scope of work with achievable tasks, targets and timelines to boost coordination and maximise efficiencies.

Practical Applications of the Recommended Typology

This report also outlines 2 practical applications where the task and finish group could add value in Edinburgh. These include;

1 Scrutinising Edinburgh City Council's 'Climate Strategy Implementation Plan' to ensure that it is realistic, action-driven and place-based.

2 Supporting the development of Edinburgh City Council's 'Climate Ready Edinburgh Adaptation Plan' by conducting policy analysis, providing independent guidance and championing a holistic approach to climate action that highlights associated co-benefits.

This typology has many potential levers such as;

Stimulating dialogue with and between key stakeholders

Scrutinising the pace, quality and direction of climate action
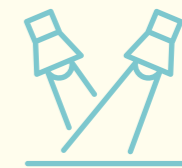
Highlighting 'dropped balls' in the climate landscape

Boosting stakeholder engagement and empowerment

Supporting improved collaboration, decision-making and coordination

Providing independent, evidence-based guidance and expertise

Identifying pathways for greater decarbonisation and resilience

This report offers **a checklist of 17 key considerations** that must be accounted for when designing, setting up, running, evaluating and decommissioning a CGP. This includes;

- Context
- Power
- Financial resourcing mechanisms
- Capacity versus scope
- Necessary support
- Clear, focussed purpose
- Governance and decision-making
- Membership representation
- Conflict of interests
- Communication
- Transparency
- Accountability
- Monitoring impact
- Duration
- Agility
- Sustainability and legacy
- Celebrating achievements
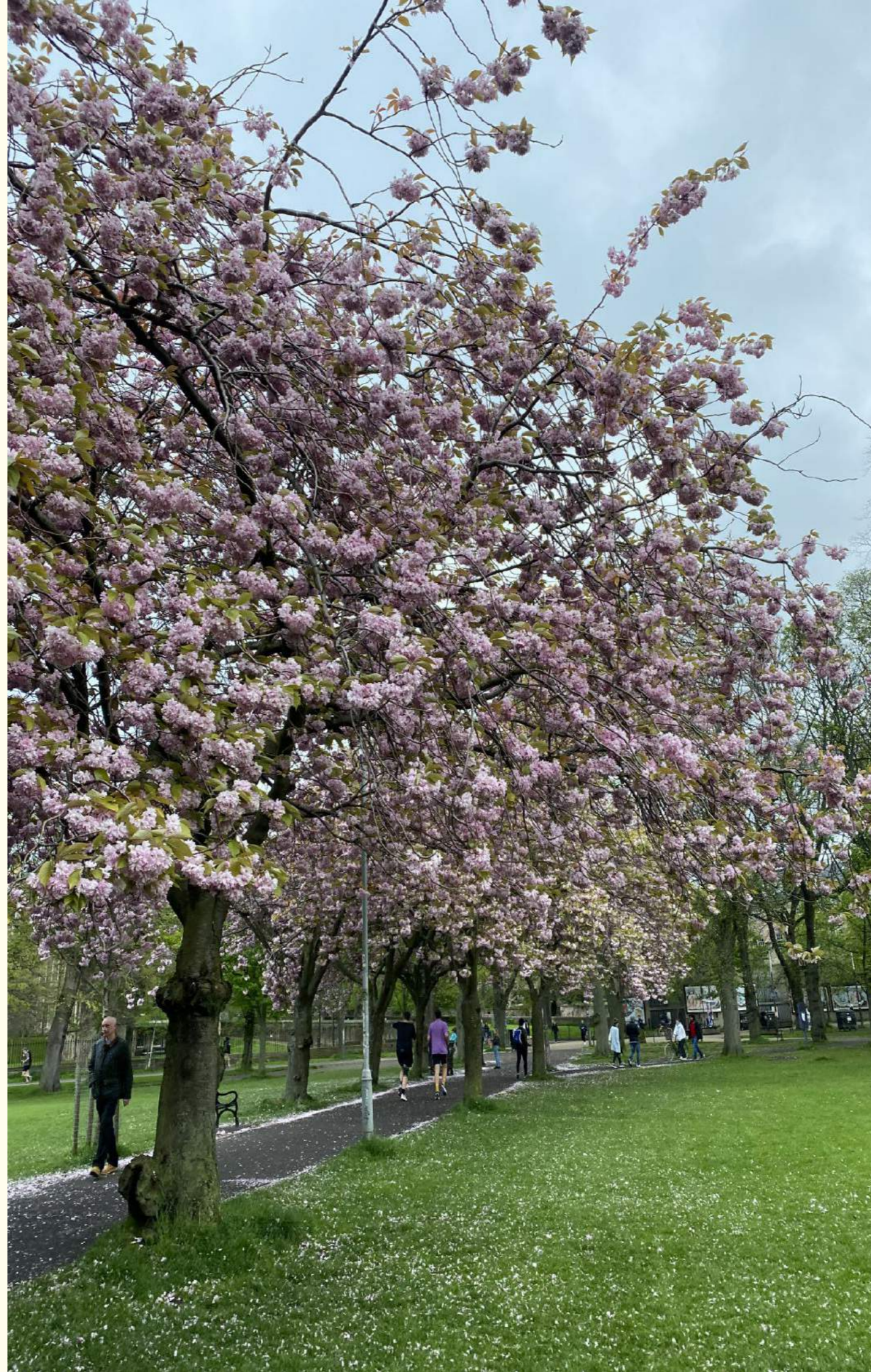
Key messages from this report

There is both a strong need and appetite for greater climate action and improved climate governance in Edinburgh

Improving climate action and governance in Edinburgh is challenging due to its complex landscape. For instance, Edinburgh's climate scene is deeply fragmented, overcrowded and highly inefficient. The greatest gaps in Edinburgh's approach to climate action include a lack of realistic, clear targets and timelines and a lack of coherent leadership, communication, accountability and commitment.

Interviewees found climate governance to be a highly ambiguous topic, often confusing it with climate action delivery. This is evident as interviewees suggested a total of 158 activities which they thought could improve climate governance in Edinburgh, however, 100 of these were actually implementation-focussed. Therefore, they were not relevant to climate governance. Just 34 actions were categorised as practical and controllable for a CGP because they aligned with its innate purpose of climate governance. To clarify, while a governance partnership can strive to create a more enabling environment that facilitates the delivery of climate action, it cannot itself deliver action on climate change.

Interviewees placed too many expectations on a CGP to fulfil their entire 'climate wish lists'. This was seen as stakeholders suggested a wide scope of work for a CGP to deliver ranging from areas as diverse as transport, heat in buildings, business growth, community engagement and a just transition. This clearly demonstrates that interviewees set high expectations for a CGP and overestimate its ability considerably.

Place-based climate governance plays a crucial role, however, the value it can add will always be limited due to its lack of power, autonomy, resources and a clear mandate.

- Lack of power:

Participants underscored that climate action at the local level is at the mercy of top-down power dynamics from the City of Edinburgh Council, Scottish Government and Westminster. This has implications for place-based climate action at every level. This led multiple stakeholders to contemplate the benefits of greater devolution of power from Westminster towards the local level in order to truly realise change necessary for a 1.5-degree Celsius future.

- Lack of autonomy:

CGPs are deeply interconnected with the wider ecosystem of place. They are reliant on external stakeholders to believe in it, support it and, most importantly, drive change. They are also vulnerable to turbulent political, social, environmental and cultural dynamics.

- Lack of resources:

CGPs are significantly constrained by a lack of financial resources. Commissioners work on a voluntary basis and, therefore, CGPs are not given the sufficient time nor attention which such a complex programme of work requires. This restricts the impact it can have.

- Lack of a clear mandate:

It is vital for those in power to recognise the value of a CGP and bestow a top-down mandate for governance onto it (as seen in Scotland's Just Transition Commission and Edinburgh's Poverty Commission). Without this, it is difficult for a CGP to garner legitimacy, obtain necessary financial resources and have a defined remit to thrive. A CGP, that lacks a mandate, is forced to define its own remit, agree on priorities and source its own

budget – all of which rely largely on volunteer capacity. This is a recipe for limited impact, dependency on others and overcommitted and undervalued volunteers.

Owing to the level, depth and pace of action required to achieve net zero goals as well as the gaps and challenges of climate action in Edinburgh, it is important that a multi-faceted approach to PCA is adopted. The challenge is such that it demands multiple synergistic and unique activities to be occurring in unison, ensuring that the creation of one thing does not exclude the creation of something else.

