

Creating Climate Resilient Communities

15th November 2023



Welcome and introductions

Alex Cameron-Smith (she/her)
Climate Resilience Manager, Sniffer



About us



Sniffer is an environmental charity, based in Edinburgh and Glasgow, with a focus on **leadership, placemaking and innovation**. We are a catalyst, fostering collaboration across sectors and places to ensure transformation towards a flourishing and fairer future for all in a changing climate.

Adaptation Scotland is the national climate change adaptation programme funded by Scottish Government that we deliver. Sniffer also provides the Secretariat for **Climate Ready Clyde**, the Glasgow City Region climate adaptation partnership.

Find out more about our work: www.sniffer.org.uk



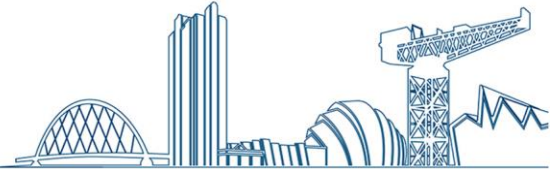
Aims for the day



- Increase awareness and knowledge of climate impacts and need for adaptation in the Glasgow City Region
- Bring together communities, third sector organisations and public bodies, building more capacity to support meaningful community participation in place-based adaptation
- Enable two-way sharing and learning
- Making wider links and collaborations with other climate adaptation and resilience projects



Agenda



- 10:00 Welcome and intro
- 10:10 Adapting to climate change in Glasgow City Region
- 10:20 Lived experience, participatory processes and climate adaptation
- 10:35 Workshop: exploring Adaptation Personas
- 11:35 BREAK
- 11:50 Climate adaptation and resilience projects in communities & panel discussion
- 13:00 LUNCH
- 13:45 Introducing the Community Climate Adaptation Routemap
- 14:05 Workshop: Using the Routemap to plan local action
- 15:15 Reflections from the day & wrap up
- 15:30 EVENT CLOSE



Adapting to climate change in Glasgow City Region


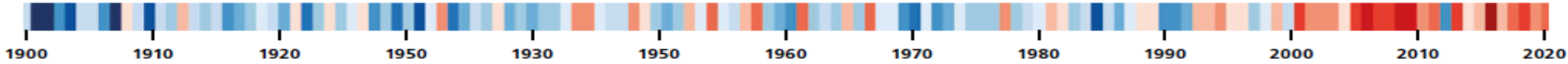
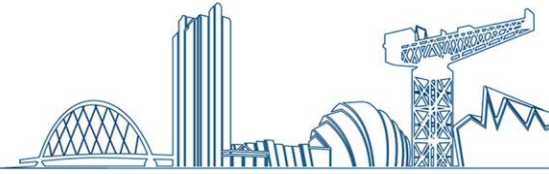
Ben Connor
Head of Climate Ready Placemaking, Sniffer




Climate Ready Clyde



Our changing climate: Scotland




Scotland's **10 warmest years** on record have all occurred since 1997. The average temperature in the last decade (2010-2019) was **0.69°C warmer** than the 1961-1990 average, and the warmest year on record was 2014⁴.



There has been an **increase in rainfall** over Scotland in the past few decades (with an increasing proportion of rainfall coming from heavy rainfall events). The annual average rainfall in the last decade (2010-2019) was **9% wetter** than the 1961-1990 average, with winters 19% wetter⁵.

Mean **sea level** around the UK has risen by approximately **1.4 mm/year** from the start of the 20th century⁶.



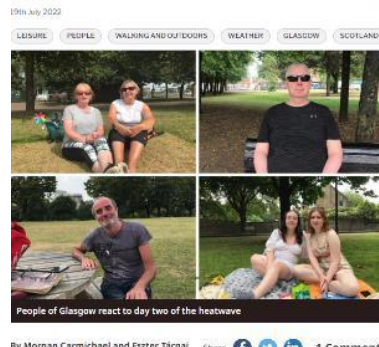
The **changes** in climate that we are already experiencing are projected to **continue** and **intensify**



Our changing climate: Glasgow City Region



People of Glasgow react to day two of the heatwave



Police warning not to travel in Inverclyde due to flooding



The Herald

News Politics Sport Voices Business HQ Features Campaigns Our Writers Announcements Events

WATCH

Bowling train: Images of flooded stations reveal scale of disruption



In all scenarios, climate change means Glasgow City Region will experience:



Increasing extreme weather



Heavier winter rainfall and reduced summer rainfall



Higher average temperatures, with more frequent and extreme heatwaves



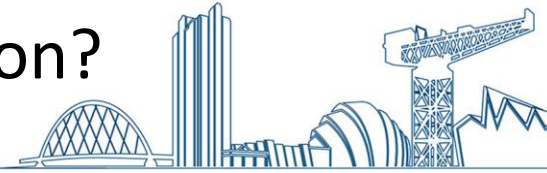
Sea level rise and coastal erosion



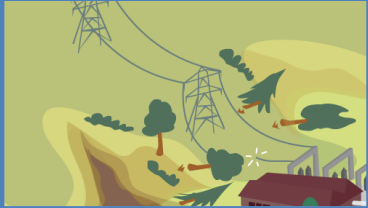
Increased likelihood of flooding



What does this mean for Glasgow City Region?



Infrastructure



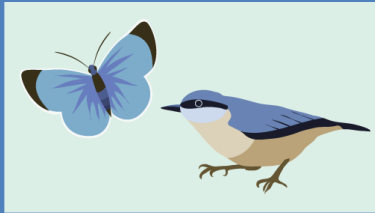
Buildings



Health and Society



Nature



Businesses



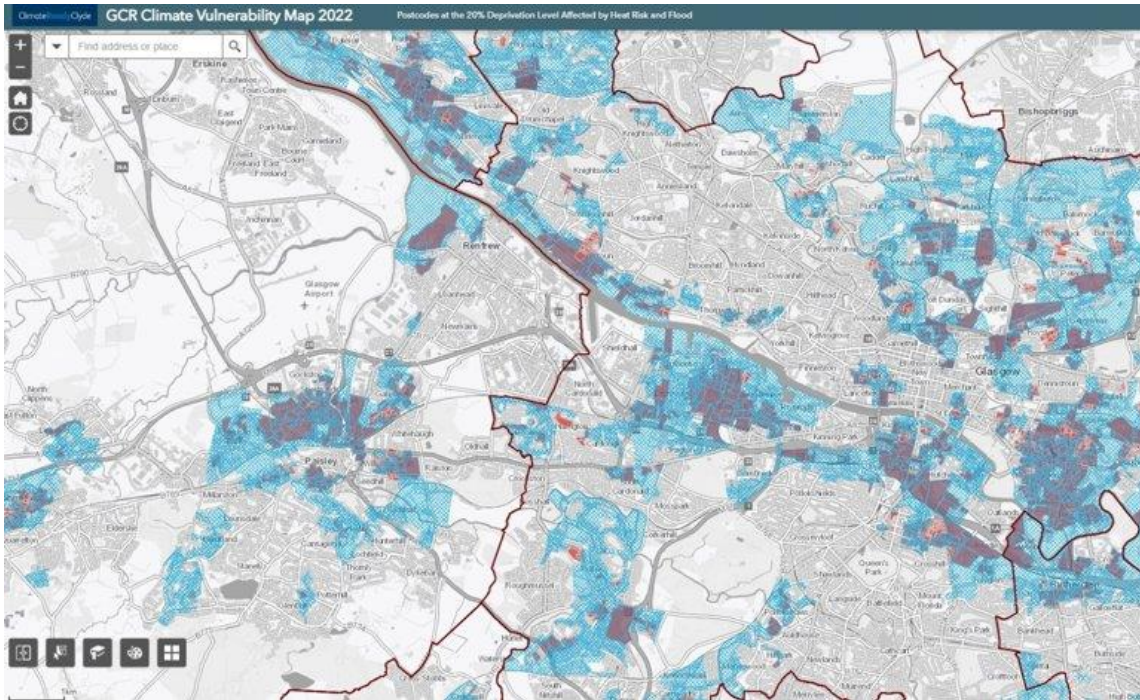
International & crosscutting



Climate risk: the potential for negative consequences for people or nature from the impacts of climate change

