

Warming Stripes- Temperature change in NI since 1884- Data source: Ed Hawkins- Showyourstripes.info



Intro & Background...

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www.climatenorthernireland.org.uk

Support policy development

- UK Climate Change Risk Assessment Evidence Report & NI Summary (CCRA3)
- Civil Society & Local Government Chapter in NI Climate Change Adaptation Programme



Support partnerships

- Cross-Sector Climate NI Steering Group
- CNI Network of Sectoral Working Groups
- UKCP User Group, OPENCLIM, RCRG Community Resilience Review



Raise awareness on climate change

- CNI Website and Monthly E-bulletin



- Accredited Climate Emergency Training

Carbon Literacy Project



- COP26 Session Lead and 'Adaptation Day'

Promote individual and sectoral action

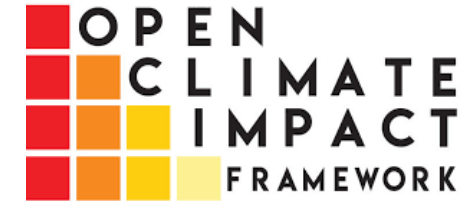
- Development of LGCAN and NI Adapts Platform
- Supporting development of mitigation and adaptation plans



Additional Projects – delivered by Climate NI Staff through NI Environment Link

RESIL-RISK – Survey to understand the NI's public perception of climate change, risk and adaptation options.

Once upon a time in a heatwave – Exploring the power of stories to engage and empower people in climate change risk and resilience in Northern Ireland..



Natural
Environment
Research Council

Rural Resilience Network –
Supporting a climate ready farming
future



TalX

Transboundary
Adaptation
Learning Exchange

A collaborative transboundary
network developing skills &
solutions for [Climate adaptation](https://talx.ie/)
policy <https://talx.ie/>



Northern Ireland
**environment
link**

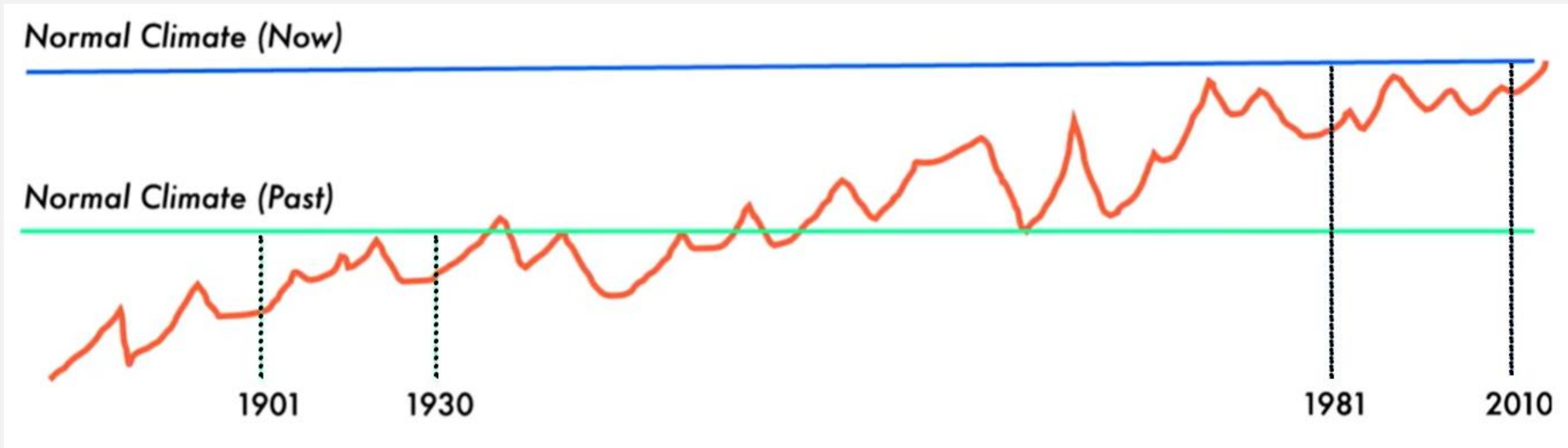


**PLACE-BASED
CLIMATE ACTION
NETWORK**



What is Climate Change?

Climate change can be described as a long-term change (normally in the 30 year average) in temperature and our average or typical weather.





The impacts of climate change are very visible and are increasing...