While climate governance is important, the central tenet of climate action is delivery. Increased attention and resources need to be injected into an improved implementation mechanism for Edinburgh given the perpetual limitations of climate governance. This ensures that there is actually something to govern over. The delivery unit, therefore, needs to be the larger part of this approach, meaning that oversight is a function of the delivery mechanism. This creates a symbiotic relationship between climate action and climate governance in order to deliver significant action on the ground.
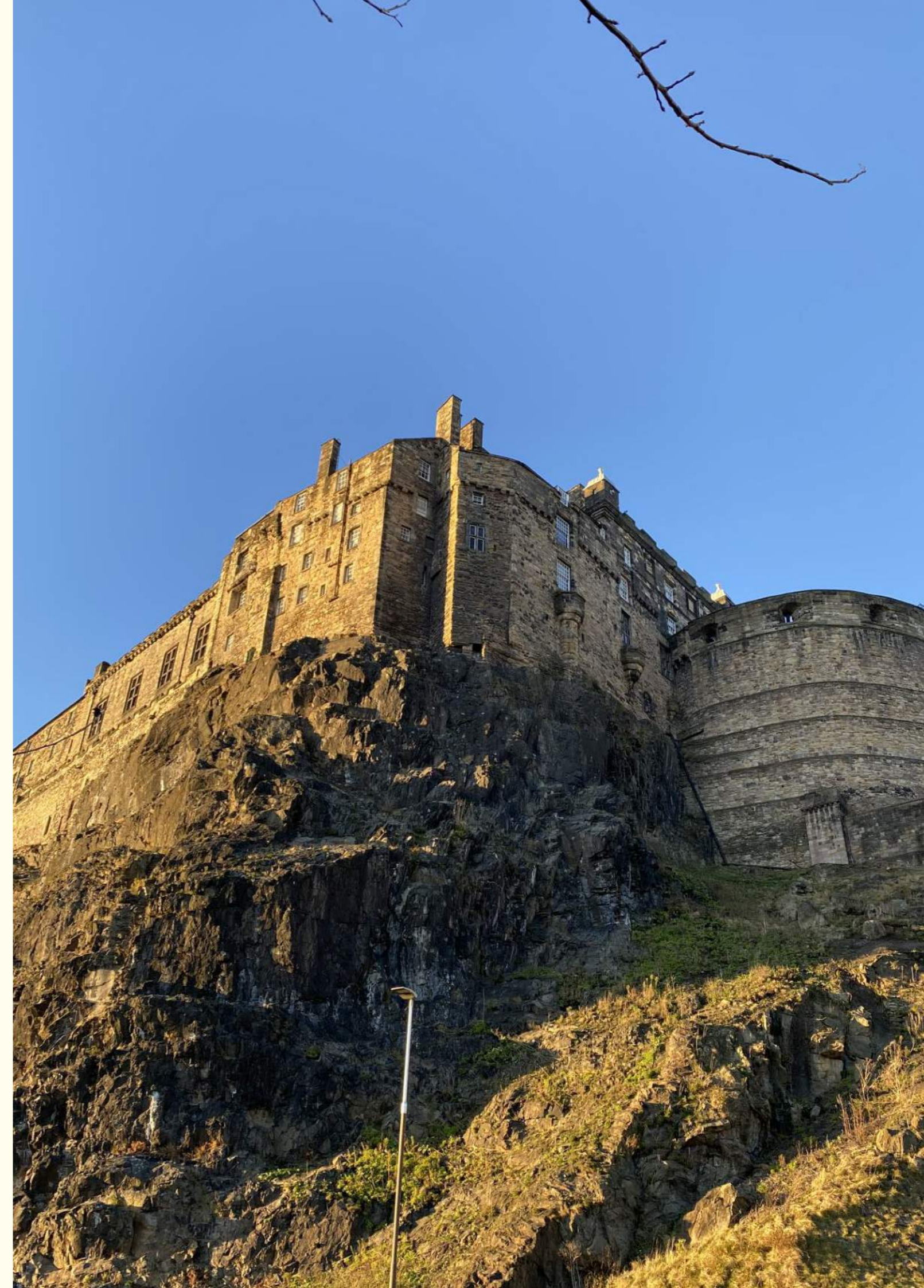
Section 2: Introduction
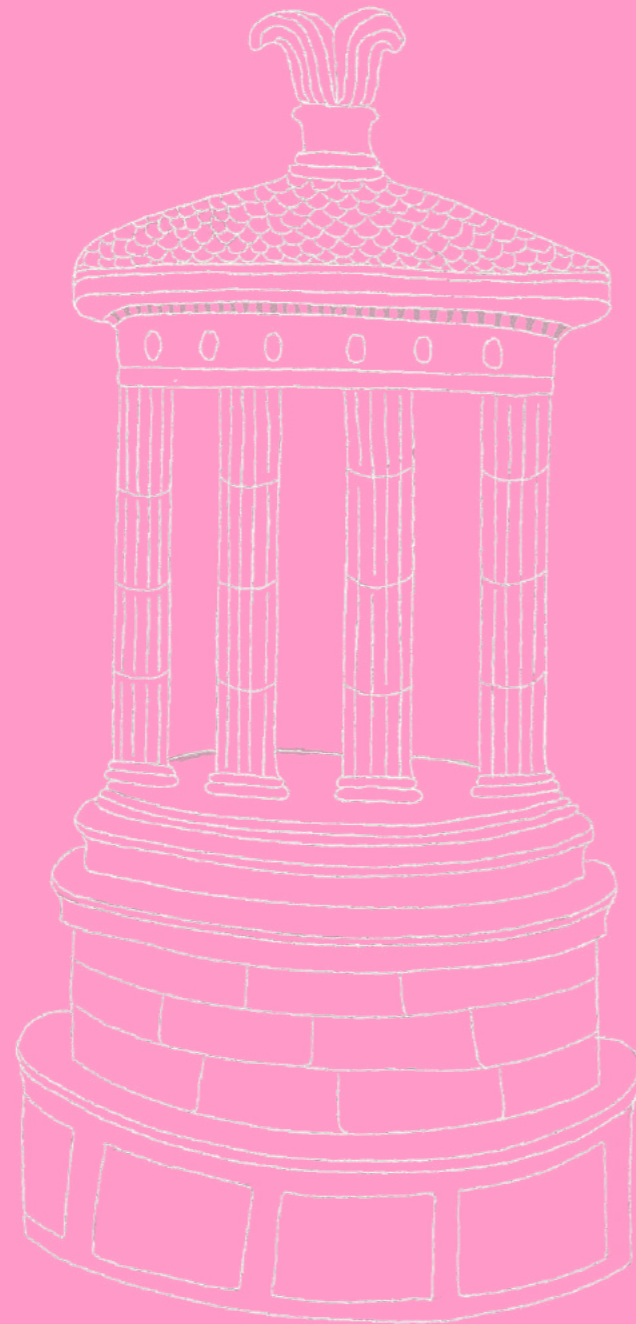
Introduction

Increased waves of localism and place-based approaches have been recognised as vital means of addressing climate change (Place-based Climate Action Network (PCAN), 2023). Among these is place-based climate action (PCA), which is an important way of uniquely designing climate action around the place.

PCA encompasses activities to reduce greenhouse gas emissions or enhance climate adaptation and resilience, which are driven by people's commitment, attachment and responsibilities to the places where they live, work and socialise, as well as being shaped by the specific opportunities, challenges and constraints of a place (Howarth et al., 2020). This integrated and asymmetrical approach is desirable in order to reflect variable localised circumstances i.e., local context, strengths, capacity, knowledge, priorities, weaknesses and threats.

Place-based climate governance (PCG) has been identified as one valuable way of accelerating PCA in a specific place (PCAN, 2023). PCG refers to the systems, processes and policies, and bodies involved in managing and addressing climate change in a certain place. It encompasses key stakeholders' actions to reduce emissions, adapt to the impacts of climate change, and promote sustainability.

In the case of Edinburgh, PCG has been visible through community planning partnerships and, more recently, 'Climate Commissions'. The latter form of PCG, which this report focuses on, are city- or area-wide partnerships that bring together people and organisations from the public, private and civic sectors to work collaboratively and help drive, guide, support and track climate action (PCAN, n.d).

Climate Commissions can make a worthwhile contribution by identifying gaps in climate action, holding stakeholders to account, providing independent expertise and facilitating collaboration and knowledge-sharing (CAG, 2023).

This research comes at a unique point in time as Edinburgh has approached a crossroad in its climate future. Since the Edinburgh Climate Commission's (ECC) establishment in 2019, it has attempted to fill the governance gap of local council. Overtime, however, this gap has widened significantly. It has proven difficult to continue filling this gap as the challenge requires a more complex and interconnected programme of work that a volunteer Commission can often only initiate.

Despite this, it appears likely that Commissions or other forms of place-based climate governance will still have a role to play until more formal and better-resourced mechanisms are established for delivering place-based approaches to climate change (CAG, 2023). This poses challenges and uncertainty for the future of PCG as ECC's funding from the UK Economic and Social Research Council (ESRC) comes to an end.

Consequently, this research explores a hypothetical form of place-based climate governance, hereafter known as a 'climate governance partnership' (CGP). This is an independent place-based partnership comprised of multidisciplinary representatives who collaborate to use climate governance to steer and mobilise action on climate change.

Overall, this research uses a CGP to meet the following research aims;

1) To assess whether an independent CGP can continue adding unique value in Edinburgh and, if so, explore where is it best placed to deliver positive climate outcomes

2) To investigate the lessons learned from the Edinburgh Climate Commission's journey thus far?

3) To utilise the lessons learned by the Edinburgh Climate Commission to inform the development of a framework of outcomes for improved climate governance

This research offers a unique and timely exploration into the potential improvements that an independent, place-based CGP could adopt in order to continue adding value. This research can be thought of as an in-depth case study or living lab for experimental forms of PCG. This research serves to inform a variety of stakeholders of the common challenges, opportunities, limitations and considerations associated with PCG and to stimulate dialogue around models for improved climate governance in different places.

Overall, the intended purpose of this research is to explore the evidence base for the potential value add of an independent CGP, to guide the direction of future climate action and potentially justify the need for increased financial investment into PCG.

The rest of this report unfolds as follows;

Section 3: Context

Context

The Challenge at Hand

Scotland's transition to a low-carbon, climate resilient future is underway and has the potential to deliver environmental, social and economic benefits. With ambitious net zero targets by 2045 and a 75% reduction by 2030 looming (compared to 1990), bridging the gap between ambition and action proves difficult for Scotland.

According to the most recent assessment of the Scottish Government's progress on climate change by the Committee on Climate Change (CCC, 2024), Scotland is off track on most of its key indicators. This is linked to wider concerns about the slow progress being made to deliver transformative action on the ground required to tackle the climate emergency.

For instance, lengthy policy timelines (e.g., transport, buildings), slow leverage of private investment, lack of devolved power, lack of capacity leading to underspend of government delivery programmes (e.g., in energy efficiency, fuel poverty, bus improvement measures) and funding/procedural constraints (e.g., active travel and place-based city transformations) mean that policy is not translating into rapid transformative action (Climate Emergency Response Group, 2023).

