Community **Climate Adaptation**

Set up, run and grow community-led enterprises Setting up initiatives such as community bakeries, tool libraries and zero waste shops can help create jobs and ensure local sufficiency.

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Develop shared transport solutions

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Reduce your community's carbon emissions and create an affordable, responsive option for local travel needs with shared travel options.

Routemap

A practical guide for communities to adapt to climate change.

This Routemap will provide you with information about practical steps your community can take to become more resilient in the face of climate change. The actions shown are arranged into 5 themes:

- Regenerate nature
- Improve housing and neighbourhoods
- Support self-sufficiency
- Getting around
- Growing skills and employment

Tip: If you don't know where to start, try answering the questions in the roots.

Build skills for current and future green jobs

Nurture skills for future green jobs such as in land management conservation, renewables and energy efficiency as these sectors continue to grow. 曲

Work with your local council to gather local climate change experience

Local lived experiences of climate change can provide essential learning for future resilience.

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Create accessible, cool and attractive outdoor public spaces

Good quality public spaces help contribute to increasing a sense of community and help your area to adapt to the impacts of climate change.

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Replace hard surfacing with green and blue spaces

Increase permeable surfaces in flood risk areas and introduce greenery to help cope with flooding.

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Reduce dampness and overheating risks

Work with people in your community to reduce dampness and overheating risks in preparation for wetter winters and hotter summers.

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Check people in your community have appropriate insurance

If you live in a high flood risk area make sure you have building and contents insurance that covers any flood damage

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Install property level flood protection measures

Encourage everyone in the community to install flood protection at home, with measures such as door quards, drain maintenance and more.

Start by looking at the resources your group has and what you would like to do: consider what you do, what is happening in your community and how this may be affected by climate change; connect with other groups in your area. Click **here** to find out more.

Yes, but we don't know where to start

Yes, but we want to understand what climate change means for us locally

1. Learn what is climate change adaptation and resilience

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

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

4. Create a future vision of your community

5. Understand what and who needs to be protected

Click <u>here</u> to find out more.

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Work with landowners to ensure roads and paths are resilient

Work with farmers and other landowners to keep roads. paths and bike paths are clear and safe during extreme weather events.

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Set up and run an edible community garden

Whether in your household garden or together as a community, growing your own food creates resilience and climate-friendly nutrition.

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Support people to become more energy efficient and independent Find ways to save energy at home in your community and help

households to reduce emissions whilst also saving money and keeping homes warm over winter.

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Establish and run a community resilience team

To assist with local emergency planning, a community resilience team can support local people to prepare for, respond to and recover from disruptive events.

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Regenerate, maintain and create community facilities Look after schools, community

centres, places of worship and other spaces, which can both play an important part in community and provide storage space for emergency equipment.

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Obtain essential community equipment

Make sure your community has important equipment such as gritbanks and sandbags to combat extreme weather events.

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Use water efficiently

Reuse water in your house b harvesting rainwater and recycling grey water ESE ⊗ ☆ Σ

> Work with landowners to improve the way land is

and taken care of. Work with local landowners like councils,

Not sure where to start? Find out here

Protect and restore gardens

and community green spaces Improve biodiversity and create more pleasant, adaptive community spaces, with areas for raingardens, wildflowers and native wildlife habitats. ₩22 💥 🖾

Grow trees and create new woodlands

The right trees in the right place can help reduce flooding - encourage your community to plant trees at home and in shared areas.

BBB⊗¢Σ

managed There are many ways to

influence how land is managed farms and housing associations to encourage improvements.

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Are you considering how your place and community can become more resilient in the face of climate change?

Yes, we know what climate change means for us locally but don't know what to do about it

You're in the right place! The tree above details different actions to help your community to become climate ready, adapt and build resilience. As well as the **5 themes** shown in the key, there are a few different ways to read the map, depending on what you're most interested in focusing on:

Are you looking for near or long term things to do?

Are there specific climate hazards you want to address?

For specific concerns around climate hazards,

look out for these symbols:

Within each theme branch, actions have been organised by how short or long-term they are. For short term actions start close to the tree trunk. For longer term actions that require a bit more coordination and resources go further along the branches.

