



A&  
DS

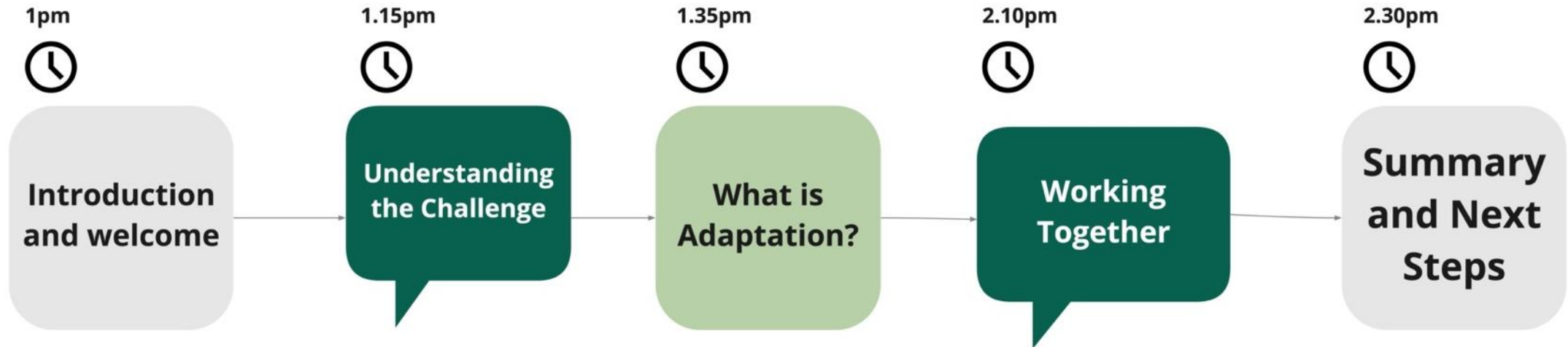
# Climate Risk Adaptation Workshop 1

Sample Presentation

Follow our commentary on  
the pages using the  
orange speech bubbles

# Schedule

It is always good to set out the programme at the start of the workshop



# Climate Action Towns in a nutshell

Give the project some context



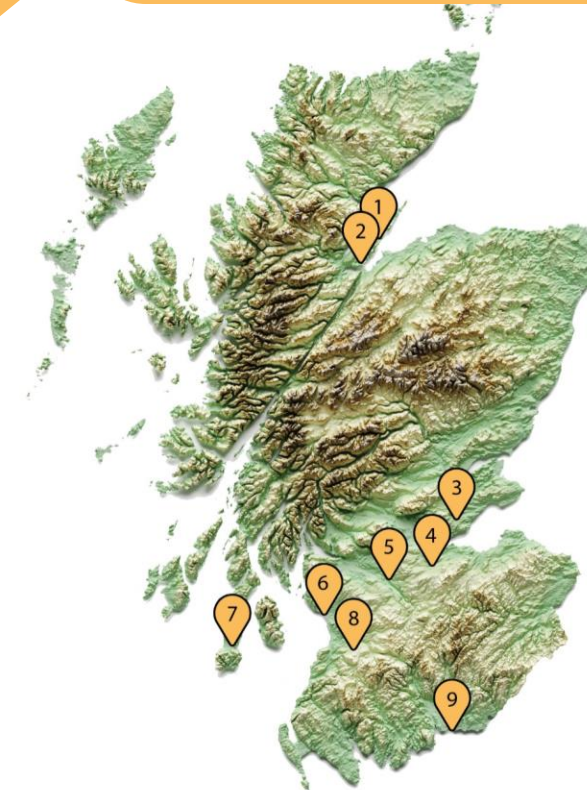
“ To support place-based climate action in a network of seven small Scottish towns, working collaboratively with local communities. From this, Architecture and Design Scotland will develop learning that can be applied in places across Scotland ”

# Climate Action Towns in a nutshell

We are working collaboratively with local people and organisations in seven small towns across Scotland to:

- Bring small towns into the climate adaptation conversation
- Challenge and explore what types of place-based action can be taken in small towns
- Explore opportunities to support communities to deliver real change on the ground in areas with historically limited action on climate change
- Use this work to outline learning for inclusive climate action at a town scale that can be applied in places across Scotland and beyond

Expand on the context



## The Climate Action Towns

1. Invergordon
2. Alness
3. Benarty
4. Blackburn
5. Holytown
6. Stevenston
7. Campbeltown
8. Drongan, Rankinston and Stair
9. Annan

# Sample survey

The results of a quick community survey at a well-attended local event provided opportunity to understand community attitudes and priorities and how these might align with existing and future climate actions.