<https://www.crc-assessment.org.uk/>

Climate vulnerability

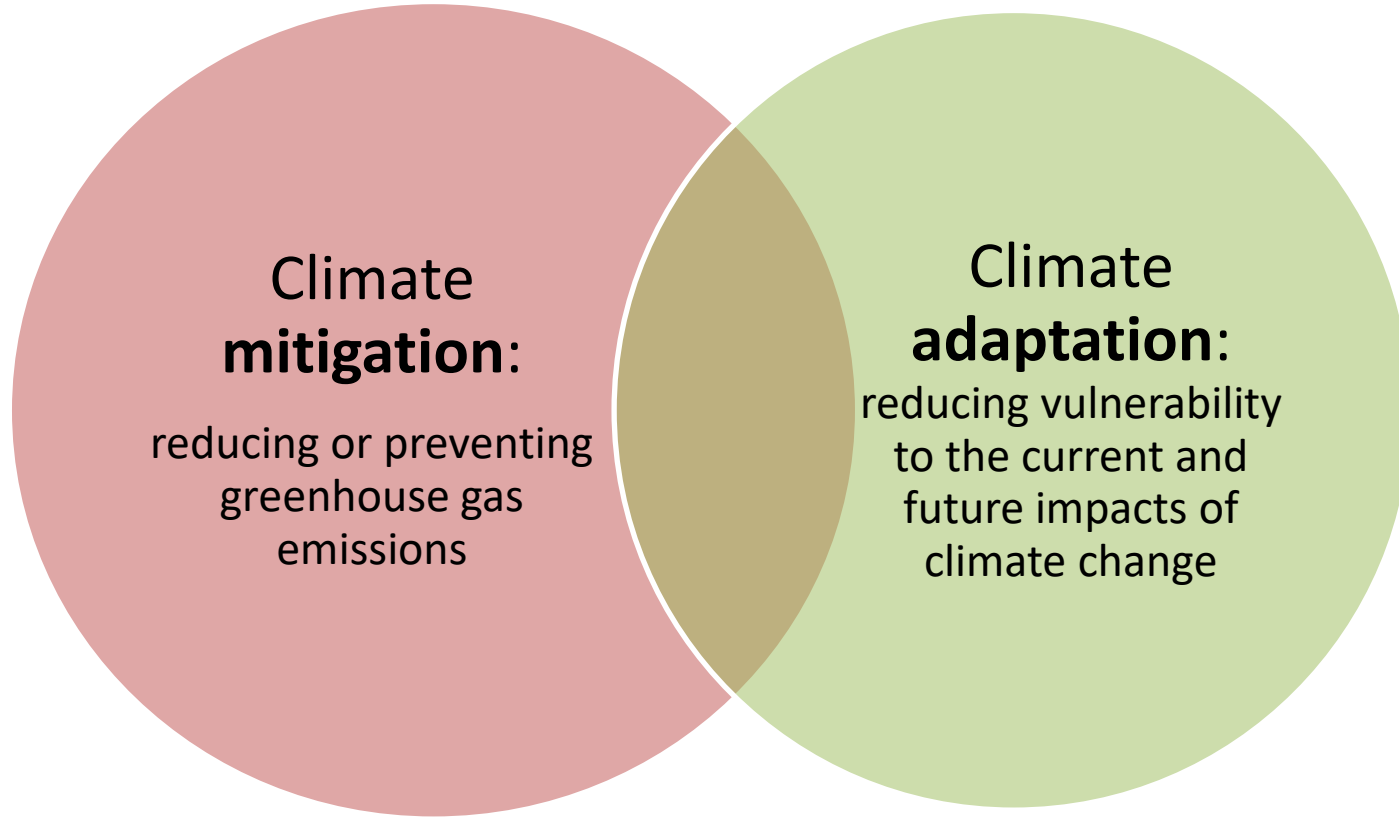


Social and economic factors, such as **gender, ethnicity, age, housing tenure and income** affect how people are impacted by climate change.

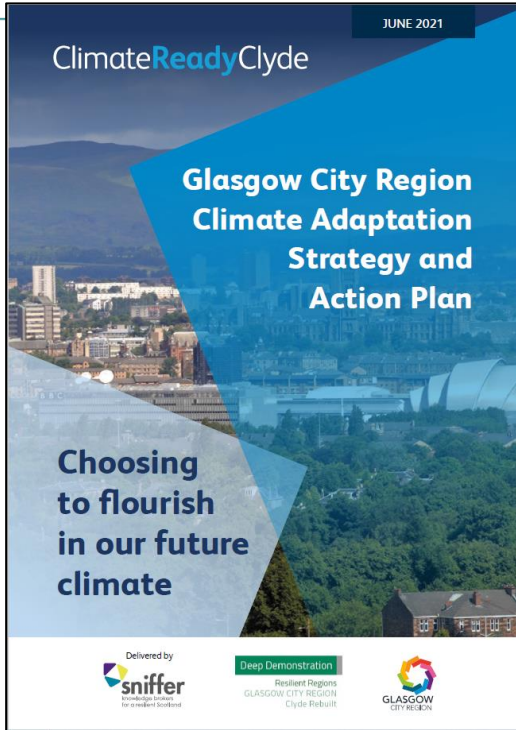
<https://climateredyclyde.org.uk/climate-vulnerability-map/>



What is climate adaptation?

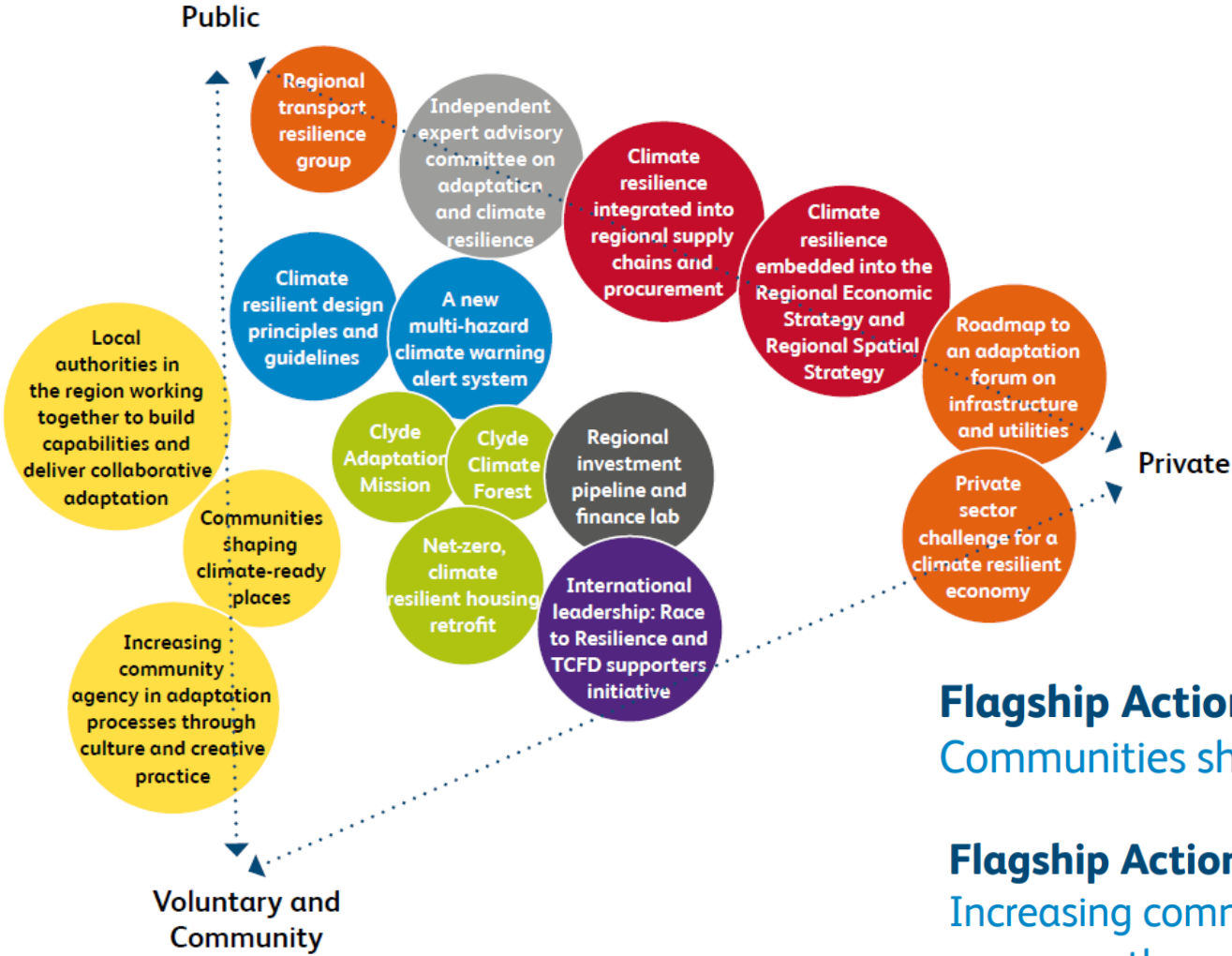


Climate Ready Clyde



- Co-ordinated, cross sector and long-term approach to climate adaptation
- Vision: “a Glasgow City Region that flourishes in the future climate”
- Transformational adaptation – not just doing things differently but *doing different things*
- **Just** resilience

16 Flagship Actions



Flagship Action 2:
Communities shaping climate-ready places

Flagship Action 3:
Increasing community agency in adaptation processes through culture and creative practice

An unadapted place



An adapted place



An adapted place

Climate ready homes

Community facilities

Resilient, accessible transport

In-street rain gardens

Local growing

Space for nature

Retrofitted buildings

Public spaces

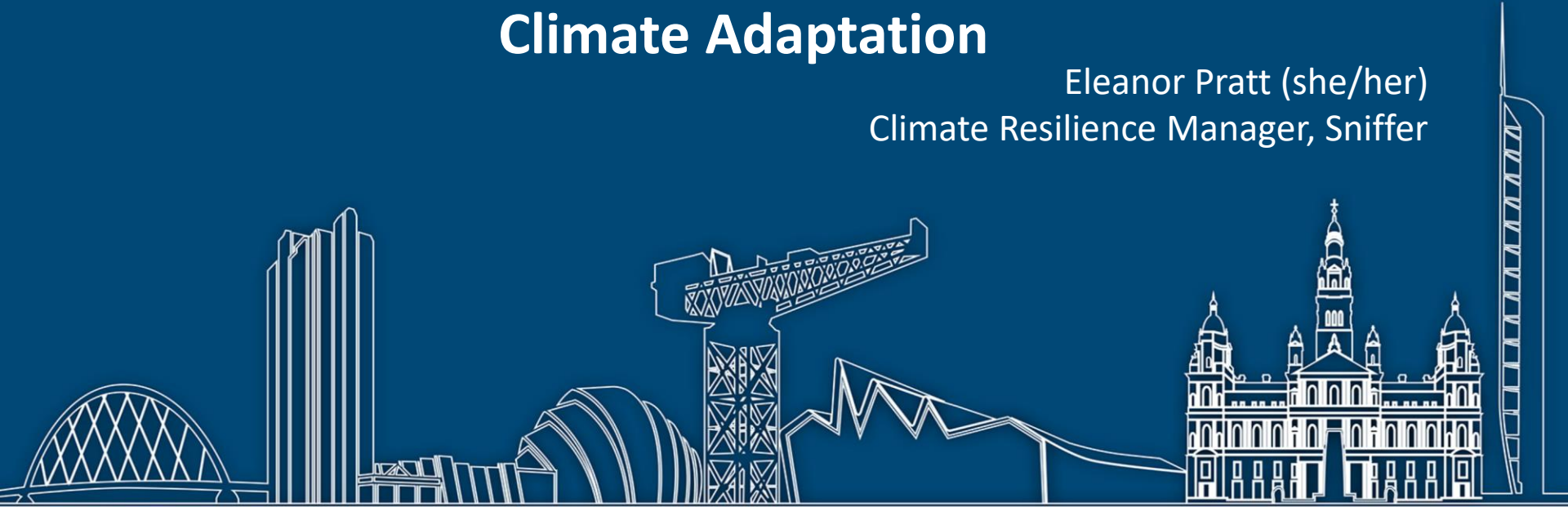
Improved drainage

Green streets



Lived Experience, Participatory Approaches and Climate Adaptation

Eleanor Pratt (she/her)
Climate Resilience Manager, Sniffer



What is 'lived experience' in the context of climate adaptation?