Greater Action is Required

In order to meet its national targets, Scotland will need to treble the pace of roll-out of public electric vehicle charge points, reduce car traffic by 20%, increase heat pump installation rates by a factor of at least thirteen, and double onshore wind capacity. In addition to this, woodland creation will need to more than double by the mid-2020s and peatland restoration rates need to increase significantly (CCC, 2024).

The acceleration required in emission reductions to meet the 2030 target is now beyond what is credible. This is because current Scottish policies, plans and governance fall far short of what is needed to achieve the legal targets under the Scottish Climate Change Act. For instance, the Scottish Government has delayed its draft Climate Change Plan and is, therefore, still missing a coherent, transparent, and quantified plan on how it will meet its stretching 2030 target (CCC, 2024).

Importance of Place-based Climate Action

Evidently, the Scottish Government lacks sufficient urgency, direction and action on climate change. This demands increased climate action and improved scrutiny and accountability. It is imperative that this response is specifically designed to the place. This is because climate change is materializing heterogeneously in different places, both as a change of weather and a change of politics (Kraus and Bremer, 2020).

Place-based climate action (PCA) encompasses activities to reduce greenhouse gas emissions or enhance climate adaptation and resilience, which are driven by people's commitment, attachment and responsibilities to the places where they live, work and socialise, as well as being shaped by the specific opportunities, challenges and constraints of a place (Howarth et al., 2020).

PCA is truly a bottom-up approach to climate change that addresses local pressures and needs, and introduces local ways of relating to and coping with changes (Kraus and Bremer, 2020). PCA is driven by stakeholders from a variety of backgrounds (public, private and third sector), maximising the utilisation of situated knowledge to deliver change. PCA also has a unique advantage of leveraging stakeholders' emotional and economic investment in a specific place by connecting local climate change impacts to people's values, personal experiences and daily lives. This develops a deeper understanding of

the interconnection between people and planet in a place (Schweizer et al., 2014). This stakeholder buy-in leads to improved outcomes as people understand their own place best. Lastly, PCA has the potential to translate national climate risks and targets to a local level, and set tangible and achievable actions with realisable goals, therefore, delivering transformation change on the ground (Howarth et al., 2024).

Place-based Climate Governance as a Means to Drive Action

One way to drive PCA and to achieve wider net zero goals is through enhanced climate governance (British Academy, 2024).

Multiple forms of climate governance exist in Scotland, such as Community Planning Partnerships (CPPs) and citizens' assemblies. Contemporary models of climate governance increasingly recognise the importance of place. This is because place-based climate governance (PCG) emerged as a way to fill the gaps in local government's climate action (PCAN, 2023). Since then, PCG has gained traction as an integrative way of providing oversight on PCA, contributing to the delivery of PCA and meeting national climate goals (Howarth et al., 2024).

Improving PCG offers a more strategic and informed method of boosting climate action and is thought to be a key lever of change necessary to achieve mitigation, adaptation and sustainability priorities. This is because PCG engages with local narratives and roots itself in the social life of a place (Krauss and Bremer, 2020). According to a recent report from the British Academy (2024), enhanced governance for net zero requires 1) clear and committed leadership through localised, multi-level governance that connects a broad range of stakeholders, sets a clear strategic vision, adapts to place and establishes accountability 2) a people-centred approach with innovative community representation and taps into co-benefits.

Challenges of Implementing Place-based Climate Governance

Implementing PCG is incredibly complex due to the unique characteristics of different places as well as common challenges faced by all.

For instance, Scotland is made up of 32 local authorities each varying in terms of population size and demographics, land size, geography, values, resources, governance structures, level of climate action, barriers to climate action and policy priorities. Given the diversity of these places, an integrated approach that recognises the importance of place in designing and delivering approaches to climate action is key.

PCG is also challenging as local governments across Scotland have inherited many similar struggles as National Government i.e., a lack of power, resources, urgency, direction, autonomy and leadership. According to the 'Local Governance Review' (Scottish Government, 2019), place is central to the delivery of local climate governance mechanisms. Furthermore, insufficient funding, a lack of fiscal autonomy, short-term budgets and misaligned budgeting across partnership organisations have significant impacts on local authorities' powers to govern action on climate change at the local level.

Despite these limitations, Scottish councils are still expected to respond to climate change. Consequently, the effectiveness of PCG must be improved given the scale and urgency of climate change. These challenges have been recognised by Scottish Government in the Verity House Agreement, as part of the New Deal with Local Government (COSLA, 2023). This agreement calls for the establishment of an improved fiscal framework between Local and National Government in order to promote stability and transparency, and ensure fiscal flexibilities and empowerment of Local Government, that can help address local priorities and improve outcomes.

Offering a Solution: New Model of Place-based Climate Governance

A newly-introduced, experimental model of PCG in the UK is that of 'Climate Commissions'. These are 'city- or area-wide partnerships bringing together people and organisations from the public, private and civic sectors who work collaboratively to help drive, guide, support and track climate action' (PCAN, n.d). Climate commissions came about, in part, as a way of providing cross-sectoral support to local authorities that have been hit hard by austerity and lacked the resources to respond with the pace and scale necessary to achieve climate targets.

A Glance at Contemporary Place-based Climate Governance in Edinburgh

The first Climate Commission to be established in Scotland was the ECC in 2019. The ECC aimed to identify and address challenges preventing Edinburgh from reaching its climate targets, providing independent expertise, challenging decision-makers, convening stakeholders and facilitating knowledge-sharing and partnerships (ECC, n.d.).

According to CAG Consultants (2023), the ECC was recognised as a valued and respected organisation in Edinburgh's climate policy landscape. The ECC effectively convened different city stakeholders to start collaborating on key challenges and also helped to provide a voice for local businesses and employers through the Edinburgh Climate Compact (Harvey-Crawford, 2021)

5 years on from the ECC's inception, Edinburgh City Council has demonstrated robust ambition, by setting its net zero target for 2030; 15 years ahead of national targets (Edinburgh City Council, 2021). Unfortunately, this ambition has not translated into sufficient action as the council is failing to meet its targets (Bol, 2024). In fact, Edinburgh's climate landscape has drastically changed since the ECC was originally established. The governance gap has widened considerably amidst escaping and unrealistic net zero targets. This calls for additional support in order to get back on track. What is less certain, however, is what this support should look like. In terms of governance, it is vital to reassess the challenge at hand and explore how a hypothetical PCG model (hereafter referred to as a climate governance partnership (CGP)) can be reinvigorated to best address contemporary challenges and opportunities.

This provides the starting point for this research.

Section 4: Methodology
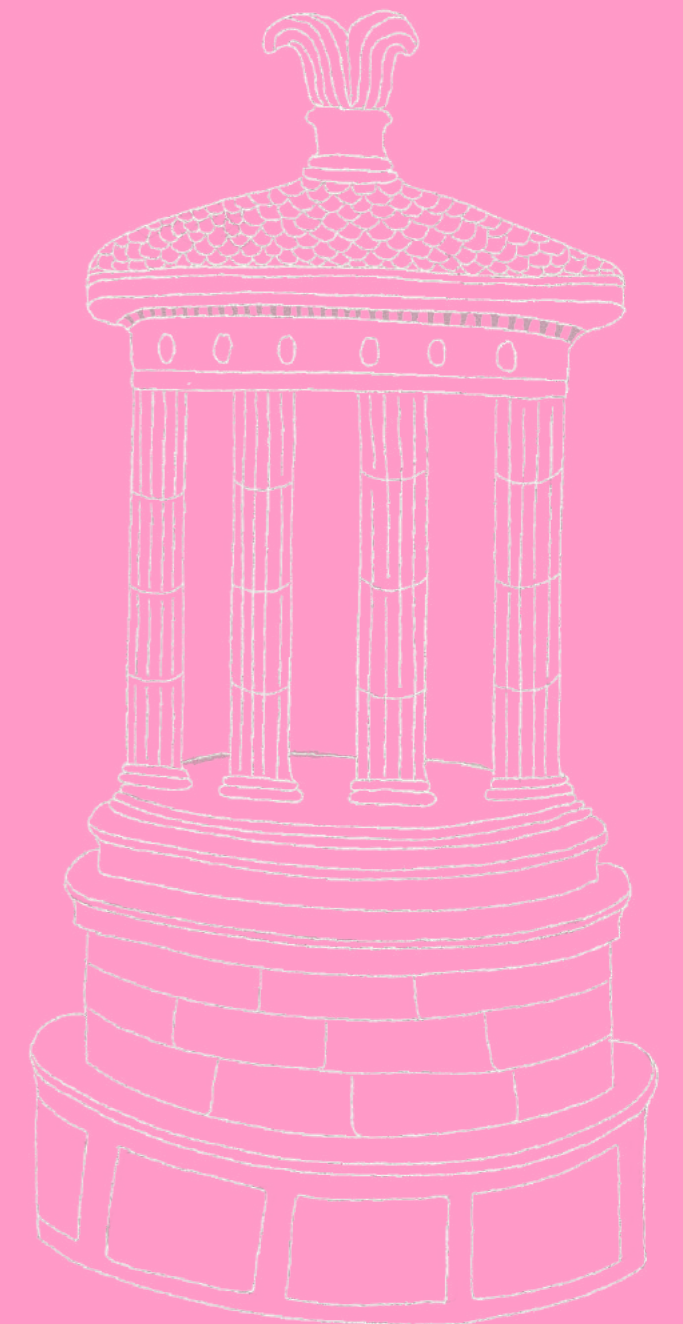
Methodology

The main aims of this research are threefold. This includes;

1) To better understand if an independent CGP could continue adding unique value in Edinburgh and, if so, investigate where is it best placed to contribute to the delivery of positive climate outcomes

2) To explore the lessons learned by the Edinburgh Climate Commissions' journey thus far

3) To utilise lessons learned by the Edinburgh Climate Commission to inform the development of a framework of outcomes for improved climate governance

In order to meet these aims, a 7-step mixed-methods approach was adopted (see figure.1).