They are also marked by these symbols: \mathbf{X} Shorter term $\mathbf{\Xi}$ Longer term

瓫 Flooding 🛛 🛆 Extreme weather 🛛 🖾 Drought

☆ Heat

𝕂 Coastal hazards

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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



This is an interactive pdf!

If you're viewing this Routemap on a digital device, you will be able to click on both external and internal hyperlinks, marked as **bold and underlined text**.

- External hyperlinks will take you to other websites and online resources
- Where another part of the Routemap is referenced, an **internal hyperlink** will take you directly to that segment.
 - Click on the **Back to start** button in the top right corner to return to this page at any point
 - Click on the **page footers** to return to the start of a section



















Acknowledgements and interactivity



Introduction

Every community is unique and so are the impacts of the changing climate to each place. Addressing climate change may seem like a massive challenge on top of all other things you are already working on – it is complex, interconnected and it isn't always easy to know where to start.

This Community Climate Adaptation Routemap stems from the belief that it is both crucial and possible to build resilience and adapt to the changing climate whilst tackling other important issues in your community such as such as housing and neighbourhoods, getting around, and skills and employment.

Moving through this Routemap, it is important to remember:

- Climate change is complex, but there are meaningful actions every community can take to address it and flourish together in this new reality
- Climate change brings a lot of harm and loss, but we can work together to repair and regenerate our communities
- Places exist in complex entanglements with other places across the world and part of addressing climate change in the Global North is supporting and acting in solidarity with communities at the frontlines of climate change in the Global South. This also goes for complex regional, Scottish and UK-wide relations
- Climate impacts and extreme weather events can affect anyone but people and places that already experience multiple causes of vulnerability are most at risk. In the actions you take, consider those who are most affected and least able to adapt
- Climate change isn't simply a technical issue to be solved, to tackle it we need to unpack the <u>history of colonialism and</u> <u>development</u> – these might seem like abstract issues, but there are meaningful ways to address them at every scale

Who is this Routemap for?

Whatever kind of community you are, there are things you can do to build resilience and prepare for climate change and at the same time make your place healthier, safer and more comfortable to live in for human and other creatures alike.

If you are not part of a community group at the moment, you could <u>seek one or build one</u> and this Routemap could be a conversation starter.

This Routemap will provide you with the information you need to understand how climate change affects your area, both now and in the future, and point you in the direction of actions to take to deal with these impacts.

Positive adaptation actions can be made in many ways, including: creating wildlife habitats in community spaces, installing property level flood protection, setting up a community response group, gaining new "green skills", engaging with your elected representatives (councillors, MSPs and MPs) to make necessary changes at the regional or national level.

This Routemap will help you to:

Find simple and clear information on climate change adaptation and resilience

Understand and address climate change impacts within your community now and in the future

Explore what actions you can take to build resilience and adapt while addressing other important issues

Invest in your community and protect against future costs



Carry out simple climate action projects that also reduce inequalities



Learn about what funding and support is available

Introductio



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:

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

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

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.

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







Stage 2: Understanding climate change in your community

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
- Typical summers will be warmer and drier
- Intense, heavy rainfall events will increase in both winter and summer
- Weather will remain variable and may become more variable
- Typical winters will be milder and wetter
- 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.

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:

iteracy Training can ul tool to help build ge in your community	E> cli <u>Pa</u>
who needs to be	ar
with our <u>Stakeholder</u> er Mapping template (shop outline	Us <u>Cl</u>
je people in your ity to talk about the	yc fu
as a starting point for g how to make our ities more resilient Are We Ready? pack	Th clii by

Carbon |

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Identify

involved

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through

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 <u>Adaptation Scotland</u>.

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.



xplore lived experience of mate impacts through a articipatory Mapping approach

nd <u>Climate Impact Interviews</u>

e Place Standard Tool with a mate Lens to understand how mate change might play out in our local area and design your iture place with climate in mind

nink more creatively about mate impacts and how to adapt y using **Adaptation Personas**

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

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

<u> Talking climate handbook –</u> how to have a climate change conversation

Engaging the public on climate risks and adaptation

• 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)

Example

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



Stage 2: Understanding climate change in your community

Do things 'with' not 'to' your community

It is important to organise these conversations and actions with (rather than for or to) those likely to be most impacted and currently not included in decision-making, valuing everyone's lived experience of climate impacts. This is ultimately about building understanding where power and privilege lies in your community, who makes decisions (and who doesn't) and creating spaces with others to distribute power more equally and make sure everyone's voices are truly heard.