- Knowledge and meaning gained through first-hand experience of e.g.
 - *Climate impacts (flooding, drought, extreme heat, erosion...)*
 - Where they occur
 - What happens during/after
 - How impacts overlap & exacerbate each other
 - Who/what is most affected and why
 - *Adaptation action*
 - What matters most to protect in future
 - What works where, and how to maximise multiple benefits
 - What strengths/capacities can we build on, where do we need help
 - How climate resilience contributes to a fairer, flourishing place



Climate Justice



Distributional Justice

- Making sure costs and benefits of taking action are spread out fairly
- Considers responsibilities and resources + the needs of future generations and ecosystems



Photo credit: Chris Jamieson, Belfast

Procedural Justice

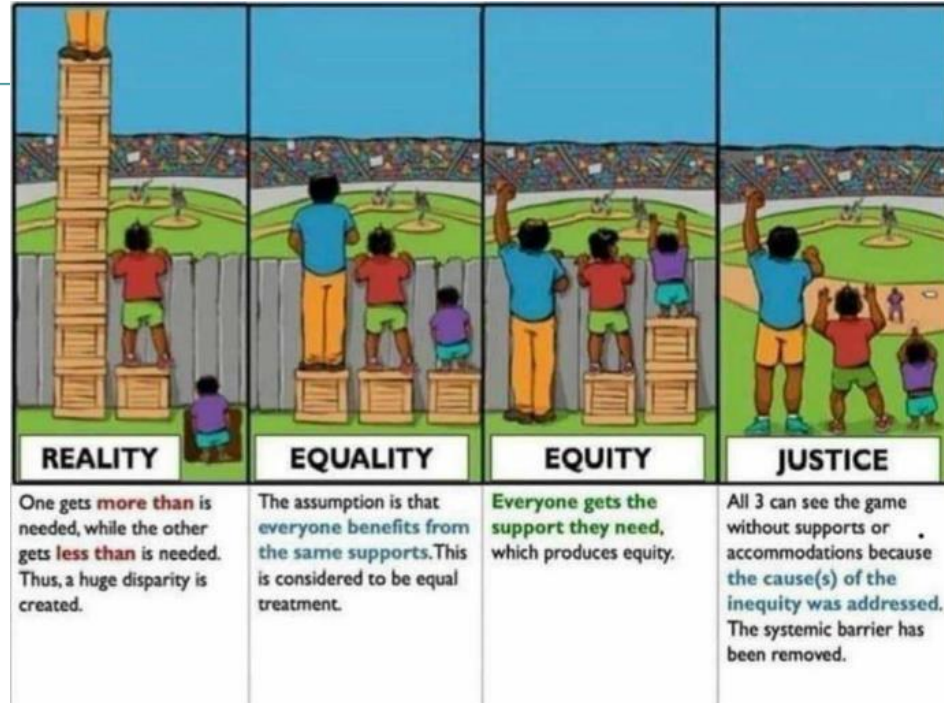
- Is about power to influence adaptation decisions, which is often not held equally
- Enables citizens knowledge and marginalised voices to be actively involved in adaptation actions.

Adaptation isn't something that should be done 'to' people; it must be collaborative



Just Resilience

“Only an approach to adaptation that moves beyond a sole focus on the biophysical risks of climate change, to one that considers the larger and more complex processes that interact and produce vulnerability, can address social, environmental, and climate injustice”, O’Brien and Selboe (2015)



Credit: Interaction Institute for Social Change | Artist: Angus Maguire

Transformational Climate Adaptation: *doing different things, differently...*



- Challenges existing power dynamics and business as usual
- Balances technical solutions with deep understanding of the process of change itself, which is a social process
- Bottom-up process of communities defining their own needs and demands and shaping meaningful adaptation
- Democratising climate adaptation by meaningfully involving communities; making it more accessible & valuing their local knowledge and lived experience



Participatory Processes...



- Help ensure citizens are part of how decisions which affect them are made
- Help address complex problems – value diverse types of knowledge, experience and values
- Reveals authentic insights into people’s lives and experiences
- Better quality decision making
- IF DONE WELL - increase trust and collaboration between communities and institutions



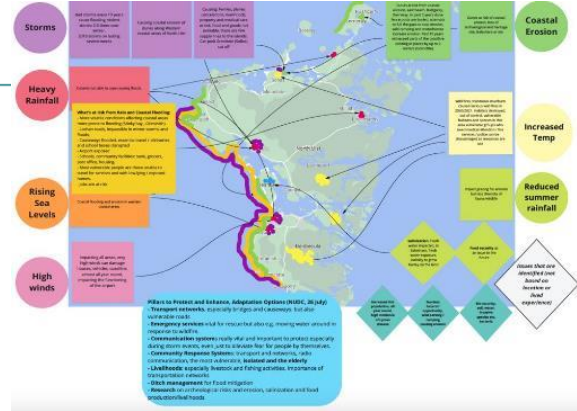
Participatory processes for gathering lived experience



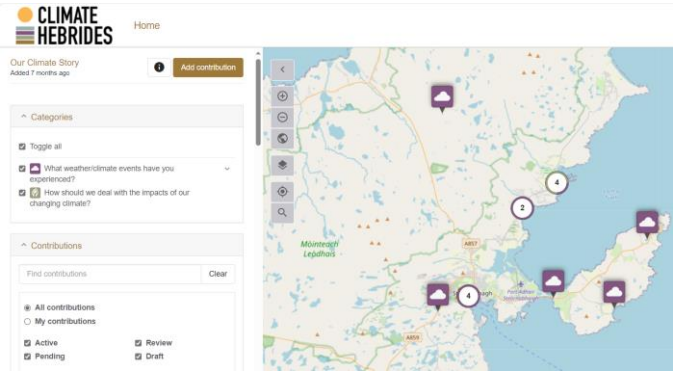
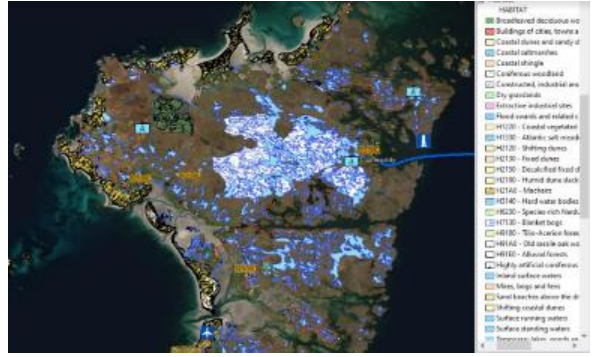
- Community/peer research- directed and conducted by people with lived experience of the issues being studied.
- Participatory mapping
- Walking tours/interviews
- Oral/written histories
- Participatory video/photography
- Games/play
- Arts-based methods



Participatory Mapping – Outer Hebrides



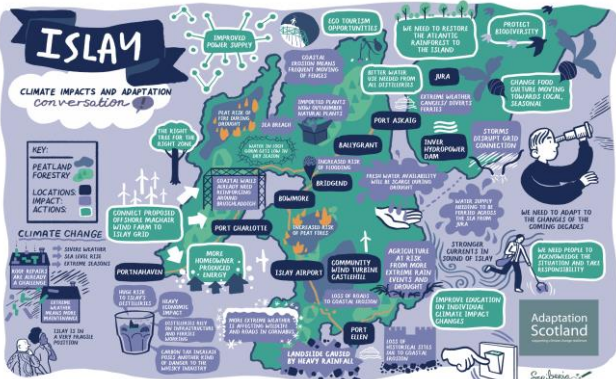
- Use of physical & digital maps to collect local knowledge about climate impacts and adaptation priorities
- Integrating community knowledge with spatial data to validate and enhance



Participatory Mapping – Carbon Neutral Islands

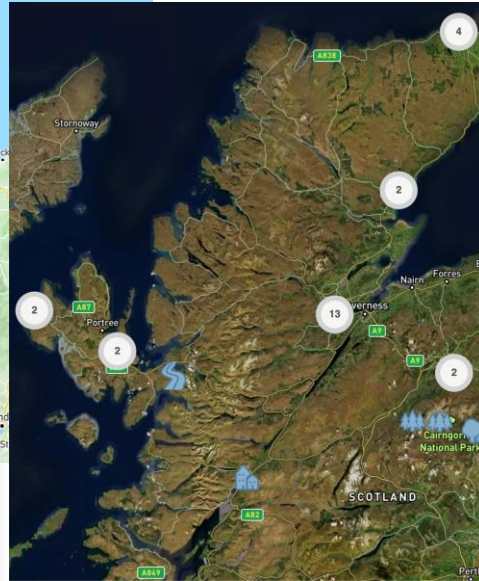


- Online workshops exploring climate projections through local impacts mapping
- Live scribed process = visual outputs
- Built understanding about how adaptation links to emissions reduction and other community priorities (housing, fuel poverty, jobs)



Participatory Mapping – Highland Adapts

www.highlandadapts.scot



Share a story of how you have experienced weather and/or climate at this place

Were you positively or negatively impacted? When did this happen?
How did you feel?



Highland Adapts

- Feeding local knowledge into evidence base for regional climate risk and opportunity assessment



Participatory Research – Urban Greening for Heat Resilient Neighbourhoods



- Open University and Sniffer working with neighbourhoods in Glasgow (Pollok and Govan) and Taipei
- Recruiting/training community researchers to co-design and lead research process and own outputs
- Walking/talking interviews exploring how communities experience hot weather, and how they think green spaces can help to deal with extreme heat in future
- Supported by local creative practice organisations (Village Storytelling Centre and Impact Arts)



Tools & Resources

www.adaptationscotland.org.uk/how-adapt/tools-and-resources

Simple how-to's, workshop outlines & templates to:

- Introduce adaptation – **Adaptation 'Whirlwind' presentation**
- ID who should be involved – **Stakeholder & Power mapping**
- Explore lived experience – **Participatory Mapping and Climate Impact Interviews**
- Think more creatively about impacts and adaptation – **Adaptation Personas**

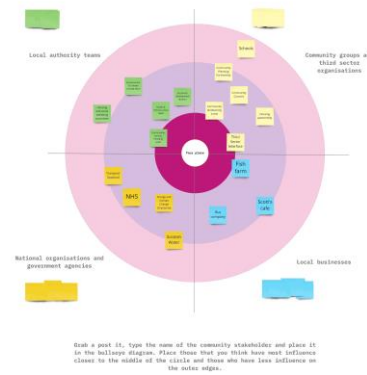


Participatory Mapping

A process to gather lived experience of climate change

Adaptation Scotland

supporting climate change resilience



The Kelpie of the Ken

"Loch Ken is my home, I rely on it for shelter, food & protection."