Mitigation



action to reduce
the severity of
climate change

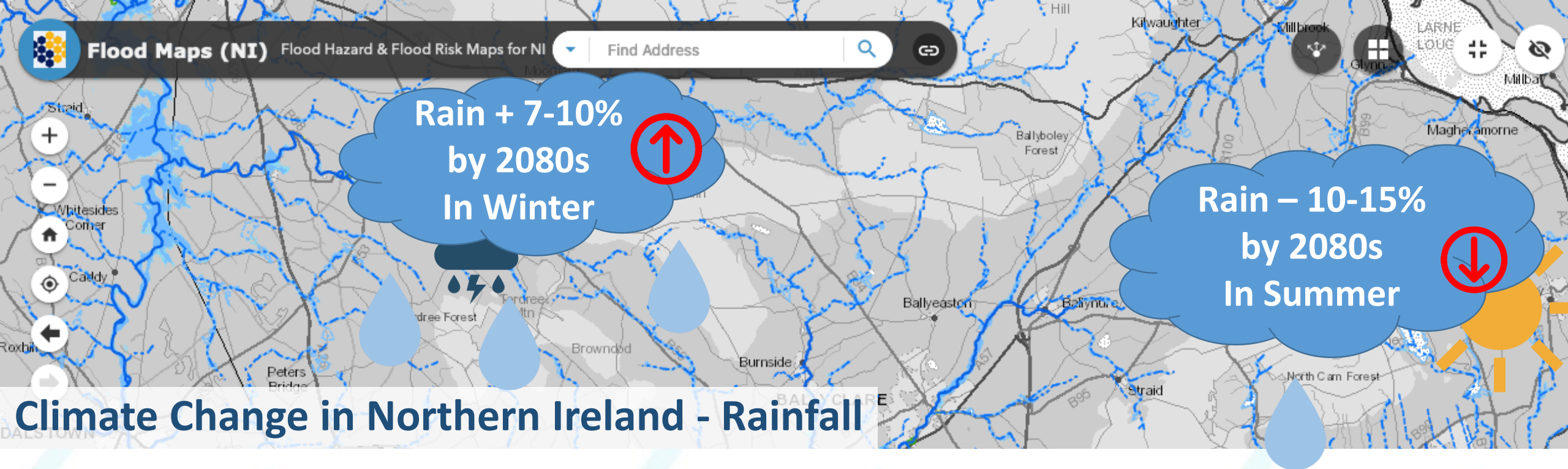
Responding to Climate Change



Adaptation



preparing for the
impacts of
climate change



45K NI Homes at
flood risk

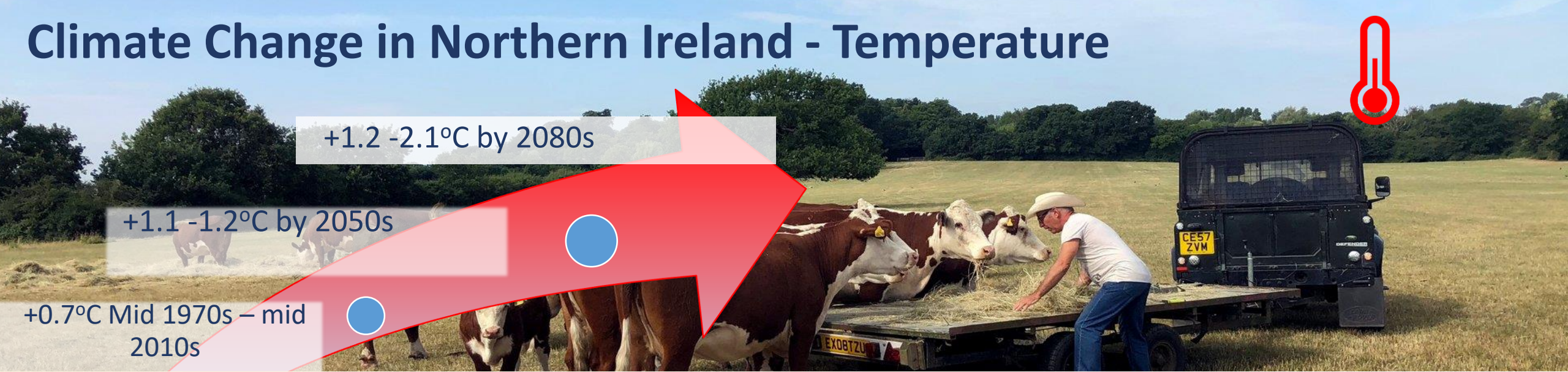


In the 2017 Derry City and Strabane flood, there was rainfall of 60 -70mm in 9 hours. This is equivalent to 63% of the average August rainfall. Water rose to unprecedented levels which washed away five bridges and caused 100s of homes to flood, damaged roads and closed the airport.

FUTURE CLIMATE - MORE INTENSE AND FREQUENT FLOODING

- Public safety & mental health
- Water pollution
- Agriculture & business disruption
- Heritage & biodiversity damage

Climate Change in Northern Ireland - Temperature



+1.2 -2.1°C by 2080s

+1.1 -1.2°C by 2050s

+0.7°C Mid 1970s – mid 2010s

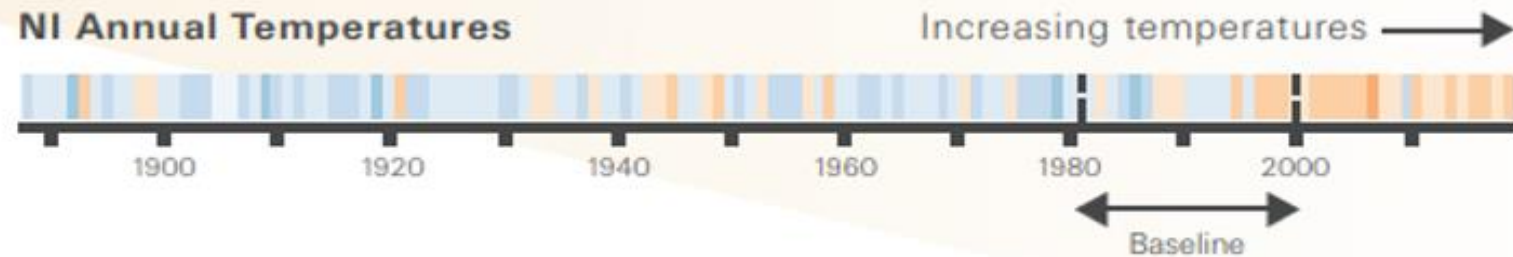
Heatwave
chances increase

90%



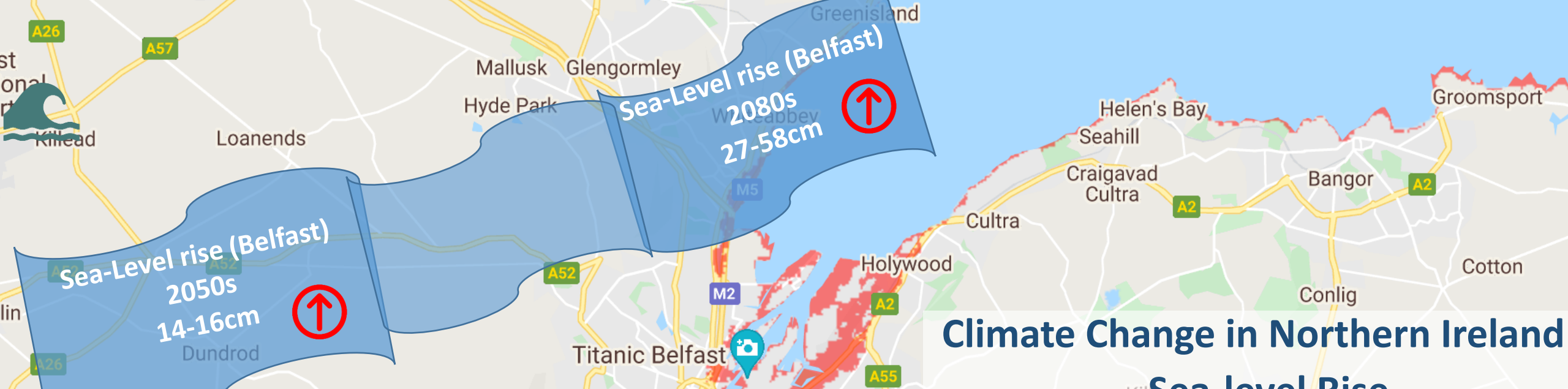
Summer heatwaves, with daily temperatures of over +30°C, have a 50% chance of happening every year by 2050 and 90% by 2100. Adapting domestic, office and healthcare premises and greening our cities can reduce overheating.

NI Annual Temperatures



FUTURE CLIMATE - HIGHER TEMPERATURES

- Increased water demand
- Infrastructure disruption
- Health of vulnerable groups
- Reduced staff productivity



↑ **94CM**
Sea Levels Rise

100s of homes evacuated

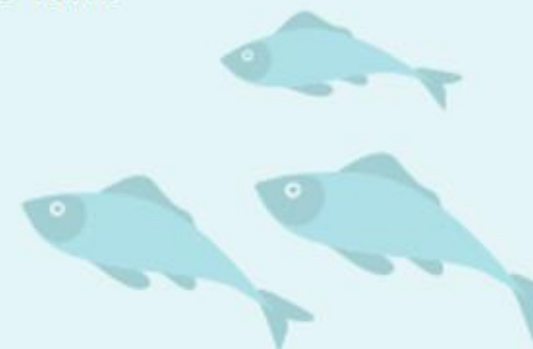
In 2014, high tidal surges & heavy rain caused coastal flooding in and around Ards. Sea defences were breached, several roads were closed & Portavogie promenade was destroyed.