Watch MEND's Climate Conversations webinar to learn what Black and Minority Ethnic (BAME) and Muslim organisations are doing around the country to tackle climate change and engage the community in the climate journey and how to work together

Create a future vision of your community

You may already be working towards community plans, visions, ambitions for how you would like your place to be in 5, 10, or even 20 years' time. This is an important starting point to the conversation about climate resilience and adaptation. It's not only about making changes to avoid flooding or prevent wildfires, but about thinking what a flourishing local place can look, feel, smell and sound like now and in the future. Who gets to decide on this vision? Who pays for it? Who benefits from it? How will we make it happen? All these are important to consider when imagining the future of your place - in a future where climate and weather are different from what we know today.

There are many tools to help you create a positive vision for your community:

1000 Better Stories A Scottish Communities Climate Action Network Podcast

Local Place Plans

Scottish Town <u>Centre Action Plans</u>

Carbon Conscious Places (A&DS)

Understand who and what needs to be protected

You can make a simple table with four columns:

In the first column, put things you know are already affected by conditions like flood, heat, droughts, erosion. These things don't have to be restricted to physical aspects such as buildings.. Climate change affects broader things, like our wellbeing, economic opportunities, and mobility. Think about:

- What are the major projects or investments that are going on in your area (that you are involved with / leading or affected by)?
- Can you influence these projects and investments to be climate ready?

In the **second column** add what is the main risk facing each. For example: two houses at the end of the road - always flood and their elderly residents struggle with the consequences. To prompt your thinking you can use 15 Key Consequences of Climate Change for Scotland infographics, and see the examples in the table below.

In the third column, write if you are already doing something to address the risk, or whether something more is needed in order for this to happen.

In the fourth column mark what you someone else.

Things affected now (such as	Main risk		ls this risk already being addressed	it as a group or do	
places, assets, relationships)	Now	In the future	or is more action needed?	you need to work with others?	
Two houses at the end of the road	Often prone to flooding. Elderly residents struggle with the consequences	Flooding could become worse. Residents could become increasingly less mobile	Neighbours help out but more could be done to stop it happening in the first place	Contact council about sandbags Create a message group to alert neighbours if help is needed	
Struggle to grow food locally	Soil quality changes and crop failures	More erosion expected	Looking at different crops to grow	Potential to learn from others who are dealing with similar issues	



Example

Adaptation in the Outer Hebrides: A Community Planning Partnership-led response

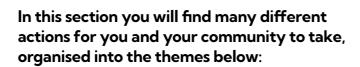
ou can address as a group and	I where you need to work with

Check if your community is at risk of flooding via Flood Hazard and Risk Information Service.

Stage 2: Understanding climate change in your community

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.



- Regenerate nature
- Improve housing and neighbourhoods
- Support self sufficiency
- Getting around
- Growing skills and employment





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

Description

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.

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.

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.

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.

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.

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.

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.



Back to

start

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:

- <u>15 Consequences of Climate Change for Scotland</u>
- 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

🌣 Overheating	松光	Drought
🗱 Flooding	X	Short term
🖍 Coastal	Ξţ	Long term
🛕 Extreme weather		

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

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Where to find support?

- Ask <u>NFUS</u> and <u>Farming for a Better Climate</u> 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.
- challenges including climate related ones.
- of Scotland or Who Owns Scotland project.
- environmental and related planning law



Grow trees and create new woodlands



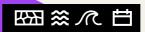
Growing the right trees in the right place in your community can help to reduce flooding by capturing rainwater, provide shade on hot days, and keep places cool, as well as storing carbon and providing homes for wildlife. You could encourage people to plant trees in their gardens, create a community 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)



Design and maintain multifunctional green spaces

Owning land as a community might help you address local

Find out who owns land or properties in your area via <u>Registers</u>

Get advice from Environmental Rights Centre for Scotland on

Stage 3: Taking action

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 Ready Places**). 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 dampness and overheating risks**

🖾 Drought

X Short term

💾 Long term

☆ Overheating

▲ Extreme weather

🖍 Coastal

- Replace hard surfacing with green and blue spaces
- Create accessible cool and attractive outdoor public spaces

Install property level flood protection measures

Flooding can cause damage both inside and outside of buildings, make slopes and land more unstable, and also increase insurance premiums in flood risk areas - Adapting Buildings, Climate Just.