Step 1 – Background Research

Firstly, desk-based background research was conducted to better understand the concept of climate governance, how this applies in praxis in Edinburgh and the challenges and opportunities associated with this.

Step 2 – Designing the Framework of Outcomes

A framework of outcomes is a resource to help you link outcomes (the goals you hope to achieve) and activities (the way you plan to achieve these goals). This report's framework presents the potential value add of an independent CGP to deliver positive climate outcomes and the means to realise this.

When designing the framework, inspiration was drawn from central components of developmental planning tools such as a Theory of Change (Weiss, 1995) and Logical

Framework Approach (Cracknell, 1989) as they collate the key aspects that must be understood before PCG can happen. These include;

- Intended goal
- Impact areas
- Favourable outcomes for the system
- A program of concrete activities to each these outcomes
- Inputs needed to implement activities
- Key stakeholders who should be engaged in these activities
- Level of action
- Ways of measuring and monitoring those activities
- Key considerations that must be taken into account

Step 3 – Interviews

Between September and November 2023, six one-to-one online interviews were conducted with diverse climate governance stakeholders in Edinburgh. This gathered perspectives from local government (Edinburgh City Council), academia (University of Edinburgh), National Health Services (NHS Lothian), utility providers (Scottish Power) and private sector (Edinburgh Chamber of Commerce and A Future Worth Living).

Answers to the interview questions were used to populate the draft framework of outcomes. The interview questions focussed on whether an independent CGP could add unique value in Edinburgh, what its purpose, key outcomes and activities should be, perceptions of the climate landscape in Edinburgh, how a CGP could fill gaps in Edinburgh, key players to engage, how it can ensure accountability and the support it needs to thrive.

Step 4 – Analysis of Interviews

Interviewees' feedback was thematically and qualitatively analysed using 'Nvivo 14' software and used to inform the development of a framework of outcomes for improved climate governance.

Step 5 – Development of the Draft Framework of Outcomes

All of the activities and outcomes mentioned in the interviews were mapped using Miro. Attention was first focussed on the activities. Interviewees' responses and further personal deliberation enabled the assigning of the level at which activities should occur. A colour coded feasibility matrix was then employed to assess the feasibility of activities, whereby;

- Green represented an activity that is controllable and practical
- Yellow denoted an activity that the governance partnership can influence and
- Red referred to activities that are out of scope

The perceived importance of activities was determined by how frequently they were mentioned during interviews. This revealed the finalised list of 'activities' for the framework that were a) feasible b) important and c) assigned to a particular level.

Moving on to the 'outcomes', these were documented during the interviews and were linked with activities that made the finalised activities list of the framework.

Step 6 - Stakeholder Engagement Workshop on the Framework of Outcomes

A 2-hour workshop was delivered at the ECCI for 8 representatives from the public, private and civic sectors i.e., ECCI, SSN, PCAN, Climate Springboard, Scottish Climate Intelligence Service and the Net Zero Edinburgh Leadership Board.

The workshop acted as an authentication process to gather additional opinions on the value add of a CGP, for stakeholders to review the draft framework of outcomes and further inform its development. Only the 'outcomes' and 'activities' sections were presented during the workshop in order to keep the amount of material manageable for stakeholders and to encourage high-quality and in-depth conversations.

Step 7 – Development of Potential Typologies

The data gathered from the workshop was thematically analysed and compared against the interviews. Ultimately, it became clear that a single framework of outcomes was not a feasible output of this research. This was due to discrepancies in how a CGP should achieve agreed climate outcomes.

Consequently, the focus of this research shifted to developing a framework that was slightly adjusted from the original version. This new framework used commonly suggested activities to explore 3 potential typologies that could be adopted by an independent CGP (See figure 2). Following this, a checklist of 17 key considerations was also developed. This outlines key factors that must be accounted for when designing, setting up, running, evaluating and decommissioning a CGP.

To view the research's methodological process, see figure 1.

Figure 1. Methodological Process Map

Step 1

Background Research

Conducted desk-based research on climate governance

Step 2

Designing the Framework of Outcomes

This framework presents the potential value add of an independent CGP to in Edinburgh and the means to realise this.

Step 3

Stakeholder Interviews

6 interviews were conducted with key climate governance stakeholders in Edinburgh

Step 4

Analysis of Interviews

Nvivo software was utilised to conduct qualitative data analysis

Step 5

Development of the Draft Framework of Outcomes

Suggested activities were categorised in terms of feasibility, importance and the level at which they should take place

Step 6

Stakeholder Engagement Workshop

A 2-hour workshop was delivered to 8 additional climate stakeholders who provided their feedback on the draft framework of outcomes

Step 7

Development of Potential Typologies

A framework was developed to explore 3 potential typologies of climate governance in Edinburgh

Section 5: Findings

Findings

A. A framework-based Exploration of Potential Typologies for Place-based Climate Governance

Whilst analysing responses from both the interviews and workshop, it became increasingly apparent that **the development of a single framework of outcomes was not a feasible output** of this research. This was because, even though stakeholders were in agreement of which outcomes an independent CGP was best placed to deliver (i.e., better informed stakeholders, increased trust and credibility, improved decision-making, increased place-based climate action, scrutiny and challenge, improved coordination, stakeholder empowerment and collaboration), participants failed to agree on how a CGP should go about achieving these outcomes. This was not because participants failed to see value in it but because they overestimated its capabilities and suggested a whole slew of activities it should take on.

There could be many reasons for this, however, it is possible that the ambiguity surrounding this hypothetical, independent CGP has contributed to this. There were many undefined variables at play such as funding levels, funding mechanisms, capacity, power, relationship with council and composition of the partnership. While this is something that would have been useful to define for research participants, this was not feasible given the theoretical nature of the research. Furthermore, bringing together a diverse range of stakeholders each with their own vested interests led to further discrepancies in suggested activities. That said, this is not something to necessarily change about the research methodology but more so something to acknowledge as multi-stakeholder collaboration is a crucial and inevitable aspect of PCA.

Despite the absence of a single, defined remit for a CGP, the research continued. This was because both **a strong need and appetite for greater climate action** in Edinburgh was clearly emphasised, which called for the rationalisation of the crowded governance landscape in Edinburgh. As a result, the focus of the research shifted to the identification of future typologies for PCG.

With this in mind, the collated results from the interviews and workshops were analysed again and commonalities were drawn from suggested activities. These common themes were used to inform the development of an updated framework that explored 3 potential typologies for a CGP.

In this section, **3 potential typologies that could be adopted by a CGP in Edinburgh are presented**. These are offered in the form of a framework that explores the following aspects;

- The stakeholders that will be engaged
- The level at which it operates
- The key activities it would deliver
- The feasibility of these activities
- The gaps it can fill
- The outcomes this can lead to
- Ways to maximise impact

This typology places the community at the heart of CGP activities. It predominantly operates at the **community level** with opportunities to engage at the local level also. **Key activities** of such a partnership could include;

- Supporting community engagement, collaboration and idea-sharing

- Facilitating deep conversations to understand communities' values, identity, heritage, wants, and experience of Edinburgh

- Listening to questions and concerns from community members

- Highlighting marginalised climate stories and voices, or lack thereof

- Acting as a mouth piece for the community to amplify their voices

- Gathering opinions and perceptions from a wide audience

- Helping organise community responses to consultations

- Ensuring representation of marginalised community groups e.g., women, youth and vulnerable groups

- Co-developing an authentic community identity and vision

This typology attempts to **address numerous gaps** identified by research participants including a lack of a place-based approach, lack of community engagement, poor communication, limited visibility of climate action and a shortage of space to hear new ideas.

Overall, these activities have the potential to drive **significant positive outcomes** such as;

- Community empowerment

- Collaboration

- Better informed community members, CGP and local council

- A clear vision driven by community members

- Improved decision making of community members and local council

- Increased trust and credibility of community members in the CGP

- Strengthened resilience of place

- Improved coordination among community members and local council

By following this typology, community engagement can stimulate a meaningful dialogue, whereby community members interact with each other and the landscape to develop a deeper understanding of their ecological and social interrelationships and impacts on the ecosystem. (Schweizer et al., 2014).

Attention to local narratives expands the scope of issues covered by climate information and improves its integration into social and cultural life (Krauss and Bremer, 2020). Local narratives also serve to improve knowledge of the impacts of climatic change (the problem framing) and introduce local ways of relating to and coping with these changes (Krauss and Bremer, 2020). For this reason, community engagement has the potential to inspire the necessary behaviour change to curb anthropogenic climate change impacts and ultimately change the public conversation by simplifying and connecting climate change impacts to people's values, personal experiences, and daily lives (Schweizer et al., 2014).

These actions differ in terms of **feasibility**. Some activities such as listening to questions and concerns from community members and highlighting marginalised climate stories and voices, or lack thereof, require relatively little resources. This can be achieved by a strong online presence via social media platforms.

Meanwhile, activities such as understanding community perceptions of place and gathering responses to consultations are feasible but require increased resources to ensure thorough execution and representation.

To **consolidate the feasibility** of these actions (and speed up their achievement), it is vital to collaborate with pre-established organisations already deeply-rooted in the community. This enables a CGP to engage with stakeholders that are already trusted by the community. This typlogy places the local council at the centre of CGP activities and therefore, mainly operates at the **local level**. **Key activities** of such a partnership could include;

- Scrutinising and holding local government to account
- Signalling what is and is not being done
- Identifying strengths, weaknesses and opportunities of climate action
- Identifying barriers to climate action and potential barrier reduction pathways
- Providing independent guidance, expertise and advisory support to local government
- Providing scientific evidence, thinking and learning to local government
- Conducting policy analysis and providing recommendations that are routed in PCA
- Facilitating and engaging in collaboration and knowledge-sharing
- Facilitating inclusive discussions with key stakeholders in Edinburgh
- Incentivising partnership-working

This typology **addresses a plethora of gaps** identified by research participants including insufficient climate action, ad hoc collaboration, a lack of a place-based approach, a lack of joined-up action, a lack of scrutiny and a lack of emphasis on delivery.