If you have some data that backs up an understanding of your project, it is good to present it with visuals.



# Climate risks adaptation workshop

One area of the collated observations from previous workshops stood out as having no correlated actions or ideas, only being barriers.

This workshop will enable us to look at, discuss, and understand climate adaptation work.

Theme	Existing Initiatives that can be built on	Quick Wins/Local Implementation	medium term Actions with LI support	Long term Actions strategic support/ partnership delivery	Linked Barriers
Monitoring and Reporting	7	3	4	2	2
Interdisciplinary sharing and create	2	1	2	2	1
Energy	1		4	1	1
Health and wellbeing issues	3		2	1	3
Learning around knowledge equity	2		4	2	4
Learning around by public transport			2		3
Community growing	2	2	4		
Community, organisational (communication) (resources and participation)	5	1	2	1	2
Small business	2			1	
			1	2	
					5

Collating previous data around themes allows the participants to understand community concerns and needs around climate change.



Understanding the challenge

# Who is in the room?

**Name**

**Organisation**

**What interests  
you about this  
workshop?**

To begin the workshop,  
use this icebreaker to  
establish the  
participant's  
credentials

**Nominate the  
next participant**



# Scotland's Climate is Changing

## Adaptation Scotland's 15 Key Consequences of a Changing Climate



### THE PRODUCTIVITY OF OUR AGRICULTURE & FORESTS

A warming climate has the potential to improve growing conditions in Scotland and increase the productivity of our agriculture and forestry. However, climate change will also pose a number of threats, from more variable and extreme weather to the spread of pests and diseases, which may limit this potential.



### THE OCCURRENCE OF PESTS AND DISEASE

As our climate changes, it will create new conditions that may allow existing pests and disease to spread and new threats to become established in Scotland. This may impact on the health of our people, animals, plants and ecosystems if risks are not properly managed.



### THE QUALITY OF OUR SOILS

We rely on soils to sustain biodiversity, support agriculture and forestry, regulate the water cycle and store carbon. Soils also have an historic environment value, as a proxy record of environmental change and for the preservation of archaeological deposits and artefacts. Soils and vegetation may be altered by changes to rainfall patterns and increased temperatures - as well as the way we use the land.



### THE HEALTH OF OUR NATURAL ENVIRONMENT

Climate change may affect the delicate balance of Scotland's ecosystems and transform Scotland's habitats and biodiversity, 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.



### THE SECURITY OF OUR FOOD SUPPLY

Climate change may have an impact on global food production. Although Scotland may be able to grow more food, this will not offset the impact global disruption has on us. The effects of increased volatility in the global commodity market due to exposure to extreme climatic events has an impact on supply and cost of food.



### THE AVAILABILITY AND QUALITY OF WATER

As our climate warms and rainfall patterns change, there may be increased competition for water between households, agriculture, industry and the needs of the natural environment. Summer droughts may become more frequent and more severe causing problems for water quality and supply.



### THE INCREASED RISK OF FLOODING

Flooding can already have a devastating effect on those affected. With climate change likely to alter rainfall patterns and bring more heavy downpours, we expect flood risk to increase in the future. This could impact on properties and infrastructure - with serious consequences for our people, heritage, businesses and communities.

8



**THE CHANGE AT OUR COAST**

Sea level rise is already having a widespread impact on parts of Scotland's coast. With this set to accelerate over the coming decades, we can expect to see more coastal flooding, erosion and coastline retreat – with consequences for our coastal communities and supporting infrastructure.

