



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



Northern Ireland  
environment  
link

Climate  
Northern Ireland



## Project funding

This project was funded by the Natural Environment Research Council (NERC) through the University of Leeds to establish the SPF UK Climate Resilience Champion NE/S017321/1.

The received funding is an impact grant following on from NERC funded research project RESiL RISK project under grant NE/S016449/1.

All RESIL RISK projects have been funded by the UK Climate Resilience Programme. Climate NI staff based at Northern Ireland Environment Link provided local expertise, however this is not part of the core funded Climate NI contract work by DAERA.

## Authors

Dr. Katharine Steentjes, Research Associate & Principal Investigator, Cardiff University

[steentjesk@cardiff.ac.uk](mailto:steentjesk@cardiff.ac.uk)

Megan McCamley, Research Assistant, Northern Ireland Environment Link

[mmccamley04@qub.ac.uk](mailto:mmccamley04@qub.ac.uk)

Dr. Jade Berman, Acting Climate NI Manager & Climate Resilience Researcher, Climate Northern Ireland

[jade@climatenorthernireland.org.uk](mailto:jade@climatenorthernireland.org.uk)

Prof. Nick Pidgeon, Professor of Environmental Risk, Cardiff University

[PidgeonN@cardiff.ac.uk](mailto:PidgeonN@cardiff.ac.uk)

## Cite as

Steentjes, K., McCamley, M., Berman, J., & Pidgeon, N. (2022). RESIL RISK Northern Ireland: Public perceptions of climate risks and adaptation in Northern Ireland. Cardiff: Cardiff University



# Key Points

- Most people in Northern Ireland currently state Brexit, economic and political concerns as the biggest issues for their country in the near future. Climate change was only seen as the top issue by 5% of respondents.
- Despite currently prioritising other issues above climate change, a clear majority of people see the need for high levels of urgency for climate action.
- The risk climate change poses to Northern Ireland is perceived as extremely or very serious by a quarter of respondents but for the UK as a whole two thirds of respondents classify the threat as very high.
- Heavy storms, flooding and coastal erosion are classified as the most serious climate risk for Northern Ireland, with less risk perception of heatwaves.
- Despite few people being concerned about heatwaves, a majority of respondents report personal negative experiences with heatwaves, such as inability to sleep.
- A number of adaptation policies such as spending money on flood defences, adopting nature-based solutions, and tighter building regulations receive high public support.
- An introduction of water charges is more controversial than other adaptation strategies.
- The Northern Irish Government and the UK Government are seen to be the main actors responsible for preparing Northern Ireland for the impacts of climate change, but these actors are also amongst the least trusted sources of climate information (along with the media).
- The most trusted sources for Climate Information are scientists, followed by scientific advisory organisations and the environmental charities.

# PROJECT DESCRIPTION

RESIL RISK Northern Ireland follows up from RESIL RISK, a research project that explored UK wide public perceptions of climate change and support for resilience building strategies. As part of the original project, a first survey was conducted with 1,401 British respondents in 2019<sup>1</sup> and a second (unpublished) survey repeated the survey during the global Covid-19 pandemic in October 2020. Furthermore the project informed a report summarising implications for effective climate communications, published in 2019<sup>2</sup>.

While the original RESIL RISK maps out public perceptions of climate risks and support for adaptation strategies across the British public and provides insights into how these public perceptions are formed, it does not offer the opportunity to understand the unique situation of devolved UK administrations. Each UK region faces unique challenges when building regional resilience to the impacts of climate change and understanding how these translate into potential differences in public risk perception is essential for building climate resilient communities and nations. Northern Ireland is a post-conflict society where the most socially vulnerable experience disproportionate flood risks, and on average are exposed to higher expected annual damage costs in flood prone areas than any of the other UK nations<sup>3</sup>.

This project provides up to date insights into public perceptions of climate risks and support for adaptation strategies in Northern Ireland at a time when the country has ambitious Climate Legislation awaiting Royal Assent. Key research results and associated recommendations from RESIL RISK Northern Ireland are summarised in this report to support Government, local government and civil society action at a key time influencing legislation in progress and shaping the next NI Climate Change Adaptation Programme.