Ultimately, these activities can support the delivery of the following **positive climate outcomes;**

- Stakeholder empowerment
- Collaboration
- Scrutiny and accountability
- Better informed local council, CGP and other key stakeholders
- A clear vision driven by place and upheld by a CGP
- Improved decision making of local council and other key stakeholders
- Increased trust and credibility of stakeholders in the CGP
- Strengthened resilience of place
- Improved coordination among local council and other key stakeholders

The suggested **activities are deemed feasible** as, for the most part, they are a one-sided affair that requires a governance partnership to scrutinise local government and signal what is and is not being done. These activities are practical and controllable; however, the challenging part of these activities is ensuring that action consequentially emerges from local council.

In order to be as impactful as possible, two-way, collaboration must be created between local council and CGP, whereby the governance partnership is a critical friend to local government, and local government is receptive to critique and strives to deliver change accordingly.

The key feature of this typology is to operate as a **problem-specific and time-sensitive group** in collaboration with key stakeholders such as local government. This dynamic pop-up partnership group would predominantly operate at the **local level with opportunities for engagement at other scales** if deemed appropriate.

This CGP's **activities are completely dependent on the task at hand.** A CGP may decide to organise its activities by emission source, target audience, location or sector. Regardless of its choice, it must have a deep understanding of the challenge it hopes to address within a predetermined time frame. **Potential activities** of a CGP could include;

- Engaging with local council and other key stakeholders in Edinburgh

- Facilitating collaboration, partnership-working and knowledge-sharing

- Providing independent guidance, expertise and advisory support to local government and other key stakeholders

- Providing scientific evidence, thinking and learning to local government and other key stakeholders

- Conducting policy analysis and providing recommendations that are routed in place-based climate action

- Identifying and mapping barriers to place-based climate action

- Identifying key carbon emitters and their levers of change

- Identifying opportunities for improvement

- Establishing potential co-benefits of action

- Improving coordination

- This typology **addresses a myriad of gaps** highlighted by research participants including insufficient climate action, ad hoc collaboration and a lack of a place-based approach, joined-up action, scrutiny, emphasis on delivery, and stakeholder engagement.

These activities have the potential to drive **significant positive outcomes** such as;

- Stakeholder empowerment

- Collaboration

- Scrutiny and accountability

- Better informed local council, CGP and other key stakeholders

- A clear vision driven by place and upheld by a CGP

- Improved decision making of local council and other key stakeholders

- Increased trust and credibility of stakeholders in the CGP

- Strengthened resilience of place

- Improved coordination among local council and other key stakeholders

Similar to the 'critical friend typology', these **activities are considered feasible** as they are designed around the innate purpose of climate governance i.e., to collaborate, to engage, to scrutinise, to advise, and to catalyse action. Some activities such as identifying and mapping barriers and barrier reduction pathways as well as establishing potential co-benefits of action are more technical activities and, therefore, would require additional resources. It also demands greater engagement and time from stakeholders, who are often time- and resource-poor.
Once again, this typology can be de-risked by collaborating with pre-established organisations that are deeply rooted in the place and by having a clear remit with achievable tasks, targets and time lines to boost coordination.

Figure 2. Summary Table of Framework Exploring 3 Typologies for Place-based Climate Governance

Framework	COMMUNITY-FOCUSSED TYPOLOGY	CRITICAL FRIEND TYPOLOGY	TASK-AND-FINISH GROUP TYPOLOGY
Engaged Stakeholders	Community members, community groups and Edinburgh City Council	Edinburgh City Council	Highly likely Edinburgh City Council, but depends on the task at hand
Level	Community-level	Local-level	Typically local-level, but depends on the task at hand
Example of Key Activities	Facilitate deep conversations, amplify community voices, organise community responses	Scrutinise local council, signal what is and is not being done, identify barriers to climate action, incentivise partnership-working	Provide independent guidance and expertise, conduct policy analysis and provide action-oriented recommendations
Feasibility of Activities	Differs in terms of activity ranging from feasible to more resource intense	Differs in terms of activity ranging from feasible to more resource intense	Depends on task at hand but will still require considerable time and money
Addressed Gaps	Lack of a place-based approach, lack of community engagement, shortage of new ideas, poor visibility of climate action	Insufficient climate action, ad hoc collaboration, a lack of joined-up action, a lack of scrutiny and emphasis on delivery	Lack of stakeholder engagement, insufficient climate action, ad hoc collaboration, a lack of emphasis on delivery
Potential Outcomes	Community empowerment, collaboration, better informed community members, a clear vision driven by place	Scrutiny and accountability, improved decision-making, improved coordination, collaboration and stakeholder empowerment	Scrutiny and accountability, improved decision-making, better informed stakeholders, increased trust and credibility
Maximising Impact	Collaborate with pre-established and well-trusted community organisations	Ensure two-way collaboration to drive change	Collaborate with pre-established organisations/ networks and have a clear remit with achievable tasks, time lines and targets

B. Optimal Pathway for Climate Governance in Edinburgh

It is clear that a CGP can add value in Edinburgh. The recommended typology for a CGP to deliver positive climate outcomes in Edinburgh is the 'Task and Finish Group' typology. This was selected as it is the most integrated, adaptive and dynamic typology. It addresses specific place-based issues in a time-conscious manner and tackles the overwhelming challenge of climate change systematically. Additionally, this approach confronts contemporary and shape-shifting issues in the place and enables solutions to be relevant and applicable in real time. These characteristics are key as they successfully mirror the ever-changing nature of climate change and are designed with the place in mind.

Furthermore, unlike the other typologies, this model intentionally and efficiently targets precise stakeholders who must be engaged to tackle the specific issue at hand rather than engaging widespread stakeholders less thoroughly. By collaborating and building partnerships with those at the epicentre of Edinburgh's climate response, a CGP essentially works with those who have the greatest ability to deliver positive climate outcomes. For this reason, engaging with powerful stakeholders offers increased benefits for and likelihood of climate action. This is important as it addresses some of the major limitations of a CGP i.e., power. This champions longevity and sustainability and is useful for the optional purposes of evolving partnership activities overtime.

This CGP typology is best placed to operate at the local level. There are many levers that a CGP has the ability to pull such as stimulating dialogue with and between stakeholders, encouraging stakeholder engagement and empowerment, highlighting 'dropped balls' in the climate landscape, scrutinising the pace, quality and direction of climate action, providing independent guidance and expertise, identifying pathways for greater decarbonisation and resilience, strengthening collaboration and communication, and supporting improved decision-making and coordination.

This report outlines multiple levers of change that a CGP has direct control over. This is not to say that a partnership should take on all of the aforementioned roles. Presuming that a partnership will continue to be limited by resources, and acknowledging learnings from the ECC, a CGP must have a clearly defined remit of work. This supports efficient use of resources and greater transparency of impact. While this report could outline which is the most important lever for a CGP to pull, this would be futile as it completely depends on the challenge that the 'task-and-finish group' deals with.

Having explored the strengths of a CGP in Edinburgh, it is also important to note anticipated threats and weaknesses. Key limitations of climate governance more widely include a lack of power, autonomy, resources and clear mandate. These risks can be partially mitigated by calling for the devolution of greater power, engaging with more powerful stakeholders, building trust and credibility, emphasising the value add of a CGP's work for the wider landscape, exploring innovative funding mechanisms, strengthening funding from local council and having a clear mandate for governance.

An additional threat is the challenge of a CGP agreeing which priorities to address. Given the variety of stakeholders which comprise a CGP, decoupling their own vested interests from what is best for the place as a whole is key. To de-risk this, it is best to build consensus, justify partnership activities through evidence provision and transparently communiticate decisions.

C. Practical Applications of the Recommended Typology

There are ample opportunities for a CGP to add value in Edinburgh as the city is far from reaching its net zero commitment by 2030. To the right, 2 potential pathways are outlined, which are considered valuable pieces of work for a 'task-and-finish group' to deliver, given their cross-cutting, time-sensitive and issue-specific nature.

It is important to note that both of these applications must strive to align with aimed improvements from the 'Local-National Government Delivery Framework for Scotland', as recognised by the Verity House Agreement (COSLA, 2023). The pathways must also advance place-based climate action in line with wider climate targets, as highlighted by Environmental Standards Scotland (2023) investigation and the CCC (CCC, 2024).

APPLICATION ONE

Following recommendations from the Policy and Sustainability Committee of Edinburgh City Council (2024a) on its City-wide Carbon Emissions and 2030 Climate Strategy update, thorough, action-driven assessment and policy innovation of the council's 'Climate Strategy Implementation Plan' is required. This plan attempts to set out new ways of unlocking barriers to the delivery of high impact actions necessary to address the scale and severity of climate change. Adopting this pathway would enable a CGP to;

a) Scrutinise and hold local government to account. The CGP must ensure that the council's implementation plan is realistic, action-driven and place-based

b) Identify and map barriers to climate action and highlight resilient pathways to support reductions in both climate barriers and emissions conduct policy

c) Conduct policy analysis and provide place-based, action-oriented recommendations

d) Improve coordination of climate action to maximise efficient use of resources

APPLICATION TWO

A growing area, which is often overlooked in favour of emissions reductions, is the topic of adaptation. Edinburgh City Council (2024b) launched a consultation at the start of 2024 on their draft 'Climate Ready Edinburgh Adaptation Plan'. Its primary aim is to guide changes to the city to safeguard people and wildlife from the risks posed by climate change. It intends to do this by focussing on 8 key themes including governance and risk, planning and the built environment, sustainable transport, coastal adaptation, water management and resilience, safeguarding and enhancing our natural environment, strong, healthy community and economy, and building understanding of climate risk.