Sea levels in NI will rise at least 11cm by 2100.

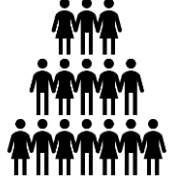
Unless global emissions decline, this could be up to 94cm.

FUTURE CLIMATE - SEA LEVEL RISE

- Loss of homes, biodiversity & cultural sites
- Sea water damage to farmland
- Transport & tourism disruption

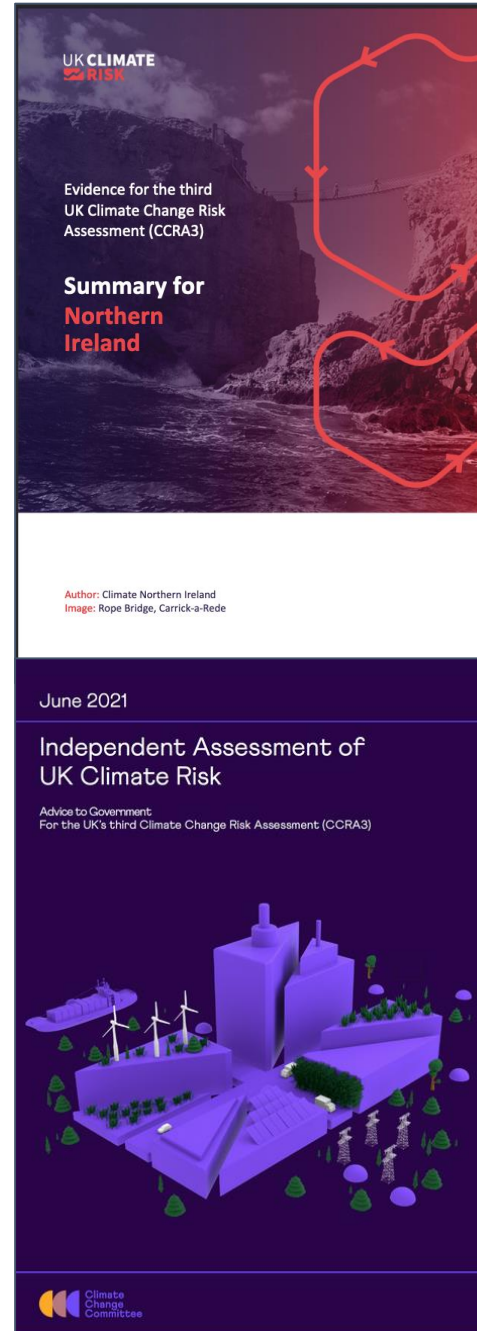


UK Climate Change Risk Independent Assessment – 1,500+ pages



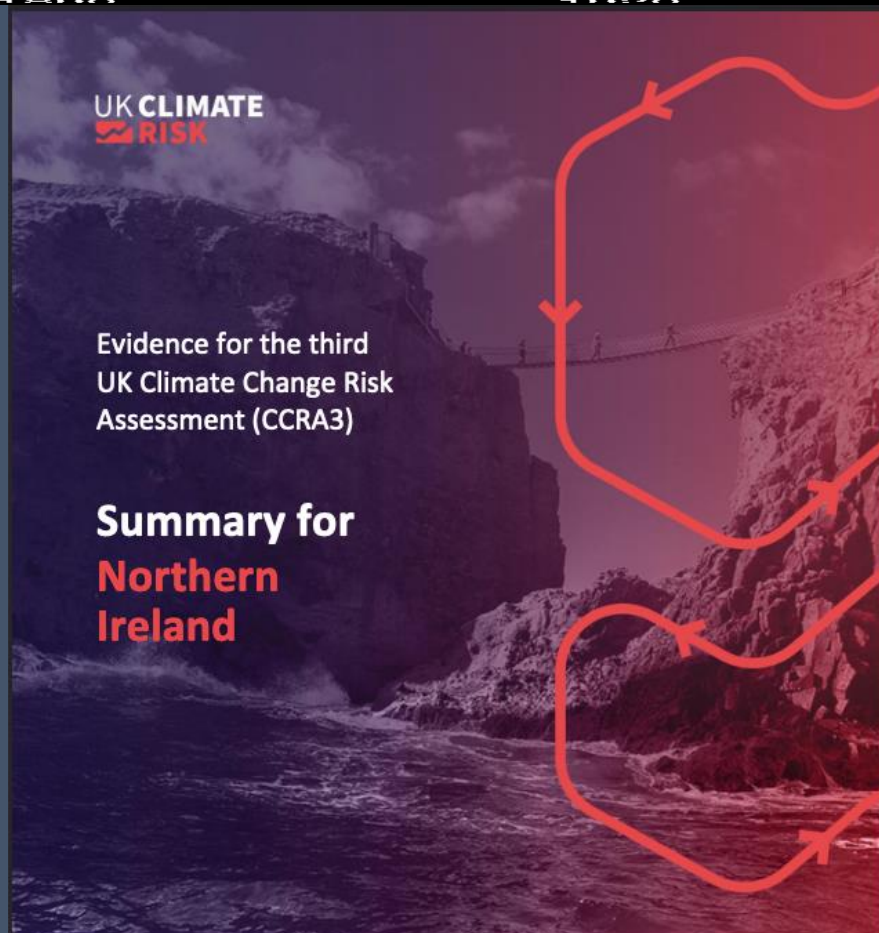
450
Experts

130
Organisations



Sectoral Briefings including:

- Children & Young People
- Agriculture & Food
- Business
- Cultural Heritage
- Energy
- Flooding & Coastal Change
- Freshwater Habitats
- Health & Social Care
- High Temperatures
- Housing
- Land Use, Land-Use Change & Forestry
- Marine & Coastal
- Telecoms & ICT
- Terrestrial Biodiversity
- Transport
- Water
- Wildfire



Author: Climate Northern Ireland
Image: Rope Bridge, Carrick-a-Rede

Risk Scores

More Urgent

More Action Needed

Further Investigation

Less Urgent

Sustain Current Action

Watching Brief

61 – Risks & Opportunities from Climate Change

31 Risks require urgent action

19 Risks need further investigation

(a) Societal choices about adaptation, mitigation and sustainable development made in arenas of engagement