First Sighting 7th January 1864

Habitat Loch Ken

Species Scottish Kelpie

Diet Fish, grass, leaves & buds

Life Span Who knows!

Population 1



Bio

The Kelpie of the Ken is a mythical creature living within Loch Ken - Don't worry it's friendly! The Kelpie has lived within the loch peacefully with the other wildlife but lately climate change means it is struggling to find suitable shelter and food.

The Kelpie is very shy but if you follow the code of the Loch and keep it's home clean you may catch a glimpse of it peering out of the loch to say hello!

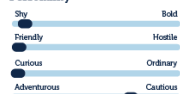
Needs & Goals

- Having a safe home to live in
- Finding plenty of food in and around the loch
- A quiet local area to explore and enjoy

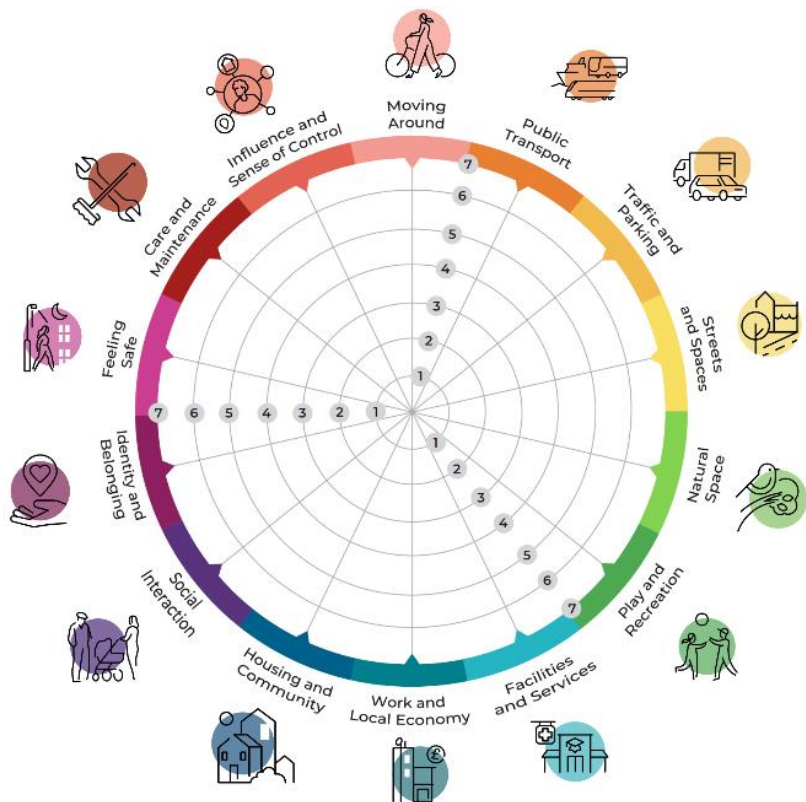
Challenges

- Variable Weather
- Lack of food
- Fear of vehicles when exploring the area

Personality



Place Standard Tool with a Climate Lens



Additional prompt questions for each of the 14 themes.

Big Challenge 1
How can we achieve our target of net zero emissions by 2045?

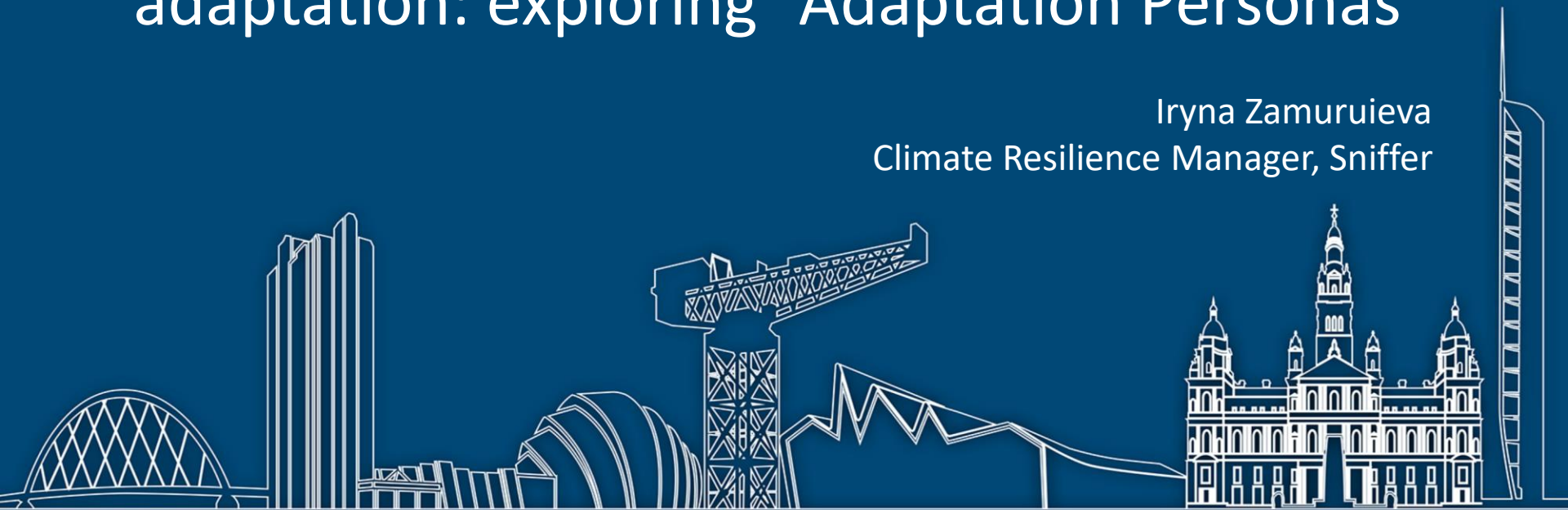
Big Challenge 2
How can we adapt this place to already unavoidable climate change?



Visit the [Our Place](#) website to access the Climate Lens resources.

WORKSHOP: Creative approaches to climate adaptation: exploring “Adaptation Personas”

Iryna Zamuruieva
Climate Resilience Manager, Sniffer



What are personas?

"Personas are research-based characters that you create to understand the real experiences of people who will use your service or be affected by a policy."

>> real people with backgrounds, goals, and values <<



www.govt.nz

Personas

Personas are research-based characters that you create to understand the real experiences of people who will use your service or be affected by a policy (PM&C serves the Executive, Governor-General, Prime Minister and Cabinet, through the provision of in...)

www.interaction...

What are Personas?

What is Personas? Personas are fictional characters, which you create based upon your research in order to represent the different user types that might use your service, product...

Why use personas?

- Put a face to adaptation
- Understand different experiences of climate change
- Think from specific perspectives about climate impacts, adaptation capacities and responsibilities

Examples of how personas can be used:

5 [Glasgow's Future Stories](#)

"We Need to Foster Dialogue and Build Trust" - Collaborative Futures 2021

Marie was part of a grassroots organisation for more than fifteen years. She knows how change and progress can be fragile and slow. This is why she tries to

Uses 5 personas and corresponding artefacts, stories and foundations/principles to vision and plan Glasgow's future human-centred and place-based perspectives

Architecture & Design Scotland
Advanced in Scotland with no limits

Town Centre Living: A Caring Place

Uses 4 personas to focus on how places can meet the specific needs of groups of people at different scales

- housing infrastructure
- community infrastructure
- green infrastructure
- transportation & digital infrastructure

Town centre living, ten principles of a caring place - Architecture & Design Scotland

Uses 4 personas to focus on how places can meet the specific needs of groups of people at different scales

- housing infrastructure
- community infrastructure
- green infrastructure
- transportation & digital infrastructure

This river in New Zealand is a legal person. How will it use its voice?

Soon, the government will recognize a mountain as a legal person as well. Here's how it happened, and what it may mean.

Research paper with more background on personas

Design fiction, culture and climate change: Working together personas, collaboration and taboos futures

Research paper with more background on personas

Glasgow's Future Stories: Social Innovation and Participatory Democracy in 2030



Your next persona will be non-human—tools for environment-centered designers

Because... why not? Mitigating the effects of climate change, dealing with water shortages, and securing future food crops are all in our...

Personas used in farming, business, sustainability, context

Your next persona will be non-human—tools for environment-centered designers

Because... why not? Mitigating the effects of climate change, dealing with water shortages, and securing future food crops are all in our...

Examples of non-human personas and more on environment-centered design & planning

Non-human persona: BALTIC SEA

Examples of non-human personas and more on environment-centered design & planning

HUMAN CENTERED DESIGN vs **ENVIRONMENT CENTERED DESIGN**

Personal

Name, age, gender, species, occupation

What do they care most about?

What are the underlying challenges they face?

Climate Change Impacts

What climate changes are affecting them the most, now and in the future (e.g. heavier rain, drier summers etc)?