Given that adaptation is a topic that fails to receive sufficient attention, it is imperative to focus on this going forward given the myriad of associated co-benefits and the significant cost-savings of early intervention. Adopting this pathway would enable a CGP to;

a) Provide independent, evidence-based and action-driven guidance and advisory support to local government and other key stakeholders

b) Conduct policy analysis and provide realistic, place-based recommendations that align with national climate targets

c) Raise awareness of the co-benefits of this pathway to champion a more holistic approach to climate change

D. Remembering the Role of Climate Governance within the Wider Picture

While a CGP has a role to play in Edinburgh, this must be one of many unique solutions.

Given a CGP's core function to govern, the partnership must do just that, and only that. It must then allow other stakeholders to be responsible for delivery of climate action. Ideally, the implementation side of climate action will be more substantial than the governance side, with implementation being managed by a robust delivery mechanism. This would be best situated as a unit off of local council in order to be close to evolving climate policies but also to remain independent.

Overall, given the identified gaps and needs of climate action in Edinburgh, the challenge demands multiple synergistic and unique activities to be occurring in unison. Therefore, the creation of one solution should not prevent the emergence of another, as long as duplication is avoided.

E. Key Considerations for a Place-based Climate Governance Partnership

Regardless of which CGP typology and pathway are chosen, certain considerations must be given due regard when designing, setting up, managing, evaluating and decommissioning a CGP. These include;

Context: The place in which a CGP operates is foundational to understanding the value add it can offer. A CGP must thoroughly understand the landscape of the place and follow an integrated, place-based approach in order to adapt to local challenges, gaps, needs, wishes and opportunities.

Power: A CGP must be aware of the level of power it has, who it depends on to bolster its activities and the barriers that prevent it from having greater power. This is because power gives a CGP the ability to influence other actors and institutions involved in climate action. This influence can help mobilise support, build partnerships, and drive collective climate action. Power also lends legitimacy to a CGP, enhancing their credibility and authority in the eyes of stakeholders. This is key as legitimate governance structures are more likely to garner trust and support from governments, civil society, businesses, and the public. Ultimately, power determines the ability of a GCP to drive transformative change on the ground.

Financial resourcing mechanisms: Climate governance models in Edinburgh lack sufficient resourcing. The stakeholders, which a CGP engages with such as local council, also face similar issues. Securing adequate resourcing is a prerequisite for stimulating and sustaining partnership activities over the long term. Exploring innovative funding models and diversifying funding sources can provide stability and reduce the dependency on any single contributor. Strengthening the business case for a CGP is also key for securing its funds.

Capacity versus scope: There is often a conflicting interplay between the capacity of a CGP and the agenda it hopes to deliver. In order to drive high-quality, impactful climate action, it is important to find the equilibrium between these and take on a manageable remit that is feasible with the resources and capacity available.

Necessary support: Being responsible for PCG is no small task and supports can alleviate this strain. Increased financial resources is at the top of this list. Further assistance includes paid, full-time secretariat and commissioners. This avoids partnership-related work being considered a 'side-of-the-desk' job and ensures greater commitment and impact. Additional supports, which are vital for driving partnership activities include recognition from local government of the value add of a CGP as well as a clear mandate for governance, both of which tend to be accompanied by financial backing.

Clear, focused purpose: It is key for a CGP to offer a specific and unique contribution to a place and be able to clearly communicate these terms of reference to external stakeholders.

Governance and decision-making: A CGP must agree on its overarching process for internal governance and decision-making. This includes agreeing on priorities, core activities, who to engage, how long to be active for and its evolution overtime. Important questions around governance structures and hierarchies should be solidified as early as possible e.g., the potential for a rotating chair and representation within the partnership.

Membership representation: A CGP should recognise the importance of representation within its membership and how this can impact partnership activities. It must question the best way forward for selecting representation i.e., invite-only or an interview

process. This is best guided by the CGP's scope of work. It must also ensure that it reflects diverse stakeholders, perspectives and expertise in order to embrace inclusivity and foster innovation and resilience. A governance partnership might also like to consider the advantages and disadvantages of membership representation, either on behalf of their respective organisations or as individuals.

Conflict of interests: As a governance partnership is typically comprised of individuals from varying backgrounds, it is important to have conflict resolution measures in place to overcome conflicts of interest. This could be in the form of pre-established, co-produced rules of engagement that are grounded in respect, listening and understanding for others.

Communication: Clear and open communication is central to the work of a governance partnership, both internally and externally. A partnership must be able to clearly communicate when it provides independent scrutiny and guidance, engages with stakeholders of varying levels of expertise and understanding, and amplifies the voices of communities. Strong communication enables a CGP to highlight the co-benefits of climate action by re-framing it in a way that closely aligns with stakeholders' values from the place. Furthermore, communication is a two-way process, which also involves deep listening and compassion. Robust communication can ensure that all partners gain value and mutual benefit from the collaboration.

Transparency: A CGP must be open and transparent about its unique role, responsibilities, aims, activities and intended outcomes for the place. This can be achieved by ensuring all processes, decisions, and data (within reason) related to climate governance are open and accessible to the public. This can include publishing meeting minutes, financial reports, and other relevant documents. This clarity helps stakeholders understand

what the CGP is accountable for. Greater transparency in climate governance upholds accountability and enhances mutual trust.

Accountability: It is important for a CGP to implement accountability mechanisms such as performance evaluations in order to assess its effectiveness and to hold members accountable for their actions and decisions. It is also beneficial to establish mechanisms for independent oversight of the CGP, such as an independent audit committee or ombudsman. This helps prevent conflicts of interest and ensures adherence to standards.

Monitoring impact: In order to monitor impact, a CGP must be in agreement of the key performance indicators it hopes to measure progress against as early as possible. Regular reports should utilise these indicators to assess the effectiveness of its activities, progress towards goals, and any challenges faced. These reports should be easy-to-understand and publicly available. Monitoring this impact can help inform the development of future partnership activities and justify additional resourcing.

Duration: A governance partnership should consider how long it intends to operate for. Is this indefinitely or for a limited time in response to a certain issue? To help plan the duration of a programme, a CGP should clearly identify its goals and the time lines it hopes to achieve these in and how.

Agility: A governance partnership should be aware of and willing to adapt to shifting priorities in the climate landscape. This enable a CGP to remain up-to-date, relevant and responsive to evolving place-based needs and challenges.

Sustainability and legacy: It is important for a CGP to only operate if it continues to successfully add unique value to the place. A CGP might decide to dissolve if it has fulfilled its mandate. If it decides to continue, it should assess whether the partnership remains relevant to the climate challenges

and priorities prevalent at that time and if it has the capacity to evolve. If the context has changed significantly, it may be necessary to realign or terminate the partnership. Furthermore, if there are persistent resource constraints or challenges in securing funding or additional support for partnership activities, it may be impractical to continue. An exit strategy should be developed to outline the process for winding down partnership activities, transitioning responsibilities, and ensuring continuity by other stakeholders, where possible.

Celebrating achievements: PCA is an incredibly unique and complex approach to climate action in today's world. It's important to take the time to acknowledge and celebrate the achievements of the CGP, even if it is ending. Reflect on lessons learned and consider how these can inform improvements in future collaborations. This will both offer practical insights and instil hope in others picking up the baton in the future.

Section 6: Discussion
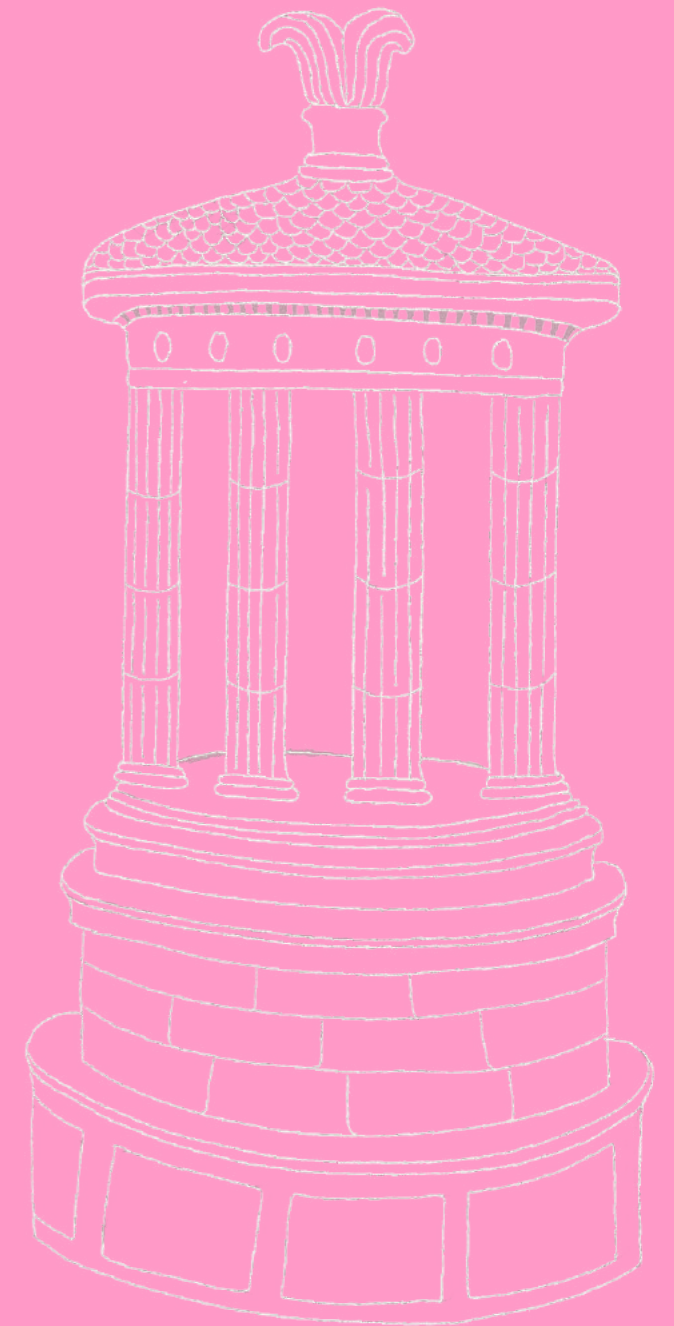
Discussion

It is clear from this research that the majority of participants see considerable added value in an independent CGP in Edinburgh.