Dimensions that enable actions towards higher climate resilient development

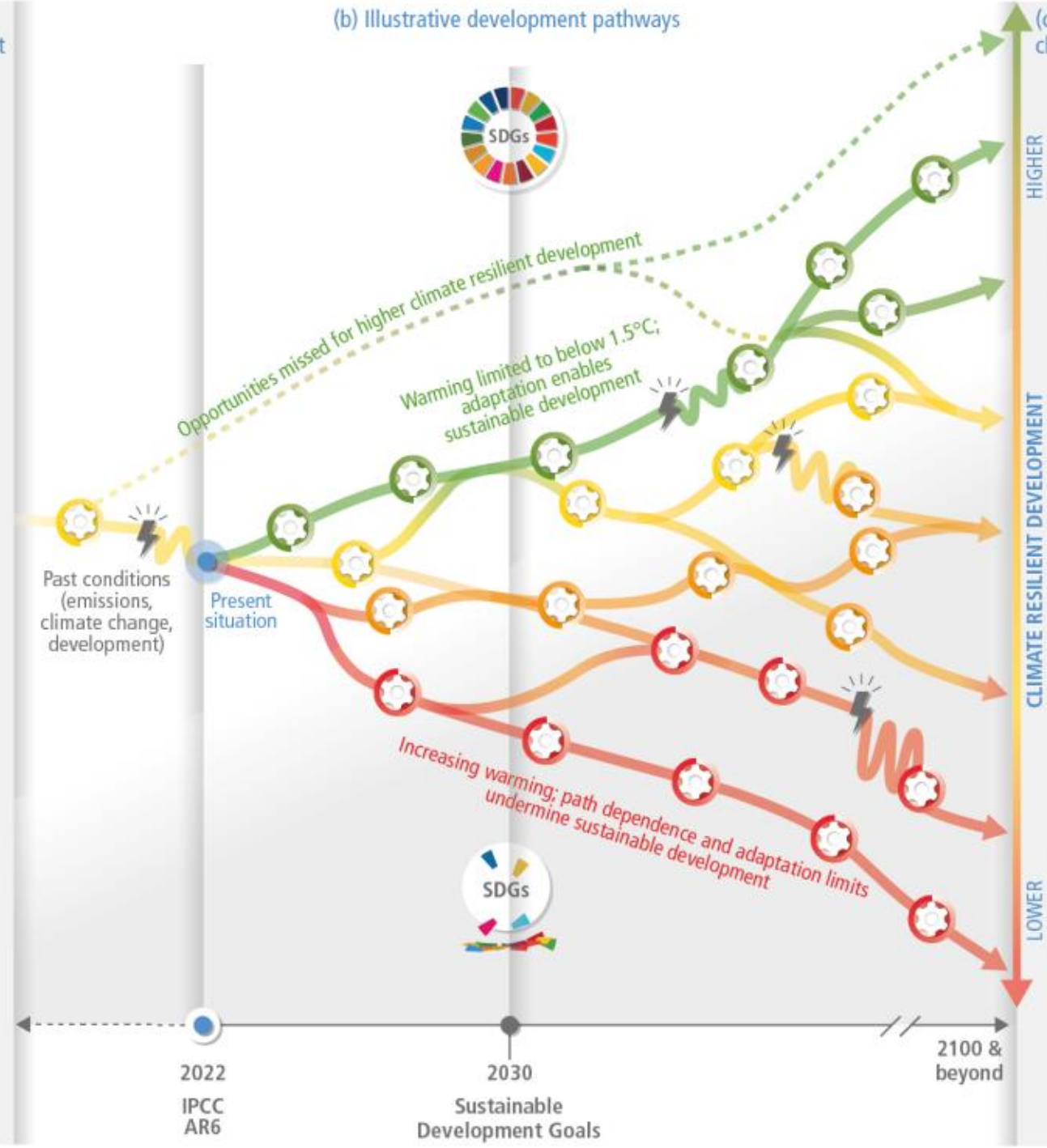


Arenas of engagement:
 Community
 Socio-cultural
 Political
 Ecological
 Knowledge + technology
 Economic + financial



Dimensions that result in actions towards lower climate resilient development

(b) Illustrative development pathways



(c) Actions and outcomes characterizing development pathways



Questions & More Info



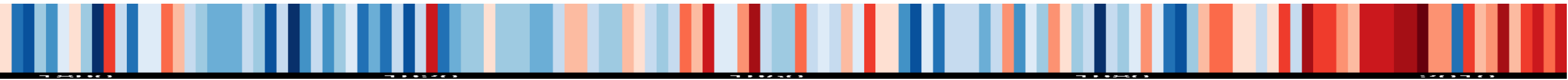
Climate Risk (UK & NI)

- www.UKClimateRisk.org - UK Independent Climate Risk Information website inc: NI Summary, Briefings, Advice Report & Technical report
- [CCRA-Evidence-Report-Northern-Ireland-Summary-Final.pdf \(ukclimaterisk.org\)](https://www.ukclimaterisk.org/CCRA-Evidence-Report-Northern-Ireland-Summary-Final.pdf)
- [Monetary-Valuation-of-Risks-and-Opportunities-in-CCRA3.pdf \(ukclimaterisk.org\)](https://www.ukclimaterisk.org/Monetary-Valuation-of-Risks-and-Opportunities-in-CCRA3.pdf)
- https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1047003/climate-change-risk-assessment-2022.pdf UK Climate Change Risk Assessment 2022 Presented to Parliament pursuant to Section 56 of the Climate Change Act 2008

ADAPTATION

- <https://www.daera-ni.gov.uk/articles/northern-ireland-climate-change-adaptation-programme> - DAERA Adaptation Links
- <https://www.climatenorthernireland.org.uk/NIAdapts/> - NIAdapts Toolkit
- **2021 Progress Report** <https://www.theccc.org.uk/publication/2021-progress-report-to-parliament/> - UK Progress Report(s)
- **MORE HELP** Jade@climatenorthernireland.org.uk www.ClimateNorthernIreland.org.uk

Questions & More Info



IPCC

<https://www.ipcc.ch/>

- *Climate Change 2022: Impacts, Adaptation and Vulnerability.* [IPCC AR6 WGII FinalDraft FullReport.pdf](#)

Northern Ireland Climate Legislation

[Climate Change Act \(Northern Ireland\) 2022](https://www.legislation.gov.uk/nia/2022/31/contents/enacted) <https://www.legislation.gov.uk/nia/2022/31/contents/enacted>

<https://www.theccc.org.uk/publication/letter-northern-irelands-climate-change-bill/> - CCC response to the Final Act.

Thank you for listening!