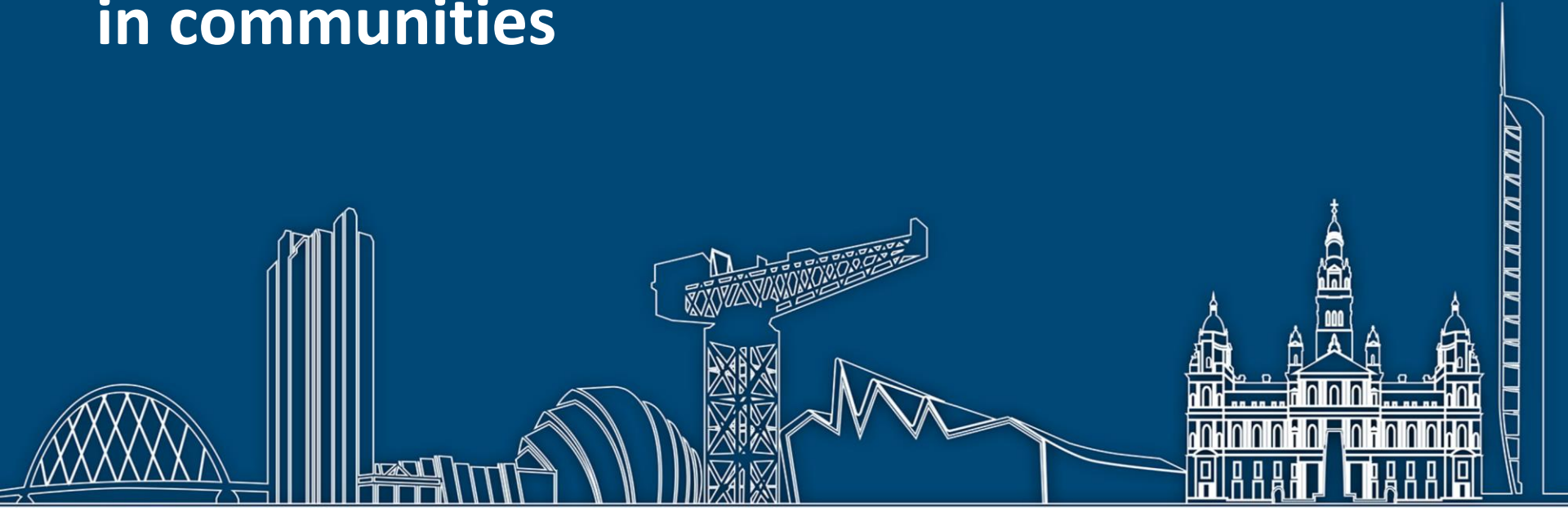
What are/might be the impacts for them?

Adaptation

What might enable/prevent them from adapting?

What adaptation actions can they take?

Examples of climate adaptation and resilience in communities



Facilitating Community-led Conversations

Bella Kerr

Intergenerational Development Officer, Generations Working Together

Watch the Community Knowledge Fund Research film here: <http://bit.ly/3MSFcCb>

Find out more: <https://generationsworkingtogether.org/>

Citizen Science and Climate Justice

Eleanor White
Sustainability Coordinator, West Dunbartonshire Libraries



West Dunbartonshire Libraries @wdclibraries

Citizen Science and Climate Justice

November 2023



West Dunbartonshire Libraries



8 public libraries,
5 school libraries,
1 mobile library



1 community
garden



“Sustainability
Action Plan”



Scotland's Public Library Strategy

People

1.3 Encourage active citizenship through access to trusted, accurate information which empowers communities to make informed decisions.

1.5 Reflect the rich and diverse communities in both library resources and programming to make them accessible to all.

Place

2.2 Design library services which reach the heart of communities and engage with new audiences.

2.4 Curate a diverse cultural offer which celebrates local and national heritage and encourages community led experiences.

Partnership

3.1 Develop partnerships which support more resilient, fairer, healthier communities.

3.3 Collaborate with partners to contribute towards the sustainable development agenda for 2030.

Scotland's Public Library Strategy

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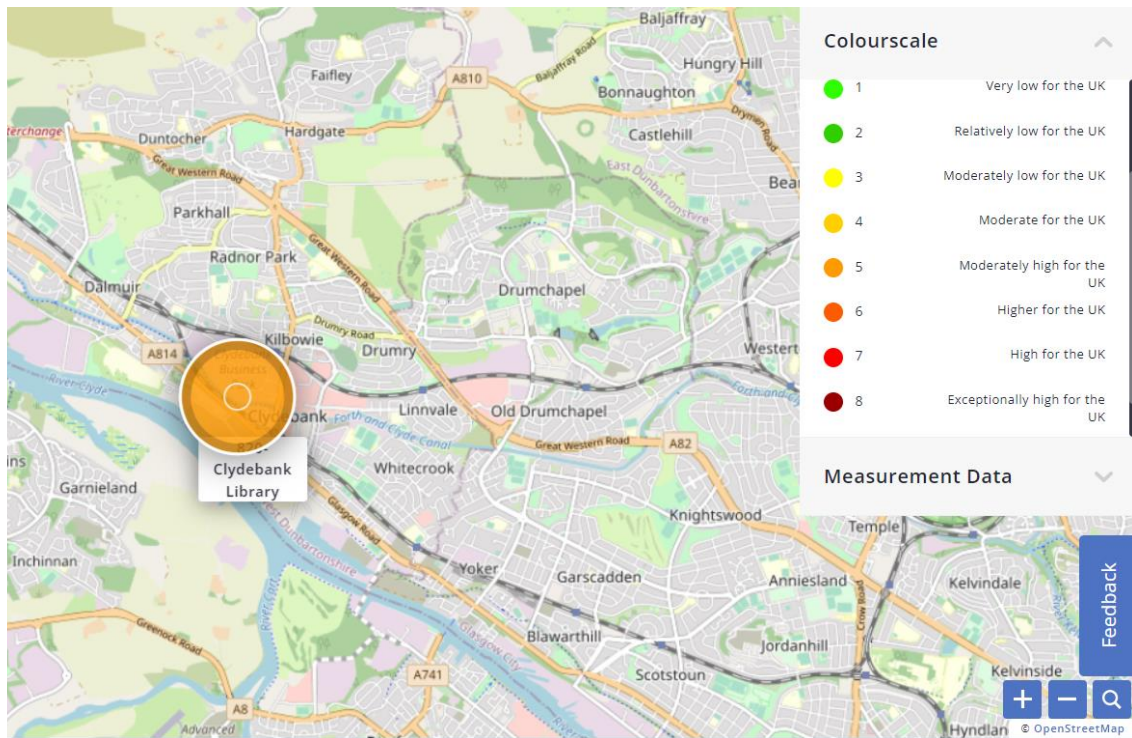
3.1 Develop partnerships which support more resilient, fairer, healthier communities.

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Vale of Leven Citizen Science: River Guardians



Clydebank Citizen Science: Air Pollution



Clydebank Citizen Science: Air Pollution



Scotland's Public Library Strategy

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Clydebank High: Seams Legit Sewing Hub



Climate ACTION Film Academy



Our film on Sustainable Fashion was selected by
the Scottish Youth Film Festival...

Watch it here: <https://vimeo.com/855668754>

Creative Climate Action: Impacts



I realised that climate change is much more important than I thought.

I have become more curious about how to help with climate change.

I finally believe that climate change is a really serious matter and that we must take action.

Environmentalist-in-Residence

- Micro-residency: 35 hours
 - Funded by CILIPS Green Libraries Grant
- Platform an artist whose practice is rooted in climate justice and/or environmentalism
- Facilitate creative climate action workshops for young people aged 12-17
- Co-creating resources with and for the community to engage with the Community Garden



Get in touch:

Eleanor White (Pronouns: She/Her),
Sustainability Coordinator.

Eleanor.White@West-Dunbarton.gov.uk





University
of Glasgow

Centre for
Sustainable Solutions



GALLANT: WORKING WITH COMMUNITIES IN GLASGOW



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@segambell



GALLANT



- Glasgow As a Living Lab Accelerating Novel Transformation
- 5 year NERC funded project
- Transdisciplinary
- 5 core themes: Flooding, Biodiversity, Active Travel, Vacant and Derelict Land, Sustainable Energy
- Community Collaboration Workstream aims to work with communities in Glasgow, on the above 5 themes
- To effectively do this, often marginalised groups need to be included



Methodology and Participants



- Qualitative approach
 - Participatory Action Research
 - Eco-pedagogy
 - Photovoice
 - Deep-mapping
-
- 12 countries represented (China, England, India, Ireland, Italy, Kenya, Liberia, Mexico, Pakistan, Scotland, Syria, Wales)
 - Age range from 9 - 70
 - A mix of mothers, carers, students, retirees, professionals, self-employed, people seeking work and some off work due to long-term health issues.





In Action

- 16 x Participatory Photo walkshops in 3 locations (Govan, Govanhill and Anderston)
- Celebration Events
- 60 + attendees at a Next Steps event
- Over 23 hours of interviews and focus groups!
- 9 x online and analogue maps created
- Celebration events (butterfly effect)
- Making friends (knowing people and place - trust)
- Reflections on changes over time
- Reimagining hopeful futures



Next Steps

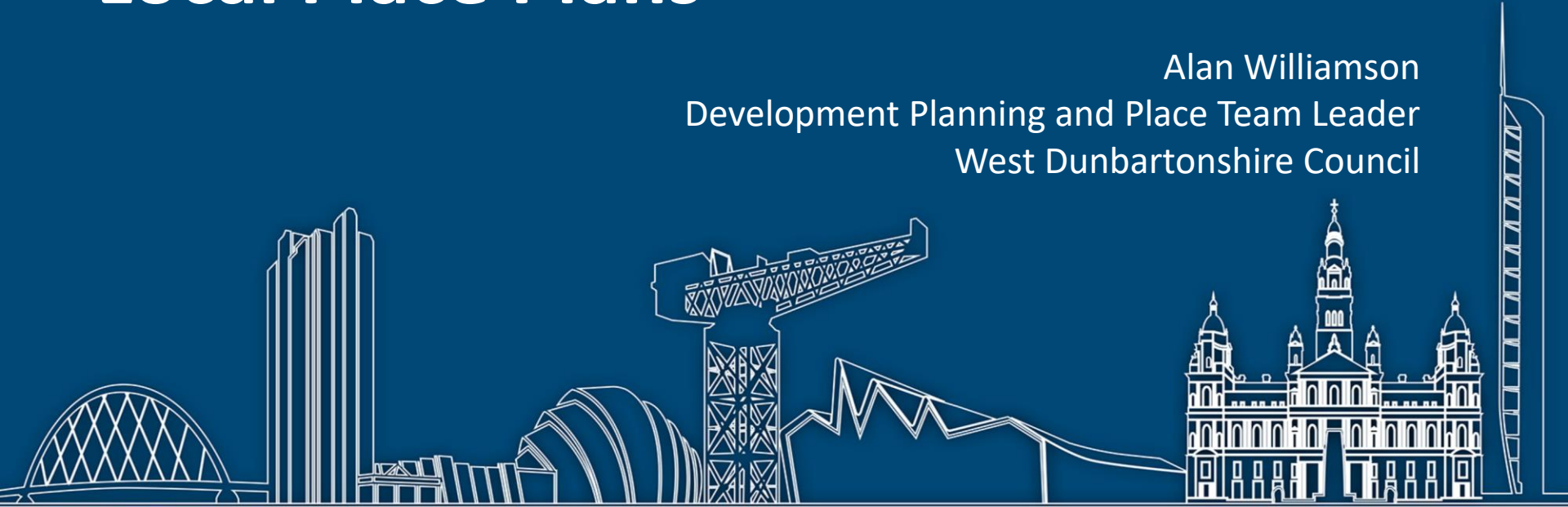


- ~10 community research projects; chosen, designed and led by communities with support from GALLANT team
- Deeper analysis into the frames of Glasgows citizens
- Continuation of the "butterfly effect" via conversations and events