Some protection measures can be	There are resilience	
carried out at a property, these	which can be taken	
are known as 'Property level	make it easier to re	
protection measures', and include:	flooding should	
 Installing (temporary or	 Use flood resistant m	
permanent) door guards	as steel skirting board	

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

- and raised flooring rather than carpets
- Installing removable/replaceable doors on fitted cupboards
- Relocating electrical plugs and sockets above the normal height (to counter top level rather than skirting board level), and raising appliances onto plinths

One-way valves on drainage pipework

Sandbags



e measures n too, which ecover from it occur;

naterials such rds and solid

Maintenance of buildings is also important, including checking windows, doors, guttering and exposed building fabric, and upgrading them to ensure housing is coping with the increased dampness 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, Floodline

See this **Flood Protection Guide** for practical examples

Guide to Building Maintenance in a Changing Climate from Historic Environment Scotland

Case study of **Bulk Purchase Creating Community Flood Protection**

> Preparing your Emergency Flood Kit advice from Scottish Flood Forum



Door guards

Improving housing and neighbourhoods

Check people in your community have appropriate insurance

If you live in a high flood risk area, you can check if your neighbourhood is at risk of flooding using SEPA's <u>Flood Hazard and Risk</u> <u>Information Service</u>.

For owned properties: it's important that you have buildings and contents insurance that covers flood damage.

For rented properties: It's important to have contents insurance covering flood and storm damage. It's the landlord's responsibility to have appropriate buildings insurance.

Check <u>Citizens Advice Scotland's</u> page if you've been flooded but don't have insurance

> Find out more about finding affordable insurance from Scottish Flood Forum

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The changing climate will make some types of housing an increasingly unhealthy environment for residents. Older homes with poor insulation or buildings that are poorly maintained or in need of repairs may be especially at risk from wetter weather and rising temperatures.

Wetter winters can bring about an increased chance of dampness in buildings (allowing mould and fungi to spread) which can have serious negative impacts on respiratory health. The elderly, children, asthmatics, and those with weaker immune systems are particularly vulnerable. It is vitally important to maintain gutters, downpipes, drains etc. to clear them of debris and to make repairs so that rainwater is not able to penetrate the building fabric and cause damp. Encourage people in your community to take measures such as: installing rain screen cladding, double glazing and other energy efficiency measures, using DIY air quality monitors, etc..

It's important to understand the difference between draughts and ventilation. Homes, especially homes where there is an open fire or woodburner need to be well ventilated. Many older buildings (especially solid stone properties) were designed to be well ventilated, and some modern interventions can cause negative consequences which lead to poor air quality and the build-up of damp. Adapting older buildings and historic properties is more complex and expert guidance can be found <u>here</u>.

When undertaking any draught proofing or insulation, make sure that the property still has adequate ventilation. With warmer weather brought about by climate change both ventilation and insulation are becoming increasingly important (<u>Adapting Buildings.</u> <u>Climate Just</u>).

Encourage people in your community to understand the energy performance of their homes and buildings: you can get an idea of your property's current energy efficiency from its Energy Performance Certificate (EPC). The EPC will show your home's energy efficiency rating, from A (very energy efficient) to G (very inefficient), and give you an idea of its potential for improvement (<u>Kirkcaldy Climate Friendly</u> <u>Living Guide</u>). Energy efficient homes contribute to cost savings through lower cost heating.