- Jade@climatenorthernireland.org.uk
- www.ClimateNorthernIreland.org.uk





28th June 2022

Public perceptions of climate risks and resilience in Northern Ireland



Northern Ireland
**environment
link**



RESILRISK Northern Ireland

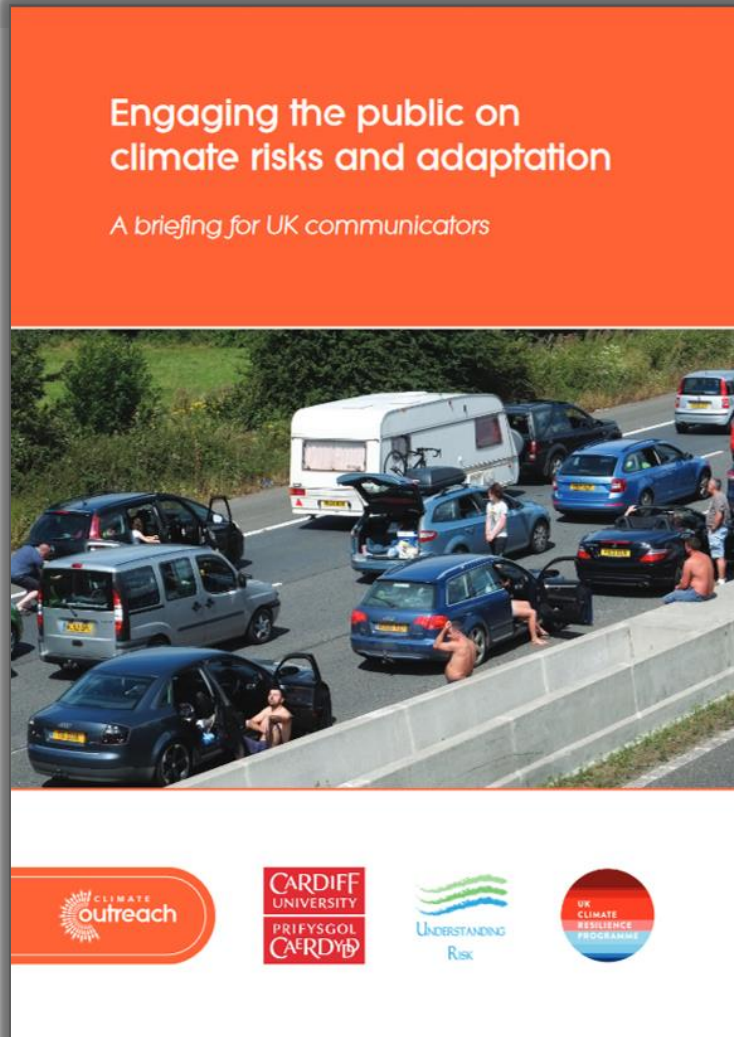
Project team

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Prof. Nick Pidgeon

Dr. Jade Berman
Amy Bell
Megan McCamley

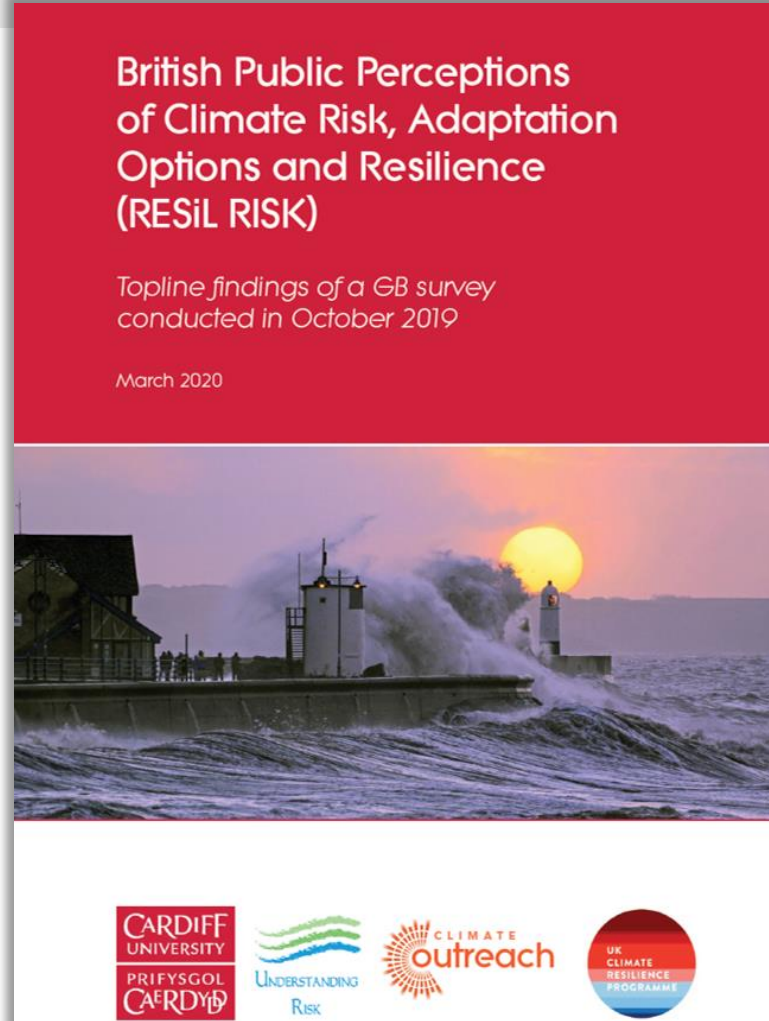


original RESILRISK project



Engagement report:

<https://climateoutreach.org/resources/engaging-public-on-climate-risks-and-adaptation/>



Topline findings:

<http://orca.cf.ac.uk/129452/1/resilrisk-FINAL-ONLINE.pdf>

original RESILRISK project

RESIL-RISK will investigate how people currently conceptualise the relationship between climate risks, resilience and adaptation options/policy, as evidence for designing future climate change risk communications.

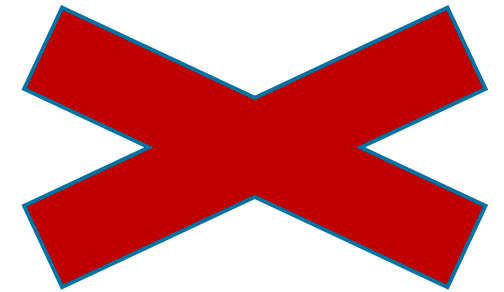
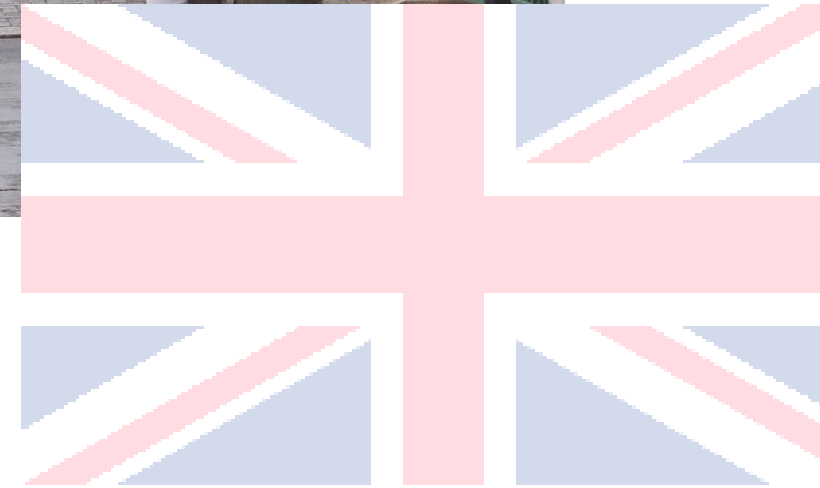
Method