9



**THE HEALTH OF OUR MARINE ENVIRONMENT**

Our marine ecosystems – from plankton through to fish, mammals and seabirds – are already being affected by climate change alongside other pressures. Changes will continue, with likely to change species and changes will present both threats to our commercial fisheries and

10



**THE RESILIENCE OF OUR BUSINESS**

Climate change and associated extreme weather events can disrupt transport, energy and other services in Scotland and around the world. These events can also affect supply chains and

11



**THE HEALTH AND WELLBEING OF OUR PEOPLE**

A warming climate may provide more opportunity to be outdoors and enjoy a healthy and active lifestyle, while reducing mortality in winter. However, it could affect patterns of disease and other health issues. Climate change and associated extreme weather may disrupt the lives of individuals and communities, limiting access to vital services and impacting on people's physical and mental health.

12



**OUR CULTURAL HERITAGE AND IDENTITY**

The changing climate is already altering our unique Scottish landscape and threatening our historic environment through coastal erosion, flooding and wetter, warmer conditions. The increased pace of climate change presents challenges to all those involved in the care, protection and promotion of the historic environment.

13



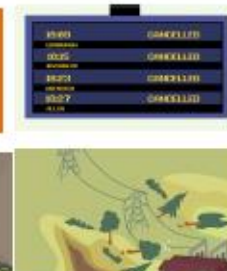
**THE SECURITY AND EFFICIENCY OF OUR ENERGY SUPPLY**

Climate change may influence Scotland's capacity to generate weather-dependent renewable energy. For example, varying water availability will affect hydro generation schemes. Climate change can also impact power distribution, with impacts ranging from damage caused by extreme weather events, to reduced transmission efficiency occurring as a result of temperature fluctuations. Impacts on global energy markets may also affect energy supplies in Scotland and consequently our overall energy security.

**THE PERFORMANCE OF OUR BUILDINGS**

Climate change will have an impact on the design, construction, management and use of our buildings and surroundings. Whether retrofitting existing or building new, it is likely that there will be issues with water management (in flood and drought), weather resistance and overheating.

15



**INFRASTRUCTURE – NETWORK CONNECTIVITY AND INTERDEPENDENCIES**

Our energy, transport, water, and ICT networks support services are vital to our health and wellbeing and economic prosperity. The effect of climate change on these infrastructure systems will be varied. They are likely to be impacted by an increase in disruptive events such as flooding, landslides, drought, and heatwaves. Our infrastructure is closely inter-linked and failure in any area can lead to wider disruption across these networks.

Introduces climate adaptation as a subject and explains the breadth of its coverage

# Climate impacts in your place

Localise climate change in the community – identify risks that will resonate with the participants



**Sea level rises in 2050 affecting shore, holiday park and golf course**



**High likelihood of flooding between train line and Dubbs Road and Ardeer Park**



**Increased surface water flooding around New street and adjacent to the river**



**Increased seasonal rainfall and more heavy downpours**

# Mapping - add your observations...

Refer to the toolkit information on how to generate a place-based map and print it

**1. Local Observations of Climate Change- please note on the postcard any local impacts of climate change you have seen. Where this relates to a specific location put the card on the map.**


**(share previous collated information and add to it).**

# Mapping - consider future trends...

Place the participants ideas onto the map to localise climate actions

## 2. Discussion- Thinking ahead...

**What trends are likely to to see continuing with regards to climate risks. Note any potential future risks on the map. There is no right or wrong answer.**



This section is about providing a broad understanding of the language around climate action

What is Climate Adaptation?

# In a nutshell...



**Mitigation** changing behaviours



**Adaptation** changing our places



**Resilience** planning for change



## What is mitigation?



Reducing greenhouse gas emissions to slow or stop global climate change, i.e. using the car less, flying less and buying local food.



## What is adaptation?



Adjusting to the effects of climate change to reduce the negative impacts and exploit any opportunities, i.e. building sea walls or removing carpets from accommodation that is at risk from flooding.

## What is resilience?



The ability and capacity to anticipate, prepare for, and respond to hazardous events, trends, or disturbances related to climate change i.e. having plans and strategies in place to deal with emerging risks and barriers.