Implementing this in praxis, however, is incredibly complex, given Edinburgh's climate landscape. For this reason, it is vital to understand the context in which a CGP seeks to operate, in order to deliver positive climate outcomes. Many contextual factors must be taken into account such as Edinburgh's deeply fragmented, overcrowded and highly inefficient climate scene, an absence of coherent leadership and a lack of communication, accountability and realistic commitment. These factors significantly hamper Edinburgh's ability to drive coordinated action. On the other hand, Edinburgh's receptive population, networks and the progress made to date are all testament to the strengths it bestows.

These contextual factors have both exacerbated and been fuelled by gaps in Edinburgh's approach to climate action, particularly a lack of realistic targets and timelines. Further gaps have had a similar effect including a lack of joined-up, place-based climate action, a lack of power and a lack of emphasis on delivery and engagement with communities. This is in addition to shortcomings of Edinburgh Council such as insufficient leadership and urgency on climate change as well as dwindling budgets and resources. Overall, the landscape in Edinburgh and its myriad of gaps pose questions for a decarbonised and resilient future. They also demonstrate a robust need for further climate action at pace. One way to contribute to this is through improved PCG.

When discussing the concept of climate governance in Edinburgh, many interesting findings emerged. This includes;

A. The Difference between Climate Governance and Climate Action Delivery

When discussing climate governance, it is imperative to understand what it is and, more importantly, what it is not. Findings reveal that **climate governance is a highly ambiguous and confusing topic to understand**, regardless of how experienced you are in this field.

When participants were asked to describe what actions an independent CGP should focus on, they were quick to provide suggestions. These suggested actions, however, ranged in terms of feasibility and swiftly disclosed the fact that **participants did not completely understand the concept of climate governance.** In fact, all 6 of the interviewees confused climate governance actions with that of delivery and implementation. Out of a total of 158 suggested actions, 100 of these were deemed out of scope for a CGP due to their implementation-focussed nature. 24 actions were considered influenceable as the partnership could partly contribute to their achievement. Just 34 actions were categorised as practical and controllable because they aligned with the CGP's innate purpose of climate governance. The central tenet of its purpose is that, while a governance partnership can strive to create a more enabling environment that can then better facilitate the delivery of climate action, it cannot itself deliver action on climate change. This is fundamental to understanding the role of climate governance in PCA.

The above finding is of critical importance as a lack of understanding of climate governance misshapes beliefs around what is possible for a CGP to deliver. This also has further implications for measuring and meeting expected objectives and outcomes. On top of that, while 'out of scope' and 'influenceable' actions are not directly relevant to a CGP, they are still important to note in this research (See appendix). These activities underscore the gaps remaining in Edinburgh's climate landscape that cannot and will not be addressed by a CGP. Instead, the gaps demand further attention and action from stakeholders whose role it falls under and who have the power and capacity to do so.

B. Extreme Expectations on Climate Governance

A high proportion of interviewees expressed the significant role that an independent CGP could play in Edinburgh, so much so, it appeared that **interviewees placed too many expectations on it to fulfil their entire 'climate wish lists'.** On top of that, participants hoped it would step up and fill all of the shortcomings of the local council. This was evident as stakeholders suggested that a CGP's activities should focus on issues as wide ranging as transport, heat in buildings, business growth, community engagement and a just transition to name a few. This clearly demonstrates that interviewees set high expectations for a CGP and overestimate its ability considerably. While ambition is important, this needs to me coupled with realisability and pragmatism. Blind ambition is a dangerously impractical approach and fails to acknowledge the specific role of climate governance and its limitations.

C. Limitations of Climate Governance

Overall, evidence suggests that climate governance plays a crucial role. It must be noted, however, that **the value it can add will always be limited**. Findings revealed that, in the case of Edinburgh, **limitations related to a lack of power, autonomy, resources and a clear mandate.**

1) Lack of Power

Participants in both the interviews and workshop raised concerns over a lack of power. This was predominantly discussed in relation to the local level where a CGP ultimately lacks sufficient power to drive action unless otherwise provided with it from key actors such as government. This sentiment also transcended beyond the local level and scaled right up to the national level of Scotland and UK-wide. Participants underscored that climate action at the local level is at the mercy of top-down political power dynamics from Scottish Government and Westminster. This has implications for PCA on the national, regional, local and community level. It threatens the ability of an independent CGP to ensure accountability and provide scrutiny if it then lacks the ability to uphold formal consequences. On account of this limitation, this led multiple stakeholders to contemplate the benefits of increased devolution of power from Westminster towards the local level in order to truly realise change necessary for a 1.5-degree Celsius future.

2) Lack of Autonomy

Being less reliant on other actors supports greater autonomy for an independent CGP. The fragile state of a CGP is brought to the forefront when the dependencies it relies upon to survive, let alone thrive are examined. Failing to be cognisant of a CGP's relationship within the wider ecosystem, turns a blind eye to its turbulent interconnections with external political, social, environmental and cultural dynamics, and the stakeholders within these. This transfer of power raises questions over the true autonomy of a CGP if it must rely on other actors to believe in it, support it and, most importantly, follow its advice. Compounded with the challenge of a lack of resources and its reliance on others to fund its activities or provide resources in kind, it could be said that a CGP could is in an insecure position. Sceptics may ask themselves whether a CGP is truly capable of independently delivering place-based climate outcomes, and they would not be alone.

3) Lack of a Clear Mandate

Participants also recognised a lack of a clear mandate as an additional limitation of a CGP. In the case of the ECC, interviewees noted that a wide and vague remit was one of the commissions' most significant downfalls,

perpetuating uncalculated and unfocussed activities. Despite this, history appears to be repeating itself as participants continued to suggest a wide scope of work for an independent CGP to deliver.

It is vital for those in power to recognise the value of a CGP and bestow a top-down mandate for governance onto it (as seen in Scotland's Just Transition Commission and Edinburgh's Poverty Commission). Without this clear mandate, it is difficult for a CGP to garner legitimacy, obtain necessary financial resources and have a defined remit to thrive. A CGP, that lacks a clear mandate, is forced to define its own remit, agree on priorities and source its own budget – all of which rely largely on volunteer capacity. This is a recipe for limited impact, dependency on others and overcommitted and undervalued volunteers.

D. Importance of a Practical, Multi-Solutions Approach

PCG is a vital driver of climate action, however, given its inherent limitations, **climate governance will only ever be a piece of the puzzle when addressing climate change**. As one opponent of a CGP in Edinburgh astutely highlighted, more resources need to be funnelled into the implementation side of climate action to ensure that there is actually something to govern over. For this reason, the delivery unit needs to be the larger part of this approach, meaning that oversight is a function of the delivery mechanism. More roles and responsibilities need to be divided up and acted upon in addition to improved climate governance. Therefore, **it is important that a multi-faceted approach to climate action is adopted, ensuring that the creation of one thing does not exclude the creation of something else.**

> " If you don't have anyone allocated to delivery, what are people overseeing? "

Section 7: Conclusions, Limitations and Further Research

Conclusions

This report aimed to i) better understand if an independent CGP could continue adding unique value in Edinburgh and, if so, where is it best placed to do so ii) explore the lessons learned by the Edinburgh Climate Commissions' journey thus far iii) utilise these lessons learned to inform the development of a framework of outcomes for improved climate governance.

Overall, evidence suggests that **the majority of stakeholders think that there is ample opportunity for an independent CGP to continue adding value in Edinburgh**. Stakeholders suggested that a CGP should **focus on outcomes such as collaboration, better informed stakeholders, improved decision making, stakeholder empowerment and improved coordination** to name a few.

While stakeholders easily identified outcomes for a CGP to deliver, stakeholders struggled to suggest a refined and practical scope of activities for a CGP to deliver. This captures a major finding of the research, which is that **stakeholders set high expectations for a CGP and confused its role with that of an implementation unit.**

As no consistent set of activities emerged from the research, **it was not feasible to develop a singular framework of outcomes.** Instead, **this report developed and presented an adjusted framework (using commonalities from stakeholders' suggested activities) to explore 3 typologies of climate governance.** The framework encompassed the following components;

- The stakeholders that will be engaged
- The level at which it operates
- The key activities it would deliver
- The feasibility of these activities
- The gaps it can fill
- The outcomes this can lead to
- Ways to maximise impact

The **3 suggested models were the 'community-focussed', 'critical friend' and 'task-and-finish group' typologies.** After utilising the framework to explore each model, **the 'task-and-finish group' typology was chosen as the most valuable and practical way forward for a CGP in Edinburgh.** This is because it is the most integrated, adaptive and dynamic pathway and it efficiently targets key stakeholders at the epicentre of Edinburgh's climate response. **This model has many levers of change** such as stimulating dialogue with and between key stakeholders in Edinburgh, highlighting 'dropped balls' in Edinburgh's climate landscape, scrutinising the pace, quality and direction of climate action, providing independent guidance and expertise, identifying pathways for greater decarbonisation and resilience, supporting improved collaboration, decision-making and coordination and boosting stakeholder engagement and empowerment.

This research went even further to set out two practical applications of the recommended typology. These include;

1) Scrutinising Edinburgh City Council's 'Climate Strategy Implementation Plan' to ensure that it is realistic, action-driven and place-based.

2) Supporting the development of Edinburgh City Council's 'Climate Ready Edinburgh Adaptation Plan' by conducting policy analysis, providing independent guidance and championing a holistic approach to climate action that highlights associated co-benefits.