- Designed in collaboration with Climate Outreach, the Met Office and expert advisory panel
- Public launch event & reports in March 2020

Main survey: October 2019, public perceptions of climate change and support for adaptation strategies, n= 1 401

Experimental component: to examine communication strategies

Post Covid-19 survey: to test conclusions from main survey



RESILRISK Northern Ireland

Project objectives:

1. Examine public perceptions of climate risks and support for regional strategies that aim to build resilience amongst the Northern Irish population, using the core survey already developed through RESILRISK
2. Identify differences and similarities between NI and the average GB population; to inform regional policy making and climate communication around climate risks and adaptation.
3. Adopting a co-creation approach, by including regional stakeholder into design, dissemination and discussion of the project results.



RESIL RISK



RESIL RISK NORTHERN IRELAND:
Public perceptions of climate risks
and adaptation in Northern Ireland



Method

Northern Ireland 2022

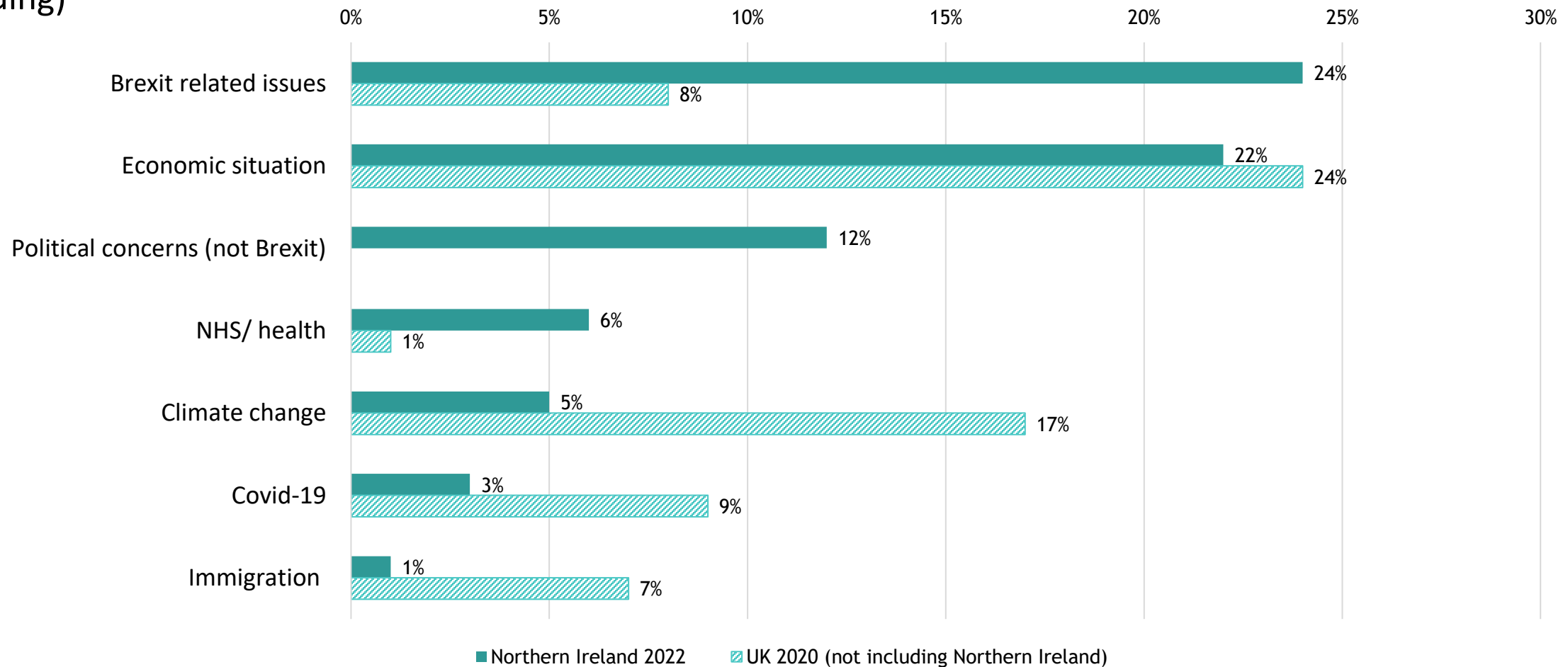
- Data collected 4th - 29 March 2022
- Online survey using Qualtrics panels for recruitment
- Quotas set for age, gender, region and income
- 15 minutes length
- 380 responses

NI Opportunity sample

- Data collected 7th February - 30th March
- Online survey hosted on Qualtrics
- Recruitment through existing channels
- 15 minutes length
- 619 responses

PERCEPTIONS OF CLIMATE CHANGE

What would you say will be the most important issue facing Northern Ireland in the next 20 years? (open response coding)