Reduce dampness and overheating risks





Free and low-cost energy-saving actions to bring down bills, improve energy security and help the planet

Improving housing and neighbourhoods

Stage 3: Taking action

Example

See how the Stalled Spaces Scotland project helped Communities transform vacant and derelict land

> Good quality public spaces can help contribute both to increasing a sense of community, while also helping your area adapt to the impacts of climate change. Creating and maintaining & a public green space can help reduce the risk of flooding (by having more permeable surfaces) and provide a shaded cool outdoor space for socialising during summer heat. You can bring vacant and derelict land sites in your area back into use or repurpose existing sites as part of this.

Check Greenspace Scotland's resources on creating and taking care of the outdoor public spaces

your community

Replace hard surfacing with green and blue spaces

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'Urban creep' is a significant contributor to surface water flooding as land is paved over or covered with impermeable materials such as roads or driveways meaning that rainfall has less chance to soak away into the soil.

Involve your Council to increase permeable surfaces in flood risk areas and introduce more greenery to help cope with flooding, such as:

- Install Sustainable Drainage Systems, that mimic nature to reduce the risk of flooding from rainfall. These could include rain gardens, ponds, wetlands and swales
- Develop reservoirs, aqueducts and pipelines to capture rainfall
- Create more permeable paving on your street
- Set up green roofs
- Initiate a community-led 'alternative reservoir' system made up of domestic raintanks, rain gardens and swales
- Remove unnecessary hard surfacing in gardens and community spaces through depaving

Webinar: The feasibility of domestic raintanks contributing to urban flood resilience

Community raingardens from 10,000 Raingardens for Scotland project

> Grey to green: a guide to community-led depaving projects

Climate Change Adaptation by **Design** for practical examples



Create accessible, cool and attractive outdoor public spaces



You can also create green roofs and walls on community buildings that will help to keep places cool and absorb more rainwater.

Transforming vacant and derelict land resources from Scotland's Land Commission

Use the **<u>Stalled Spaces Toolkit</u>** to learn about how to create and maintain public spaces in

Improving housing and neighbourhoods

Stage 3: Taking action



Support self sufficiency

As a community group you can work on increasing your community's self-sufficiency, resilience and sense of community to be better prepared for climate change and be more quick and effective with your responses.

Support self sufficiency actions:

- Use water efficiently
- Establish and run a community resilience team
- Obtain essential community equipment
- Set up and run an edible community garden
- Regenerate, maintain and create community facilities
- Support people to become more energy efficient and independent

¢	Overheating	松光	Drought
≋	Flooding	X	Short term
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\wedge	Extreme weather		



Use water efficiently



Using water efficiently will help households in your community deal with droughts. There are two methods for reusing water inside your house: rainwater harvesting and grey water recycling. Rainwater harvesting is collecting all of the water from your

> roof and grey water recycling is reusing water from your kitchen sink, shower and basin. Water collected from both methods can then be used to flush your toilet, water your garden or wash your bike.

The kind of actions your group may do will depend on the risks in your community, the resources that your group has and the needs of your local community. For example, you could be: sharing risk information and alerts to homeowners; visiting people in your neighbourhood to ensure they are supported before the severe weather occurs; clearing snow or helping with flood defences; and helping the community to recover and become more resilient.

Connect with the Emergency Resilience team in your local council and create a plan of action. There may also be existing groups in your area either working on community resilience in emergencies or interested in linking up to better support the local area. Check with your local <u>Community Council</u>, and any other community networking spaces for potential partners.

Obtain essential community equipment ≋ ∩ ▲ X

Practical resources such as grit banks and sandbags will be essential to communities impacted by extreme weather events. Obtain a store of these items or work with your local council to ensure it is known where items are available if needed. In some areas, working with local farmers to pool equipment may also be useful. Ask your local council to set up grants (or check if there are any available already) as part of their climate change/resilience work, to help fund vital community equipment.



Establish and run a community resilience team $\cong \mathbb{A} \land \mathbb{X}$

As a community group you can establish a community resilience team to support local people to prepare for, respond to, and recover from disruptive events arising from the immediate impacts of climate change such as severe weather, wild fires, utilities failures, and human and animal viruses.

Find existing Development Trust in your area via **Development Trusts Map** from DTAS

For more information <u>get involved in</u> <u>Community Resilience at Ready Scotland</u>

> Find your Community Council via Community Council Finder

> > Support self sufficiency

Stage 3: Taking action

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Regenerate, maintain and create community facilities

Community facilities like schools, community centres, places of worship or gardens play important roles in community life and contribute to community resilience. Ensuring these buildings and spaces are resilient to the impacts of climate change and able to continue operating in a changing climate will benefit the community.