Local Place Plans

Alan Williamson
Development Planning and Place Team Leader
West Dunbartonshire Council



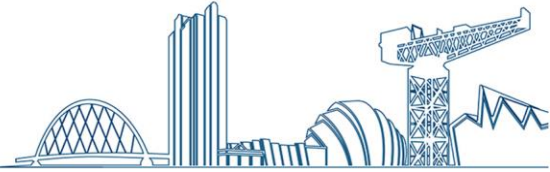
Overview



- Local Place Plans are community led plans which set out proposals for the development and use of land.
- New power, giving community-led plans statutory weight
 - Planning (Scotland) 2019 Act
 - Town and Country Planning (Local Place Plans) (Scotland) Regulations 2021



Requirements for Communities



The fundamental requirements for a Local Place Plan are that it must fulfil the following criteria. It must:

- be prepared by a Community Body;
- be a proposal as to the development or use of land;
and
- fulfil the legal requirements set out in the 1997 Act and the 2021 Regulations



Duties for the Council



- Invitation to Prepare Local Place Plans
- Validation of Local Place Plans
- Register of Local Place Plan
- Taking into account Local Place Plans when preparing the Local Development Plan



Local Place Plan content



Issues relating to climate change/resilience would be appropriate for a Local Place Plan, such as:

- Identification of areas considered to be at risk from extreme weather events
- Identification of flood risk management schemes/opportunities
- Identification of areas for tree planting or habitat creation, or protection of existing areas contributing to climate resilience



How to get involved?

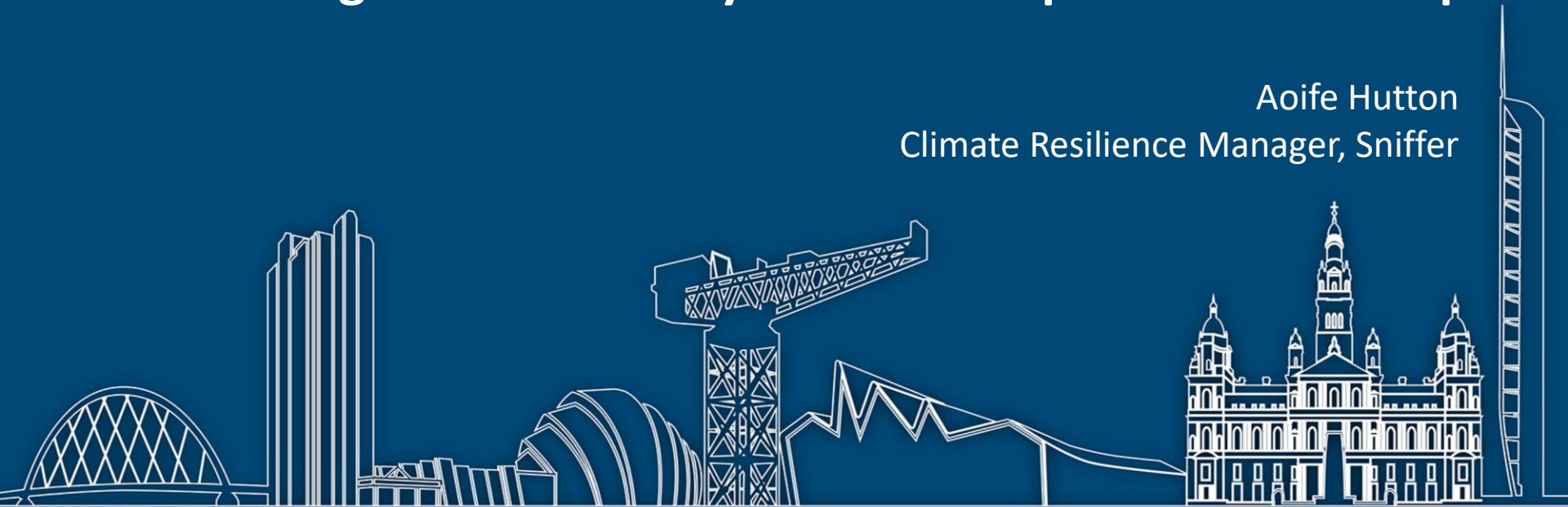


- Visit your local authority website – most should/will have Local Place Plan content.
- Contact your local planning authority – enquire if there is Local Place Plan activity in your area
- Contact your local community council to check if they are already involved in preparing Local Place Plan – or if it is aware of the opportunity.



Introducing the Community Climate Adaptation Routemap

Aoife Hutton
Climate Resilience Manager, Sniffer



Community Climate Adaptation Routemap

A practical guide for communities to adapt to climate change.

Climate Ready Clyde Workshop

Adaptation Scotland
supporting climate change resilience

 **sniffer**
knowledge brokers
for a resilient Scotland



Scottish Government
Riaghaltas na h-Alba
gov.scot

 **DEVELOPMENT TRUSTS ASSOCIATION SCOTLAND**
the community-led regeneration network

 Scottish Communities
Climate Action Network



 **NORTH HIGHLANDS & ISLANDS CLIMATE HUB**



Who was involved?

The Routemap was produced as part of our **Adaptation Scotland** programme, funded by the Scottish Government.

Adaptation Scotland supports communities, organisations and businesses to adapt and build resilience to climate change.

Partners:

- H&I Hub (Highlands and Islands Climate Hub),
- DTAS (Development Trusts Association Scotland),
- NESCAN Hub (North East Scotland Climate Action Network – Climate Hub)
- SCCAN (Scottish Communities Climate Action Network)



Aoife and Iryna with the Routemap

A route



A map



**Every
community
is different.**

**Our Community
Climate Adaptation
Routemap can help any
community or person
drive their own local
climate action.**

Our Community Climate Adaptation Routemap can help...

Local action
groups

Community
councils

Resident
groups

Community
development
trusts

Local
committees



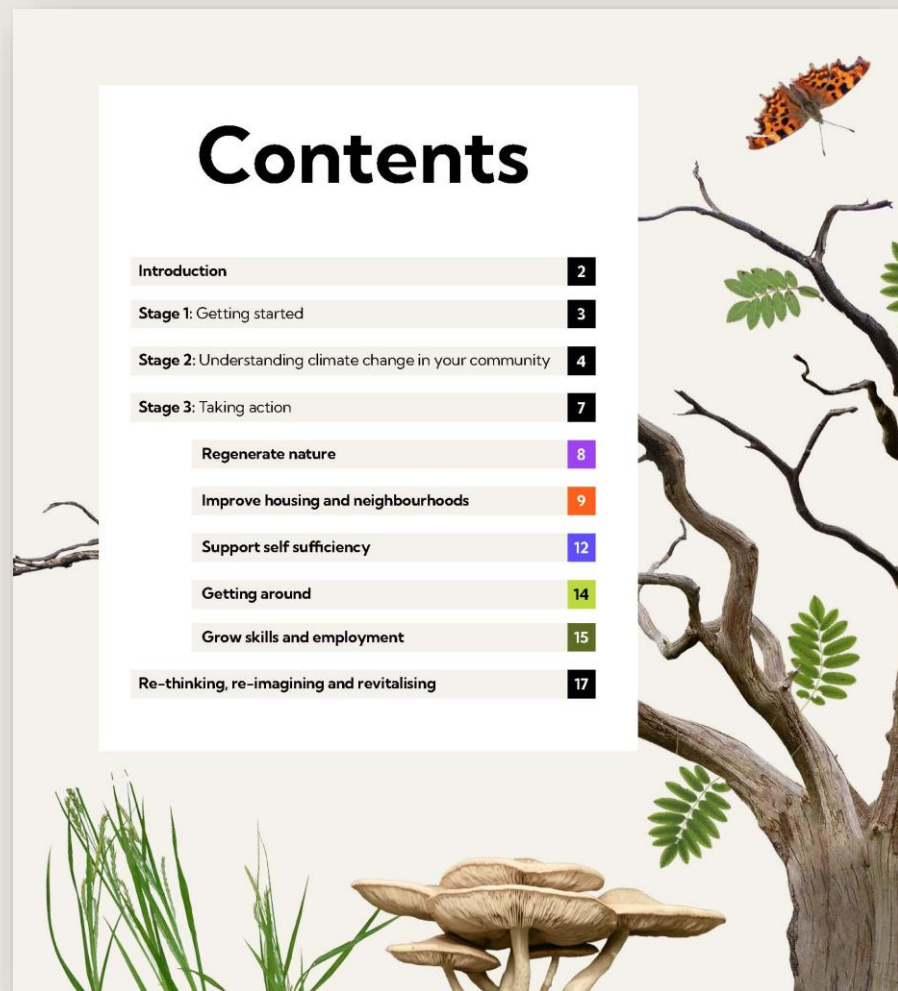
Format

- A booklet & a poster
- Digital version, printed version and at-home print available



Contents

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Stage 2: Understanding climate change in your community	4
Stage 3: Taking action	7
Regenerate nature	8
Improve housing and neighbourhoods	9
Support self sufficiency	12
Getting around	14
Grow skills and employment	15
Re-thinking, re-imagining and revitalising	17





Stage 1: Getting started

Preparing for the changes to our weather patterns and more extreme weather events – adapting to climate change – is a collaborative process. It's helpful to understand your capacity and resources first, as later on you will need to decide what actions you can take on your own and where it makes sense to work with others.

Finding out what others in your area are doing in relation to climate change is important. This will help with finding the right partners and funding, and avoid duplication of effort.

First, here are some questions to consider:

- 1 Who are you – what resources do you have as a group?
- 2 Do you have land, buildings or other assets that are/will be affected by climate change?
- 3 What are your main activities and how are these affected by climate change?
- 4 Are any of your existing activities already about adapting to the local impacts of climate change?
- 5 What is your local council already doing about climate change adaptation and resilience? You can [find contact details for your local council here](#).
- 6 Are other groups and organisations in your area already adapting to the local impacts of climate change?