# Mapping - consider adaptation measures relevant to Stevenston...

Localising climate adaptation projects using mapping

## 3. Activity...

**Look at the Climate Risks you have already mapped and add a corresponding adaptation measure.**

**This can be from the examples shown on the climate Ready Place cards or written on a blank card or a Post-it.**



Working together

Examples from around  
Scotland to inspire the  
participants

Mitigation, adaptation  
and resilience

Delivering in Scotland

## 01 Mitigation, Adaptation & Resilience

# Hazlehead Park, Aberdeen

1. A range of energy saving options
2. Improvements to the park aimed at drawing in the local community and reducing their need to travel elsewhere for recreation
3. A suite of climate adaptation actions relating to surface water management; localised temperature control and increased habitat connectivity.

(Courtesy of Greenspaces Scotland)

## Hazlehead Park Climate Change Park Report Final Report - February 2013



# 02 Mitigation, Adaptation & Resilience

## Callander Resilience Group

### IMPORTANT NUMBERS

Name	Phone Number
SEPA Floodline (Teith Callander)	0345 988 1188 (Quick dial 23104)
SEPA's pollution hotline	0800 80 70 60
Scottish Fire and Rescue Service, Police, and Ambulance Services	999
Police Scotland For non-emergencies	101
NHS 24	111
Power cut (Callander electricity network provider is SSEN, Scottish & Southern Electricity Networks)	105
Gas leak (Callander gas supplier is SGN)	0800 111 999
Scottish Water (mains water and sewers)	0800 0778 778
Stirling Council	01786 404 040
Trossachs Search & Rescue	07796 240 023

NOTE: A landline telephone that plugs into the wall will keep working even after a power cut. Please be aware they are due to be phased out after 2025.

**Location of defibrillators**

- Dreadnought Garage, Stirling Road
- Callander Golf Club, Aveland Road
- McLaren Leisure Centre, Mollands Road (Internal)
- The Post Office, Station Road
- Ancaster Square, Main Street
- West Dullater House and Grace's Cottage Invertrossachs, Invertrossachs Road
- Mobile Unit based in Callander with Scottish Ambulance Service (Depot Gelsler Road)

### MY EMERGENCY NUMBERS

Why not use the space below to make a note of your **first point of contact**. Consider including family members, friends, insurance, doctor, vets, work, school, neighbours.

EMERGENCY CONTACTS	
Name	Phone Number (landline & mobile)



This leaflet provides guidance on how you can prepare your household, for **weather related and other emergencies** in Callander.

It is intended to help raise awareness of the actions you can take and the services available.

The information is sourced from the Scottish Government, Stirling Council and Red Cross UK websites where more information can be found.

CALLANDER COMMUNITY DEVELOPMENT TRUST COMMUNITY FUND Galvonic Community Council

### STAY SAFE

- Preparation: in advance**
- **Emergency websites** - check full emergency information (see emergency website section).
  - **Emergency bag/box** - prepare in advance.
  - **Important documents** - keep in one safe place.
  - **Landline and mobile phone numbers** - keep in one safe place.
  - **Food, water and emergency lighting** - plan for their availability in an emergency.
  - **Trip hazards** - remove from the floor.
  - **Outdoor furniture** - secure from possible storm damage.
  - **Grit bin** - check the nearest one.
  - **Open fire or fuel burner** - if you have one, ensure fuel supplies are topped up and handy.
  - **Priority Services Register** - service run by gas, electricity, water and heating oil companies for vulnerable people. See each website to register a vulnerable person for priority treatment.
- In an emergency ...**
- Stay indoors, close all external doors and windows but leave them unlocked. Leave promptly in case of fire.
  - Avoid using unlit stairs in a power cut.
  - Leave immediately if you think you are in danger.
  - If outdoors, seek shelter and avoid trees during storms.