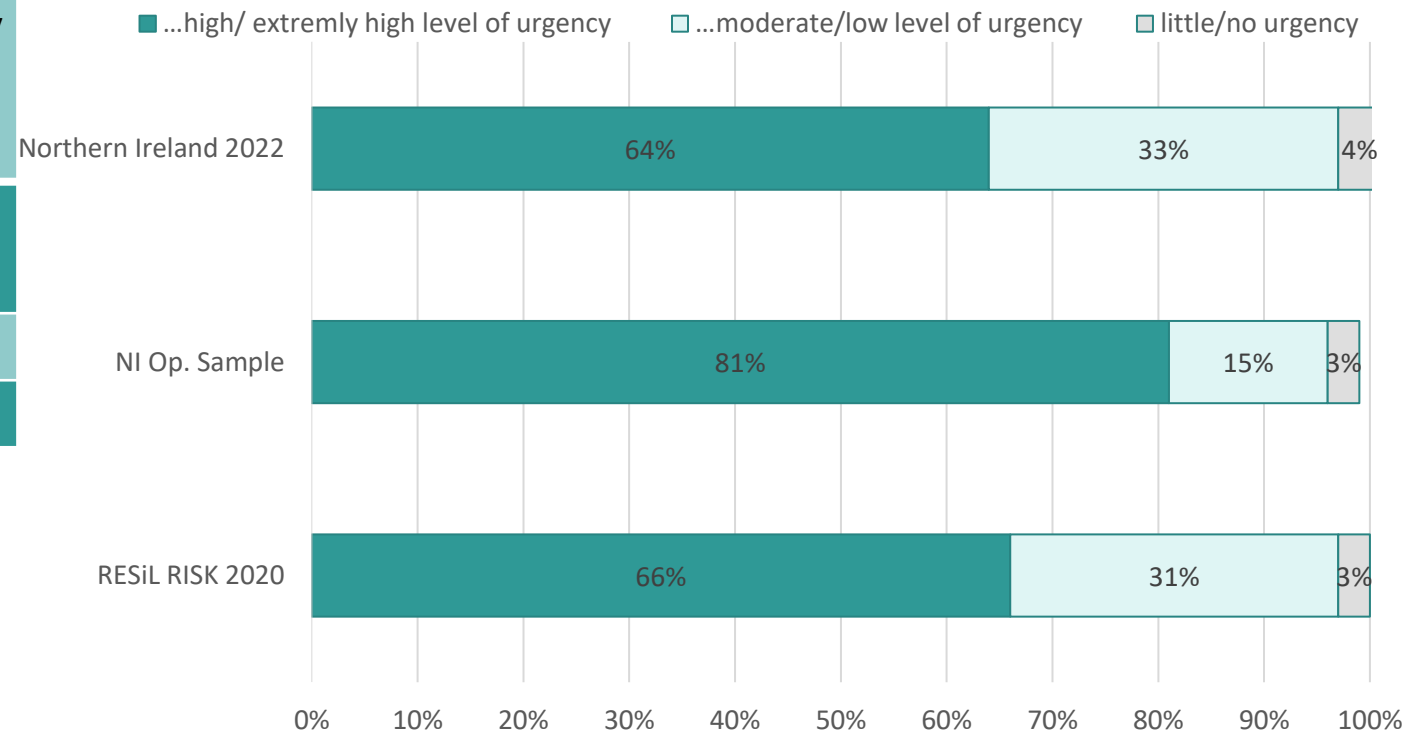


PERCEPTIONS OF CLIMATE CHANGE

Question 3. Worry about climate change: “How worried, if at all, are you about climate change?”

	Not at all worried	Not very worried	Fairly worried	Very worried	Extremely worried
Northern Ireland 2022	7%	20%	45%	18%	10%
NI Op. sample	3%	11%	35%	30%	20%
UK 2020	3%	16%	39%	25%	17%

Question 6. Urgency to address climate change: “Addressing climate change requires ...”



CLIMATE CHANGE BELIEFS

Question 5. How serious of a threat, if at all, is climate change to each of the following?

		Not at all/Not very serious	Fairly serious	Very/Extremely serious
You and your family	Northern Ireland 2022	38%	47%	16%
	NI Op. sample	21%	47%	31%
	UK 2020	34%	42%	25%
Northern Ireland	Northern Ireland 2022	23%	47%	32%
	NI Op. sample	14%	38	48%
	UK 2020	-	-	-
The UK as a whole	Northern Ireland 2022	11%	27%	62%
	NI Op. sample	10%	25%	64%
	UK 2020	16%	40%	44%
People in developing countries	Northern Ireland 2022	17%	41%	42%
	NI Op. sample	5%	10%	84%
	UK 2020	10%	24%	67%

RISK PERCEPTION

Question 7. How serious of a problem do you think the following currently are for Northern Ireland?

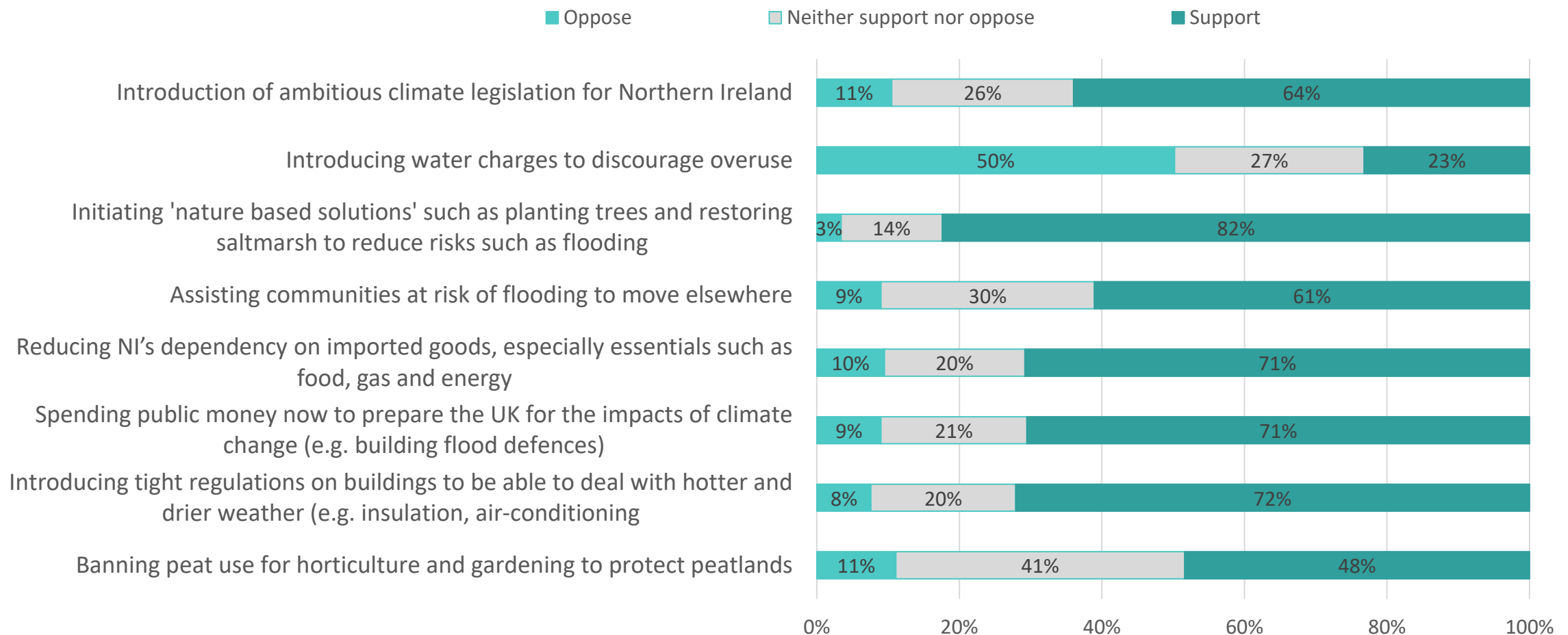
	Fairly/very serious
	Northern Ireland 2022
Snow	38%
Cold winters	57%
Mild winters	43%
Dry period without rain	48%
Heatwaves	49%
Flooding	77%
Periods of heavy rainfall	74%
Hot summers	42%
Coastal erosion	76%
Heavy storms with strong winds, rain/hail	83%

Question 11. Experience: Have you, or someone close to you, ever experienced any of the following extreme weather events?