↶
Back to start



Find a group

If you are not part of a community group at the moment, you could **seek one or build one** by starting or joining existing [Climate Cafés](#), finding [your climate action hub](#), local [Scottish Communities Climate Action Network \(SCCAN\) group](#), your local [Development Trust](#), or [Friends of the Earth Scotland group](#).

You may also be interested to get involved with action networks such as [Climate Camp Scotland](#).



Resourcing your actions

Many of the actions listed in this Routemap can be achieved with people-power and time, however, some specific actions will need funding to achieve.

Scottish Council for Voluntary Organisations (SCVO) [Funding Scotland](#) website is regularly updated, check here for relevant funding by searching keywords such as climate, energy, carbon, transport, active travel, cycling.

Stage 2: Understanding climate change in your community

In this section:

- ◆ What is climate change adaptation and resilience to extreme weather?
- ◆ Learn how your community and place is affected by climate change now and in the future
- ◆ Open up a discussion on which of the effects of climate change are most relevant to your place
- ◆ Do things 'with' not 'to' your community
- ◆ Create a future vision of your community
- ◆ Understand what and who needs to be protected



What is climate change adaptation and resilience to extreme weather?

Climate resilience	Climate resilience is the ability to anticipate, prepare for, and respond to hazardous events, trends, or disturbances related to climate.
Climate change adaptation	Climate change adaptation comprises all the actions and solutions that a country, a region, a city or a community can develop and implement to build more resilient societies and economies, to respond to the impacts of climate change that are already happening or are expected.

It is important to remember that even if we cut all our emissions (by doing things like generating renewable energy and making homes more energy efficient), there are already changes set in motion that we need to prepare for. Therefore both adaptation and mitigation (cutting our emissions) are needed.

Building resilience and adapting to climate change is about becoming better equipped for the present and future changes brought about by global climate change. These include not only physical changes, like higher temperatures, but also indirect changes in how people's health, economic situation, ecosystems and activities may be affected.

Adaptation means different things for different places – in some places it may be about reducing the risk of flooding, and in other places preventing wildfires or reducing impacts of heatwaves. It might mean helping people with climate anxiety, or creating opportunities for skills and work that are rooted in regeneration and revitalisation. In some places it may be about making different land use choices and in others creating a shared pool of resources.

Understanding how your place and community is and will be affected by climate change in the future is important for making good choices today.

Learn how your community and place is affected by climate change now and in the future

Over the last few decades the climate in Scotland has warmed, rainfall patterns have changed, and sea levels have risen. The weather extremes we experience are also changing with our hottest days getting hotter and our wettest days getting wetter.

While the effects of climate change vary from region to region, there are a lot of commonalities. Climate change is likely to change rainfall patterns and bring more heavy downpours, leading to more flooding across the country. This will have impacts on people's homes and public infrastructure (disruptions in electricity and gas supply and internet connection) – with potential damage to people and the natural environment. Drier spells will become drier, with droughts and heat waves becoming more frequent.

Key long-term [climate change trends for Scotland](#) are:

	Average temperatures will increase across all seasons		Weather will remain variable and may become more variable
	Typical summers will be warmer and drier		Typical winters will be milder and wetter
	Intense, heavy rainfall events will increase in both winter and summer		Sea levels will rise
			Reduced frost and snowfall

Climate impacts are experienced differently depending upon geographic, historical, social, political, economic and cultural factors. Inaction to prevent further worsening of climate change will not only worsen climate impacts and increase (climate) injustices, but also make it more difficult to adapt. In understanding climate impacts for your place, climate action and social justice need to be considered alongside each other. For example, low-income, working class, ethnic minority and migrant communities are faced with [intersectional experiences of climate vulnerability](#) and greater marginalisations, exclusions and injustices.

You can also engage with your elected representatives (councillors, MSPs and MPs) to see what they already might be doing in response to climate change in their constituencies and explore what you can do more of together. Fostering change at the political level through your representatives is important as supportive policies can make local action easier. You can find out who your local representatives are at [writetothem.com](#). [This guide](#) from Friends of the Earth Scotland can help you learn more about meeting and engaging with politicians.

Learn more about [why and how different people and social groups are sensitive to the climate impacts](#) from [Climate Just](#).

Understand how to practice [Intersectional Justice in Climate Action](#) in your community.

Check for long term flood risk in your area via [Flood Hazard and Risk Information Service](#).

Open up a discussion on which of the effects of climate change are most relevant to your place

Some issues may be more and some less relevant to your community. It is important to agree which impacts you would like to focus on. This can be something most urgent or something affecting most people or vulnerable people, something that can do a lot of damage or bring most opportunities to your community.

Here are some ways to collect information within your community:

Carbon Literacy Training can be a useful tool to help build knowledge in your community

Explore lived experience of climate impacts through a **Participatory Mapping approach** and **Climate Impact Interviews**

Introduce climate adaptation through an **Adaptation Whirlwind presentation**

Identify who needs to be involved with our **Stakeholder and Power Mapping template and workshop outline**

Use **Place Standard Tool with a Climate Lens** to understand how climate change might play out in your local area and design your future place with climate in mind

Climate Outreach has many other resources to support you engaging others in your community to understand climate change:

Encourage people in your community to talk about the weather as a starting point for discussing how to make our communities more resilient through **Are We Ready?** pack

Think more creatively about climate impacts and how to adapt by using **Adaptation Personas**

Talking climate handbook – how to have a climate change conversation

Engaging the public on climate risks and adaptation



Example

Climate Ready Ken: what happens when a Community Development Trust initiates local efforts on climate resilience

There are a lot of organisations that can support you in understanding the present and future impacts of climate change for your place and community.

- ♦ Access free resources and guidance from [Adaptation Scotland](#).
- ♦ Connect with local groups and networks and find out what is happening in your area:
 - ♦ [Your climate action hub](#)
 - ♦ [Scottish Communities Climate Action Network \(SCCAN\)](#)

Your local council may also be able to offer advice or point you to local information sources. You can find [contact details for your local council here](#).

Stage 3: Taking action

All communities are different and your group may focus on responding to climate and ecological emergency as a main focus or it may be one of many issues you're dealing with. For this reason it is important that you as a group understand your role in supporting your community to become more resilient to climate change, regardless of your main purpose. There are a number of different actions that a community group can take, depending on your resources and priorities.



In this section you will find many different actions for you and your community to take, organised into the themes below:

- ◆ [Regenerate nature](#)
- ◆ [Improve housing and neighbourhoods](#)
- ◆ [Support self sufficiency](#)
- ◆ [Getting around](#)
- ◆ [Grow skills and jobs](#)

The actions are also tagged with relevant climate hazards and how short or long term the action is:

Action characteristic	Icon	Description
Overheating		Actions you can take as a community group that will help you address local impacts of overheating in buildings. Overheating, particularly in buildings, is a growing health and wellbeing concern in the UK.
Flooding		Actions you can take as a community group that will help you address local impacts of flooding. Flooding is a regular occurrence in Scotland and climate change intensifies it.
Coastal		Actions you can take as a community group that will help you address coastal risks. Scotland's coasts are especially vulnerable to climate change, as they will be affected by changes both to the land and in the sea.
Drought		Actions you can take as a community group to conserve water and reduce water scarcity. Scotland's summers are projected to be drier, with prolonged periods of little or no rainfall, leading to drought.
Extreme weather		Actions you can take as a community group to build resilience to extreme weather events. Occurrences of extreme weather in Scotland are likely to increase with climate change.
Shorter term		These actions are the "lower hanging fruit" that you are likely to be able to do within your community group relatively easily. Usually, they require fewer resources so they can be implemented more quickly.
Longer term		These actions are more complex and may take longer to set up. They usually require wider collaboration, as well as resources such as money, time, or technical input.



Regenerate nature

Improve housing and neighbourhoods

Support self-sufficiency

Getting around

Growing skills and employment

Improving housing and neighbourhoods

People are affected by climate change differently for a number of reasons. This could be to do with the type of housing that they live in ([Climate Just](#)) and where they live ([Climate Just](#) [Climate Just](#)). There are a lot of things you as a community group can do to support individuals in your area to make their homes and neighbourhoods better and more resilient places to live in.

Improving housing and neighbourhoods actions:

- ◆ **Install property level flood protection measures**
- ◆ **Check people in your community have appropriate insurance**
- ◆ **Reduce emissions and overheating risks**
- ◆ **Reduce hard surfaces with green and blue spaces**
- ◆ **Create accessible and attractive outdoor public spaces**

- 🔍 Overheating
- 🌊 Flooding
- 🌳 Green
- 🌳 Extreme weather
- 🗣️ Orally
- 📄 Short term
- 📄 Long term

Install property level flood protection measures

Flooding can cause damage both inside and outside of buildings, make areas less safe and accessible, and also increase insurance premiums in flood risk areas.

Adaptation Building, Climate Just

Some protection measures can be carried out at a property, these are known as Property level protection measures, and include:

- Installing temporary or permanent door guards
- Fitting flood-proof air bricks
- Commercial barriers
- Using sand bags
- Installing routing for parked areas and cycle stores to protect vehicles.
- One way valves on drainage pipework to prevent overflow from the sewage network from entering properties
- Vigilant maintenance of drains and downpipes.

There are resilience measures which can be taken too, which make it easier to recover from flooding should it occur:

- Use flood resistant materials such as steel skirting boards and solid and sealed flooring rather than carpets
- Installing removable/replaceable doors on fitted cupboards
- Relocating electrical plugs and sockets above the normal height in counter top level rather than skirting board level, and raising appliances onto plinths.

Maintenance of buildings is also important, including checking windows, doors, gutters and exposed building fabric, and upgrading them to ensure housing is coping with the increased stresses and humidity, taking care that any measures do not increase overheating.

Some of these measures/actions may be available for bulk purchase in your community. Taking these actions in flood prone neighbourhoods will not only improve living conditions, but also help people save money on renovations.

Sign up to SEPA's free flood warning service: [FloodAlert](#)

See the [Flood Protection Guide](#) for practical examples

[Guide to Building Maintenance in a Changing Climate](#), from [Nature Environment Scotland](#)

Case study of [Bulk Purchase Coatings Community Flood Protection](#)

[Property water Emergency Flood Kit advice](#) from [Scottish Flood Forum](#)



Improving housing and neighbourhoods Stage 3: Taking action Page 9

Growing skills and employment

Work with your local council to gather local climate change experience

Local Authorities in Scotland are taking action to increase resilience and adapt to the impacts of climate change. This work should include understanding how climate change affects their region. At the moment most of this information is collected from national organisations, like [MetOffice](#), [SEPA](#), [NatureScot](#), etc. However local lived experiences of climate change are equally as valid and essential in understanding and responding to climate change at the regional level.