### STAY WARM

- Hot drinks, regular warm meals, warm clothes, duvets and blankets will keep the body temperature up.
  - **Hypothermia** (body temperature under 35°C) - check for signs, especially in the elderly, infirm or very young.
- In an emergency ...**
- Check in with your first point of contact if you or your family need more warmth.
  - Check if your neighbours are warm, especially if elderly or infirm.
  - Move to a warm community space if available.

### STAY CONNECTED

- Preparation: in advance**
- Phone numbers - keep the ones in this leaflet in a safe place
  - **Emergency contacts and first point of contact** - as above
  - **Record your own Emergency Numbers**
  - **Make an Emergency Family Plan** (including pet care)
  - **Sign up to Emergency Websites** to receive warnings especially
    - SEPA (Floodline)
    - Met Office (Weather warnings)
  - **Plan for an urgent departure** - keep fuel, emergency car kit and shovel in the car, allowing for snow.
- Warning: Do NOT charge your mobile phone whilst asleep. Fire hazard.**
- In an emergency ...**
- Check in with your first point of contact to let them know you are safe
  - Check your neighbours are safe
  - Tune in to local radio for updates
  - If power is lost, call 105 (free) to speak with your local supplier, SSEN

Emergency Websites	
Met Office weather updates and fire severity index	<a href="http://www.metoffice.gov.uk">www.metoffice.gov.uk</a>
Ready Scotland weather related emergency advice	<a href="https://ready.scot">https://ready.scot</a>
Red Cross UK wildfires	<a href="http://www.redcross.org.uk">www.redcross.org.uk</a>
SEPA flood warnings	<a href="http://www.sepa.org.uk">www.sepa.org.uk</a>
Traffic Scotland incidents, traffic and warnings	<a href="http://www.traffic.gov.scot">www.traffic.gov.scot</a>
Scottish Fire and Rescue Service	<a href="http://www.firescotland.gov.uk">www.firescotland.gov.uk</a>

### EMERGENCY BAG/BOX

- Preparation: in advance**
- Think of the things you might need in an emergency.
  - Use the ideas below to help you.
  - Adapt these to your and your family's own needs.
  - Don't forget your pets' needs too!
  - **Keep a torch ready to help you find the bag!**
- Get started: choose the best ideas for you.**
- Plug-in phone (not cordless) (if you still have a landline and if lines are working)
  - Mobile phone with back-up charger cable and power bank
  - Cash and cards (the cards may not work in a power cut)
  - Emergency contact numbers (paper copy)
  - Important documents, e.g. insurance, birth certificates, passports, driving licence in a waterproof bag
  - First aid kit
  - Essential medication
  - Spare glasses or contact lenses
  - Torch - battery, wind-up or a head torch
  - Candles, candle holder and matches (keep dry) (Fire hazard)
  - Pencil, paper, penknife, whistle
  - Spare keys (house and car)
  - Car jump leads
  - Radio (battery-operated or wind-up)
  - Spare batteries for torches and radio
  - Playing cards - or something to pass the time
  - Fleece or fleecy blankets
  - Sleeping bag(s)
  - Thermal underwear
  - Gloves, hat and scarf
  - Hot water bottle
  - Thermos flask
  - Bottled water and ready-to-eat tinned food
  - Tin opener and eating utensils
  - Baby and pet supplies

(Courtesy of Incallander website)

## 03 Mitigation, Adaptation & Resilience

# South Central Kilmarnock

Upstream flood mitigation blue & greenspace

The project identified the following learning points:

- Ensuring longevity through simplicity
- Adding value beyond flood management
- Adapting design to suit current and future functions
- Creating multiple benefits
- Involving local businesses

(A&DS website)





04 Mitigation, Adaptation & Resilience

## Flooding in Ballater

Ballater Flood  
Resilience Group



A positive film to inspire  
and end the session

(Courtesy of Scottish Flood Forum)

End on a positive note.  
A discussion around  
enabling change and what  
comes next.

#### **4 Discussion-**

**How can Local  
authority, Agencies  
and Community  
Groups work together  
around adaptation?**

#### **5 Discussion-**

**Has this been  
valuable? Could this  
help inform a  
community led action  
plan? Is a further  
session on Planning  
helpful?**



Thank you and next steps...