These places and spaces may also be ideal locations for storing community emergency equipment, gathering space for emergencies and a go-to place for any materials needed for flooding, storms or heatwaves.

In some cases there may be a need to redevelop or create new community hub facilities that can meet multiple needs, including acting as a space to support local climate resilience

> Free support available from <u>Community</u> <u>Ownership Support Service</u>

See example: Building climate resilient, low carbon schools with Colmonell Primary School

> See example: <u>Garrison House</u> <u>Community Hub</u> in Millport

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Making your community more energy efficient and helping people who are struggling with their bills is an important aspect of climate action. Find easy ways to <u>save energy at home</u> in your community, help households <u>reduce their emissions whilst saving money</u>, and <u>make homes warmer</u>.

If you want to focus on becoming more energy independent as a community, this can protect your community from price fluctuations and build community resilience to supply issues. Generating energy locally through renewable sources can be a way to lower the cost of living and be better prepared for infrastructure disruptions, with localised systems being more resilient to global disruptions and more responsive to local place needs. There are many examples of renewable energy sources: solar photovoltaic (solar PV), solar water heating (solar thermal), heat pumps, small scale wind turbines, biomass heating systems, etc.. (Greening Your Home Guide). However while creating these in your community consider how it will affect land use: are you installing wind turbines at the expense of space for growing food locally?

Get advice from <u>Community Energy Scotland</u> and <u>Local Energy Scotland</u> on local and community led energy projects

Learn more about <u>Glasgow Community Energy</u>, a community-owned renewable energy co-operative

Set up and run an edible community garden



Growing your own food as a household or as a community is a great way to both ensure good local and climate-friendly nutrition as well as help your community and individuals adapt to the impacts of climate change.

Climate change means there will be differences in how seasons feel in Scotland and it will have an effect on what can be grown when: there will be changes in the harvesting season, you might be able to grow things that previously you couldn't in the region due to changing weather conditions, the weather conditions might be more hot/dry/wet compared to what they used to be, leading to crop failure and making it difficult to continue growing the same produce. Your community garden can also work like a rain garden, helping to absorb water and reduce flood risk and also provide shade to spend time during summer heat.

Talk to **Nourish Scotland** to see how you can make sure everyone in your community has sufficient quantities of affordable, nutritious food produced and distributed with care for the soil, climate and all the living world.

Talk to Landworkers Alliance Scotland about how to create a better food and land-use system locally

Check **Farming for a Better Climate** guides for climate change adaptation & food growing guides

Get advice on <u>Get Growing Scotland</u> on starting or improve a growing site for your community







Support people to become more energy efficient and independent

Get advice from <u>Home Energy Scotland</u> on dealing with the cost of living crisis, reducing your bills and improving energy efficiency in your community

Support self sufficiency

Stage 3: Taking action

Getting around

Climate change will have effects on our ways of getting around. This includes everything from flood damage to roads, rail networks and bike paths, to heat-related risks of moving around during heat waves.

A future with more active travel, such as walking and wheeling, not only helps cut greenhouse gas emissions from petrol and diesel vehicles, but also provides an opportunity to build in more green spaces and fewer roads designed around private car travel. More green spaces will help us adapt to a changing climate, reducing the 'urban heat island effect' often experienced in areas of concentrated buildings and road surfaces. More green spaces also help reduce flood risk, by allowing rainfall to be absorbed rather than building up on impermeable surfaces like roads.

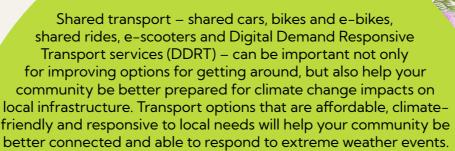
See guidance on sustainable travel.