There are different approaches to collecting local climate information, using [Place Standard Tool with a Climate Lens](#) is a current [community climate project](#) (online survey) and interviews to name a few. You can work with your council to see if they could run (or fund) one of these. One will both allow you to be better prepared for climate change impacts and simultaneously help people gain new work skills in mapping, surveying, reporting, etc. This local information, research and advice, then training, etc. This would also help local local knowledge and lived experience, and help your place be better prepared for climate impacts, involving people in your community in sharing and recording local knowledge and lived experience can also help develop new skills such as digital mapping, data reporting, research and analysis.



Growing skills and employment actions:

- ◆ Work with your local council to gather local climate change experience
- ◆ Build skills for current and future green jobs
- ◆ Set up, run and grow community-led enterprises

- 🔍 Overheating
- 🌊 Flooding
- 🌳 Green
- 🌳 Extreme weather
- 🗣️ Orally
- 📄 Short term
- 📄 Long term

Growing skills and jobs Stage 3: Taking action Page 15

Regenerate Nature

Regenerating, taking care of and maintaining healthy natural environments is an important climate adaptation action. Climate change affects the delicate balance of Scotland's ecosystems and causes shifts in Scotland's habitats and wildlife, adding to existing pressures. Some distinctive Scottish species may struggle and could be lost, invasive non-native species may thrive, while a degraded environment may not be able to sustain productive land or water supply.

Restoring natural ecosystems is also important as they can help protect us from, flooding, rising sea levels and storms.

Read more about climate impacts on nature:

- [15 Consequences of Climate Change for Scotland](#)
- [Climate change impacts for species, habitats and landscapes in Scotland](#)

Regenerate nature actions:

- ◆ **Protect and restore gardens and community green spaces**
- ◆ **Grow trees and create new woodlands**
- ◆ **Work with local landowners to improve the way land is managed**



Protect and restore gardens and community green spaces



There are lots of practical actions you can take to help improve biodiversity, adapt to climate impacts (such as more rainfall), and also create more pleasant community spaces. Some examples of actions that can be carried out in individual gardens or on shared land or community spaces include creating raingardens, growing wildflower areas and creating habitats for native species.

Renaturalising our outdoor spaces can reduce flood risk and also supports biodiversity, improves health and wellbeing and can capture carbon from the atmosphere. Ensuring that gardens contain natural features such as trees, shrub, grass, plants and ponds can dramatically reduce surface water flood risk for the homes and neighbourhoods.

[Create a wildflower meadow](#)
(The Conservation Volunteers)

[Create a wildlife pond](#) (Froglife)

[Create homes for wildlife in your garden](#) (Scottish Wildlife Trust)

[Nature on your doorstep](#) (RSPB)

Work with local landowners to improve the way land is managed



Even if your community group does not own the land in your area, there are still ways you can influence how land is managed and taken care of, so that it helps us adapt to climate change and regenerate nature. You can work with your landowners (e.g. your council, housing associations, local farms), to encourage them to make improvements such as: introducing more trees to the landscape through hedgerows and woodlands, connecting up wildlife habitats, and taking better care of the soil.

[Create and maintain wetlands](#) (WWT)

[Conserve and restore peatlands](#)

Introduce [soil mulching](#) to reduce soil erosion

Design and maintain [multifunctional green spaces](#)

Where to find support?

- Ask [NFUS](#) and [Farming for a Better Climate](#) for support on how to engage your local farmers on climate change adaptation.
- Get advice from [Community Land Scotland](#) or [DTAS Community Ownership Support Service \(COSS\)](#) on working with landowners in your area and explore your options for buying out land or buildings or other assets as a community.

Owning land as a community might help you address local challenges including climate related ones.

- Find out who owns land or properties in your area via [Registers of Scotland](#) or [Who Owns Scotland](#) project.
- Get advice from [Environmental Rights Centre for Scotland](#) on environmental and related planning law

Grow trees and create new woodlands



Growing the right trees in the right place in your community can help to reduce flooding by capturing rainwater, provide shade on hot days, and keep places cool, as well as storing carbon and providing homes for wildlife. You could encourage people to plant trees in their gardens, create a community orchard, work with your local authority to plant more street trees in towns and cities, or develop a community woodland.

[Create a community woodland](#)
(Community Woodlands Assoc)

[Trees for schools and communities](#) (Woodland Trust)

[Community orchard advice](#)
(The Orchard Project)

[Tree planting advice](#)
(Woodland Trust)



Re-thinking, re-imagining and revitalising our places and communities

There's no one "next step" that would suit all – please use this Routemap in ways that make sense for your community, remix it, make different paths through it, use it to set off on your own path. There are others across Scotland working on climate and social issues and there are many people and organisations who can support you, remember you're not doing this alone. You can use the questions on the right to open up conversations about your local action.



Questions to stay with:

- 1 How can we carry out projects that matter in our community in a way that also addresses social and climate justice? What does it mean for our community?
- 2 How can we create space for action that brings both the need for urgent changes and also creates space for building trust and connections in our community?
- 3 What's the smallest, most doable thing we can do to make our community a better place for all creatures, human and not?
- 4 How can we address immediate needs and practical questions while also focusing on longer-term, strategic outcomes?
- 5 How can we connect our organising with others, like migrant action, land right campaigns and others?
- 6 How can we work with and not on behalf of the most vulnerable in our area?
- 7 How can we support communities in the Global South in building their resilience to climate change?



"For those who haven't yet experienced climate collapse in our own bodies, a history not yet written into us, the feeling it arrives in the shape of shadows, an atmospheric wrongness, and harrowing predictions; these are stories that change our own. The moment we begin to truly engage with climate science, our narratives of self and future are whirled out of orbit."

Jessica Gaitán Johannesson,
[The Nerves and Their Endings: essays on crisis and response](#)

Get in touch with us

If you have questions about the Routemap, please get in touch with the Adaptation Scotland team via adaptationscotland@sniffer.org.uk or through Twitter [@AdaptationScot](https://twitter.com/AdaptationScot)

"[This] is not just about locating fault lines of climate change, or imagining those most impacted by it, but is instead [...] about courageously enacting the principles of a love ethic which is based on showing care, respect, knowledges, integrity, and holding the will to cooperate."

Susannah Haslam in
[Justice/Love for Sunshine Doesn't Need a Pipeline](#)



WORKSHOP: Using the Routemap to plan local resilience action

1. Have you experienced climate impacts in your community already?
2. Which of the actions listed in your Routemap theme could help deal with the impacts you have faced and/or protect you against these in the future?
3. How can you support communities to take these actions too?



20 min in groups,
then switch tables to
a new theme for the
next 20 min





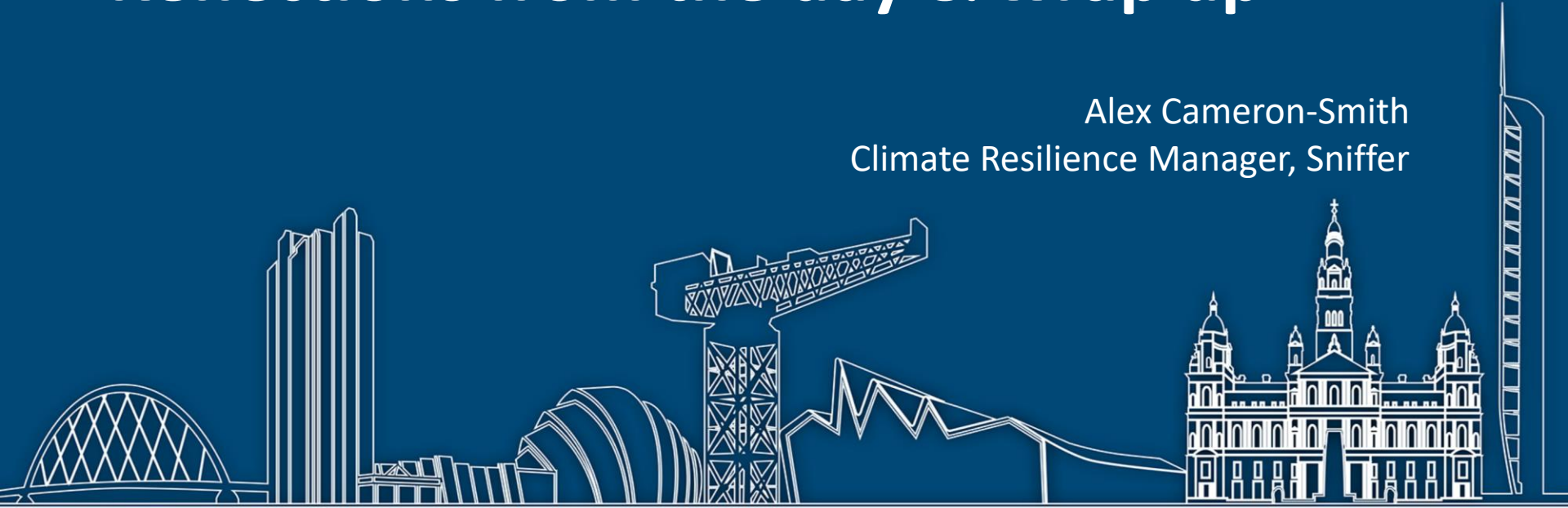
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aoife@sniffer.org.uk



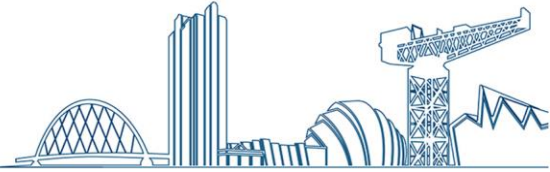
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Reflections from the day & wrap up

Alex Cameron-Smith
Climate Resilience Manager, Sniffer



Information, tools and resources



- Climate Ready Clyde website:
<https://climatereadyclyde.org.uk/>
- Adaptation Scotland Communities Hub:
<https://www.adaptationscotland.org.uk/how-adapt/your-sector/communities>
- Email us: climatereadyclyde@sniffer.org.uk

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Thank you for coming!