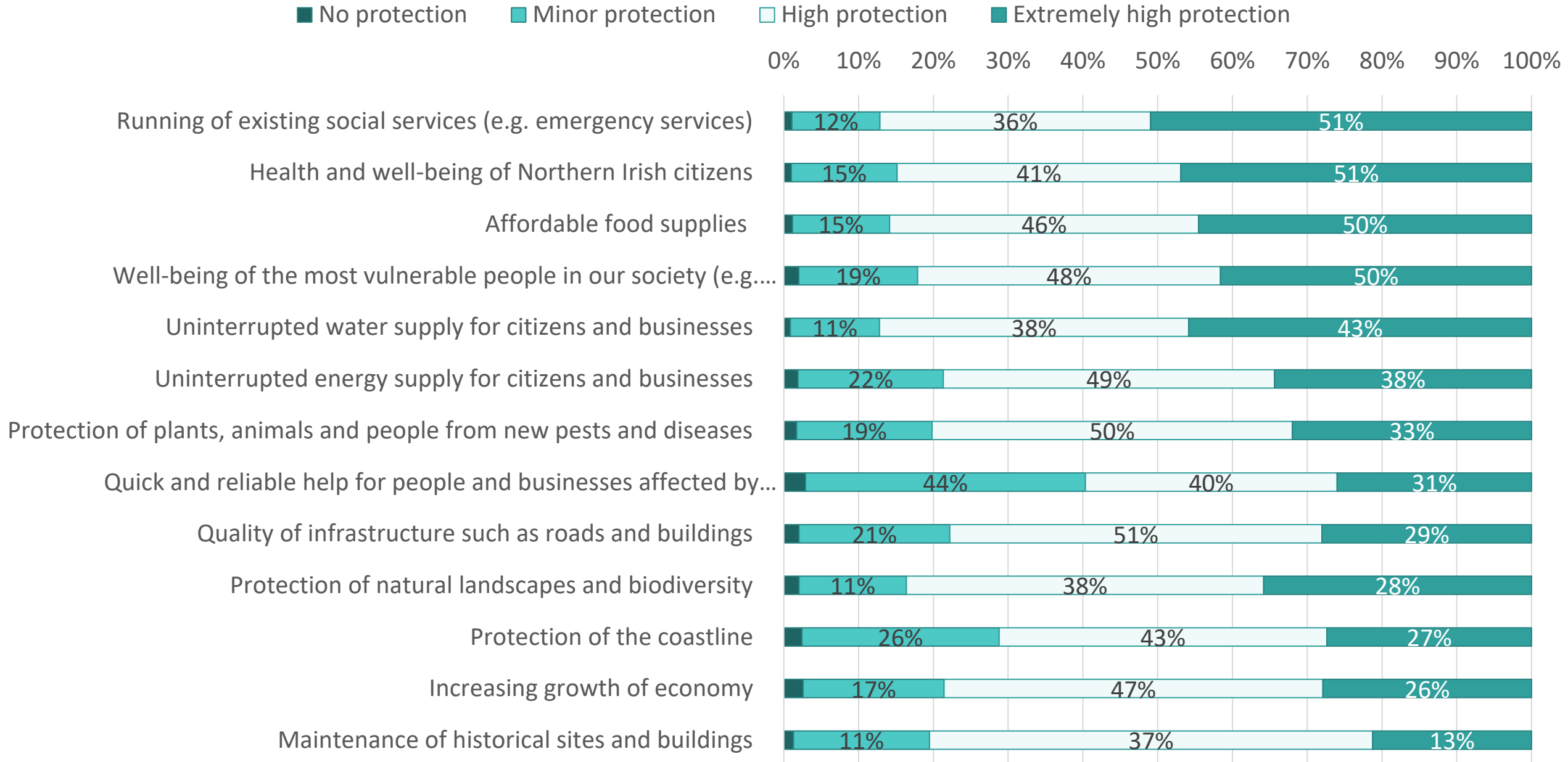
	Yes - to me
	Northern Ireland 2022
Flood damage to your home	8%
Water restrictions/shortages due to low rainfall	36%
Heatwave (discomfort/being unable to sleep)	60%
Heatwave (health significantly affected)	17%
Wildfires during drought periods (disruption to travel, loss of natural habitat)	6%

POLICY SUPPORT

To what extent do you support or oppose the development of the following policies in Northern Ireland?



PRIORITIES FOR ADAPTATION



PERCEPTION OF ACTORS

Responsibility

	Northern Ireland
The Northern Irish government	38%
The UK government	25%
Northern Ireland Department for Agriculture Environment and Rural Affairs (DAERA)	12%
Individuals and their families	10%
Local authorities/councils	6%
Local communities	4%
Business and industry	3%
The international community	2%
Environmental charities	1%
Insurance companies	< 1%

Trust

Strongly trust percentages	Northern Ireland 2022
Scientists	38%
Met Office	25%
Committee on Climate Change	25%
Environmental charities	25%
Family/friends	21%
International Government organisations	15%
Extinction Rebellion	10%
Your local authority/council	7%
Northern Irish government	5%
UK government	4%
Journalists/the media	3%

SUMMARY

Perceptions of climate change & beliefs

- Brexit, economic and political concerns are the biggest issue in NI. Climate change only the top issue for 5%
- A clear majority see the urgency for climate action
- Risk perception for the whole of the UK higher than for NI.

Support for adaptation strategies

- High support for a range of adaptation policies including tighter building regulations and investing in flood defences
- Introduction of water charges most controversial policy

Risk perception

- Heavy storms, flooding and coastal erosion are classified as the most serious climate risks
- Many people report heatwave discomfort

Perception of actors

- UK and Northern Irish government perceived as most responsible and least trusted (and the media)
- Scientists, scientific advisory organisations and environmental charities are the most trusted sources for climate information

RECOMMENDATIONS FOR PUBLIC ENGAGEMENT

Do not hesitate to address climate change now

Clarify seriousness of climate impacts for Northern Ireland

Communicate risks of extreme heat and adaptive response to heatwaves

Focus adaptation strategies on providing basic needs and assisting vulnerable groups

Improve trust in governments and utilize trusted actors



Other survey data collected

Demographics

- Gender
- Age
- Working status
- Urban vs. rural
- household size
- Education
- Council area
- Work sector

Climate change impacts

- More homes being flooded as a result of heavy rainfall
- Poor harvests, due to extreme weather ...

Psychological variables

- Collective efficacy
- Environmental identity
- Identification with NI
- Vulnerabilities

Political affiliation

- Political preferences

Initial reactions or questions?

Discussion

1. What additional questions would you like to explore within the NI dataset?
2. How do you intend to use information on public perceptions of climate risks?
3. How would/could people's perceptions of climate risk and adaptation options influence and impact on your future work?

Thank you!

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Northern Ireland
**environment
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