It is important to note that both of these applications must strive to align with aimed improvements from the 'Local-National Government Delivery Framework for Scotland', as recognised by the Verity House Agreement (COSLA, 2023). These pathways must also advance PCA in line with wider national climate targets, as highlighted by the Environmental Standards Scotland (2023) investigation and the CCC (CCC, 2024).

Lastly and most importantly to reiterate, **a CGP is a critical driver of climate action. Given its perpetual limitations (i.e., a lack of power, autonomy, resources and clear mandate), it must be accompanied by other synergistic and complimentary programmes of work on implementation.** More attention and resources need to be injected into an improved implementation mechanism in Edinburgh. For this reason, climate governance and climate implementation must occur synergistically and simultaneously.

Limitations and Further Research

There are numerous limitations associated with this research. For instance, the main aim of this research was to better understand if and where a CGP could add value in Edinburgh. This research was not developed to explore if it was the best use of resources to tackle climate change in Edinburgh. For this reason, more appropriate responses may exist such as investments into implementation, however, this is beyond the scope of the research and could be the focus of future investigation.

Furthermore, this research had a sample size of just 14 people, which could be considered small. While a healthy number of perspectives were sought after, this was still somewhat limited. This can be associated with difficulties securing busy research participants as well as the project duration and capacity restrictions. While it was not within the bounds of this research to conduct widespread analysis of PCG in Edinburgh, the research could be more robust. Consequently, this research acts as a catalyst for further dialogue and calls for deeper analysis into this topic with wider stakeholder engagement and a comparison of those results to this research. This is because the casting vote on whether a CGP could continue adding value in Edinburgh cannot and should not be left to a select few. Deep place-based stakeholder engagement and collaboration around this question is critical.

This research also revealed that climate governance is often confused with climate implementation. This was evident as two-thirds of suggested activities were implementation-focussed and were ultimately ruled 'out-of-scope'. Future research could inspect the drivers behind this confusion and present ways for improved communication and clarification of their differences. This research also fails to explore how these implementation-focussed activities should be addressed, and by whom. Greater attention could be paid towards understanding these activities and how best to prioritise and achieve them. Furthermore, this research highlighted the important interconnection between climate governance and implementation. Supplementary research could analyse how the relationship between climate governance and climate action delivery can be more synergistic in order to deliver positive climate outcomes.

Additionally, this report outlined a variety of key limitations that a CGP can face, particularly a lack of power and autonomy. This led multiple stakeholders to contemplate the benefits of greater devolution of power from Westminster towards the local level in order to truly realise change necessary for a 1.5-degree Celsius future. Future investigations could explore how this would work in praxis and the challenges, negative repercussions, opportunities and advantages (if any) of this.

Moreover, this report selects a recommended climate governance typology for Edinburgh, presents two practical applications of this typology and offers a checklist of 17 key considerations that must be accounted for when delivering place-based climate governance in praxis. This report does not, however, explore how these can be implemented on the ground. Subsequent research could analyse the individual value add of each pathway and also investigate the relative impact of these 17 considerations on the effectiveness of climate governance.

Additional research could also seek to map the existing governance landscape in Edinburgh onto these typologies and explore which typologies already exist and if any gaps are evident.

Lastly, this research offers an in-depth case study on climate governance in Edinburgh. It examines the unique landscape in Edinburgh, the gap's in its climate action, its climate needs as well as the activities and outcomes it hopes to deliver. For this reason, it will not be suitable for direct application elsewhere due to its specific place-based focus on Edinburgh. While it never intended to offer a cookie cutter approach to PCG, it can provide inspiration to others who may wish to replicate aspects of this research. Stakeholders can take account of the framework used and the key considerations outlined irrespective of their setting. Future research could explore the key considerations that must be accounted for in other places in the UK and assess their degree of variance, if any, from Edinburgh.

References

Bol, Howard. (2024). Edinburgh's 2030 net zero pledge off track amid green heat row. The Herald. [online]. Available at: https://www.heraldscotland.com/news/24038797.edinburghs-2030-net-zero-pledge-off-track-amid-green-heat-funding-row/

CAG Consultants. (2023). Evaluation of the Impact of PCAN-supported Climate Commissions - Final Report. [online]. Available at: https://pcancities.org.uk/sites/default/files/Evaluation%20of%20the%20Impact%20of%20PCAN-supported%20Climate%20Commissions%20final%20report.pdf

Climate Emergency Response Group. (2024). State of Delivery: Bridging the gap between climate ambition and action in Scotland – An open invitation to the Scottish Government. May 2023. [online]. Available at: https://cerg.scot/wp-content/uploads/2023/04/CERG-Report-May-2023.pdf

Committee on Climate Change. (2024). Progress in reducing emissions in Scotland. 2023 Report to Parliament. March 2024. [online]. Available at: https://www.theccc.org.uk/wp-content/uploads/2024/03/Progress-in-reducing-emissions-in-Scotland-2023-Report-to-Parliament.pdf

COSLA. (2023). Progress Publication, December 2023: Fiscal Framework between Scottish Government and Local Government. December 2023. [online]. Available at: https://www.cosla.gov.uk/__data/assets/pdf_file/0028/46792/progress-publication-december-2023-fiscal-framework-between-scottish-government-local-government.pdf

Edinburgh City Council. (2021). 2030 Climate Strategy: Delivering a Net Zero Climate Ready Edinburgh [online]. Accessed at: https://www.edinburgh.gov.uk/downloads/file/29617/edinburgh-2030-climate-strategy#:~:text=Edinburgh%20has%20committed%20to%20%E2%80%9Dnet,city%2C%20put%20into%20the%20air.

Edinburgh City Council. (2024a). City-wide Carbon Emissions and 2030 Climate Strategy Update – Policy and Sustainability Committee. [online]. Available at: https://democracy.edinburgh.gov.uk/documents/s65224/Item%207.5%20-%20Climate%20Strategy.pdf

Edinburgh City Council. (2024b). Draft Climate Ready Edinburgh Plan (New climate change adaptation plan for the city). The City of Edinburgh Council [online]. Available at: https://consultationhub.edinburgh.gov.uk/bi/climate-ready-edinburgh/

Edinburgh Climate Commission. (n.d.). Edinburgh Climate Commission – Accelerating climate action and impact in Scotland's capital [online]. Available at: https://www.edinburghclimate.org.uk/

Environmental Standards Scotland. (2023). Climate Change Plan Summary Report. [online]. Available at: https://environmentalstandards.scot/wp-content/uploads/2023/09/Case-Summary-Report-Climate-Change-Plan-IESS.23.020.pdf

Griggs, D., Smith, M. S., Rockström, J., Öhman, M. C., Gaffney, O., Glaser, G., Kanie, N., Noble, I., Steffen, W., & Shyamsundar, P. (2014). An integrated framework for sustainable development goals. Ecology and Society, 19(4). http://www.jstor.org/stable/26269703

Harvey-Crawford. (2021). Inside Edinburgh's Climate Compact: Commentary [online]. Available at: https://pcancities.org.uk/inside-edinburghs-climate-compact

Howarth, C., Bryant, P., Corner, A. et al. (2020). Building a Social Mandate for Climate Action: Lessons from COVID-19. Environ Resource Econ, 76, 1107–1115. https://doi.org/10.1007/s10640-020-00446-9

Howarth, C., Brogan, J., Bryant, S., Curran, B., Duncan, A., Prof. Frankhauser, S., Prof. Goudlson, A., Dr. Lane, M., Lock, K., Prof Owen, A and Pro can der Horst, D. 2024. The Importance of Place in Climate Action. PLOS Climate – Opinion. March 2024.

Intergovernmental Panel on Climate Change. (2023). Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, H.Lee and J.Romero (eds.)]. IPCC, Geneva, Switzerland. doi: 10.59327/IPCC/AR6-9789291691647

Krauß, W and Bremer, C. (2020). The role of place-based narratives of change in climate risk governance, Journal of Climate Risk Management., 28 (2020), Article 100221, 10.1016/j.crm.2020.100221

NHS Scotland. (n.d.) What is an Outcomes Framework [online]. Available at: https://www.healthscotland.com/OFHI/what_is_it.html#:~:text=An%20outcomes%20framework%20is%20a,up%20of%20different%20%22tools%22. [Accessed 10/07/2023]

PCAN. (n.d.). What is a Local Climate Commission? [online]. Available at: https://pcancities.org.uk/what-local-climate-commission

PCAN. (2023). Enabling Place-based Climate Action in the UK: The PCAN Experience. [online]. Available at: https://pcancities.org.uk/sites/default/files/Enabling%20Place-based%20Climate%20Action%20in%20the%20UK%20-%20The%20PCAN%20Experience.pdf

Robèrt, K. H. (2000). Tools and concepts for sustainable development, how do they relate to a general framework for sustainable development, and to each other?. Journal of cleaner production, 8(3), 243-254. https://doi.org/10.1016/S0959-6526(00)00011-1

Schweizer, S., Davis. S. and Leigh Thompson, J. (2013) Changing the Conversation about Climate Change: A Theoretical Framework for Place-Based Climate Change Engagement, Environmental Communication, 7:1, 42-62, DOI: 10.1080/17524032.2012.753634

Scottish Government. (n.d.). Improving public services [online]. Available at: https://www.gov.scot/policies/improving-public-services/community-planning/

Scottish Government. (2019). Local Governance Review. [online]. Available at: https://www.gov.scot/publications/local-governance-review-analysis-responses-ask-public-sector-organisations-outline-alternative-arrangements-public-service-governance/

UNEP. (2023). Emissions Gap Report 2023. 20 September 2023 [online]. Available at: https://www.unep.org/resources/emissions-gap-report-2023

This report utilises the lessons learned from the Edinburgh Climate Commission to inform the development of a framework that explores 3 typologies for improved place-based climate governance.

After selecting a recommended typology, the report goes further to outline 2 practical applications of this in Edinburgh.

It also presents a checklist of 17 key considerations that must be accounted for when designing, setting up, running, evaluating and decommissioning a place-based climate governance model.