Getting around actions:

- **Develop shared transport solutions**
- Work with landowners to ensure roads and paths are resilient

☆	Overheating	# }}	Drought
≋	Flooding	X	Short term
R	Coastal	Π	Long term
٨	Extreme weather		

Develop shared transport solutions



Get advice and support about improving cycling and walking in your community from:

- <u>Sustrans Scotland</u> · Cycling Friendly Programmes, Paths for All
 - Cycling Scotland

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Get advice from **Collaborative Mobility UK** (CoMoUK) on shared transport and sustainable transport more broadly

> See a map of **<u>existing</u>** community transport projects across Scotland



Work with landowners to ensure roads and paths are resilient



In many areas in Scotland, farmers are informally involved in helping clear roads after the storms and help people get around during extreme weather events. You can work on building relationships with your local landowners to ensure you coordinate your actions in response to an extreme weather/climate event. You could also think about jointly purchasing equipment as a community group that will help cope with flooding or storms.

There are a lot of things you can check with your council about how prepared your local travel infrastructure is to climate change. Some councils in Scotland have done climate risk assessments, know the situation and may be already taking some action. For others this may be a completely new area. If you know there's a place on the walkway, road or bike lane that always gets flooded (and prevents people from being able to go places), make sure there's a strategy to deal with it, as with increasing risk of flooding it's likely the places that are already experiencing flooding will experience it more in the future.

> Ask ClimateXChange about their work on Future Mobility **Systems** and what can be relevant for your community

> > Learn more about **adaptation**, road and transport

Stage 3: Taking action

Growing skills and employment

As a community group you can work on creating more opportunities for good, local jobs that will be important both for Just Transition (away from fossil fuels) and ensuring people have the right skills to work in the changing climate. As society transitions towards a greener future, the skills needed will be different and there will be new opportunities for work in different sectors, for example renewable energy, sustainable farming, bike and electric vehicle mechanics, and foresters. These are sometimes referred to as "green jobs".

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

- X Short term
- 🖍 Coastal
- ▲ Extreme weather
- 💾 Long term

B Drought

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**, or running community climate impacts mapping sessions and interviews to name a few. You can work with your council to see if they could set up funding for this work that will both allow you to be better prepared for climate change impacts and simultaneously help people gain new work skills in mapping, surveying, working with local information, research and analysis, interviewing, etc.. This would also help feed 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, storytelling, research and analysis.





Growing skills and employment

Stage 3: Taking action

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Adapting to the impacts of climate change isn't all about hard measures. There are a lot of important projects that can help with it, while dealing with other important issues - you may well be doing some of these without realising they are contributing to adaptation. Take a look at the projects you are already running – might these be in any way helping your community to respond to the impacts of climate change?

enterprises can be a good way to create good local jobs, help people get valuable work skills and ensure more food is produced locally. With climate change bringing more disruptions to international supply chains, localising food production and investing in local supply chain resilience is an important step towards a more adapted and flourishing place. Other examples include setting up & running repair cafés, tool libraries or zero waste shops.

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Build skills for current and future green jobs

With Scotland's targets to reduce emissions, there is a growing demand for lower carbon heating systems, energy efficiency measures, renewable energy and electric vehicles. In turn, new skills in installing and maintaining these systems will be in high demand. Check if your local college is offering training and involve your community - some of this work could be carried out by community enterprises and help create local work opportunities. Other opportunities for "green skills" are also expected to grow, such as work relating to land management, conservation, forestry, habitat creation and restoration.

Check out some examples below:

"Is this just about me losing my job?" Opportunities and challenges of building support for a just transition from **Climate Outreach**

NatureScot Nature based jobs and skills pages are a good source of information about land-based skills and work

> Green Jobs Workforce Academy for training opportunities

Back to

Set up, run and grow community led enterprises



For example, setting up a **community bakery** or other community-led

See examples of:

unity tool library	<u>Repair cafés</u>
mmunity Bakery	Zero waste shop



Stage 3: Taking action

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:

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? 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? What's the smallest, most doable thing we can do to make our community a better place for all creatures, human and not? How can we address immediate needs and practical questions while also focusing on longer-term, strategic outcomes? How can we connect our organising with others, like migrant action, land right campaigns and others? How can we work with and not on behalf of the most vulnerable in our area? 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

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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

"[This] is not just about locating fault lines of climate change, or imaging 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

> > Re-thinking, re-imagining and revitalising