## Method

To inform the survey design and dissemination, a stakeholder engagement workshop took place on September 14<sup>th</sup> 2021 to identify what questions around public risk perceptions and support for adaptation local councils, national government, climate communicators and policy advisors would like to see answered. The workshop took place online and an online engagement platform tool was used to record outcomes of the discussion.

Recruitment of representative survey samples are difficult to achieve in Northern Ireland, which is the reason public perception data is scarcer than for other devolved UK nations. To achieve the best quality data for this project, we adopted a mixed method design and recruited one quota sample and an opportunity sample. The survey questions for both samples were identical, it took respondents ca. 15 minutes to go through the questions and all respondents were aged 18 years or over. The study was approved by the Ethics Committee of Cardiff University, School of Psychology ([psychethics@cardiff.ac.uk](mailto:psychethics@cardiff.ac.uk)). Recruitment methods for the two samples differed and are outlined below.

*Northern Ireland 2022.* The survey was administered through the online platform Qualtrics and respondents were recruited through Qualtrics panels. Recruitment methods varied from double opt-in panels, publishing networks, social media, and other types of online communities. Recruitment followed a quota sampling method with quotas set for age, gender, region and education to ensure national

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<sup>1</sup> Steentjes, K. et al. (2020). *British public perceptions of climate risk, adaptation options and resilience (RESIL RISK): Topline findings of a GB survey conducted in October 2019.*

<sup>2</sup> Corner, A. et al. (2020) Engaging the public on climate risks and adaptation: A briefing for UK communicators. Oxford: Climate Outreach

<sup>3</sup> Sayers et al. 2020 - Sayers, PB., Horritt, M, Carr, S, Kay, A, Mauz, J., Lamb R, and Penning-Rowsell E (2020) Third UK Climate Change Risk Assessment (CCRA3): Future flood risk. Research undertaken by Sayers and Partners for the Committee on Climate Change. Published by Committee on Climate Change, London.

representativeness of the Northern Irish population - as advised by data from the Office for National Statistics.

NI Opportunity sample. The survey was also administered through the online platform Qualtrics. Respondents were recruited by sending invitations to existing communication channels from project partner Climate Northern Ireland. There was an emphasis to reach out to rural and agricultural communities and to reach out for all views beyond the existing Climate Communities. In return for their participation respondents entered a prize draw with the chance to win online shopping vouchers.

UK 2020. Results from the Northern Ireland survey was compared to the latest version of the RESIL RISK survey, conducted in 2020. This survey was also administered through Qualtrics and recruitment took place via Qualtrics panels. Fieldwork was carried out between 17<sup>th</sup> – 18<sup>th</sup> August 2020 with respondents aged 18 years and over. It took respondents on average 25 minutes to complete the survey. A quota sample was adopted with quotas set for age, gender, region, education and income to ensure national representativeness of the public - as advised by data from the Office for National Statistics

### Northern Ireland sample descriptions

	Northern Ireland 2022	NI Opportunity sample		Northern Ireland 2022	NI Opportunity sample
<b>Sample size</b>					
	380	619			
<b>Age</b>			<b>Gender</b>		
18-24 years	14%	8%	Male	68%	64.2%
25-34	25%	20%	Female	32%	34.8%
35-44	26%	28%	Other	< 1%	< 1%
45-54	19%	22%			
55 years or above	16%	22%			
<b>Education</b>			<b>Region</b>		
University degree (BA, BSc, etc)	22%	33%	Antrim and Newtownabbey	10%	21%
Post-graduate degree (MSc, PhD, etc)	10%	31%	Ards and North Down	12%	7%
Trade Qualification	5%	2%	Armagh City, Banbridge and Craigavon	15%	10%
Professional Qualification	7%	9%	Belfast	20%	14%
No academic or professional qualifications	1%	1%	Causeway Coast and Glens Borough	7%	5%
GCSE O-level/ BTEC or equivalent	26%	10%	Derry City and Strabane	9%	7%
A-level or equivalent	26%	11%	Fermanagh and Omagh	5%	5%

# PERCEPTIONS OF CLIMATE CHANGE

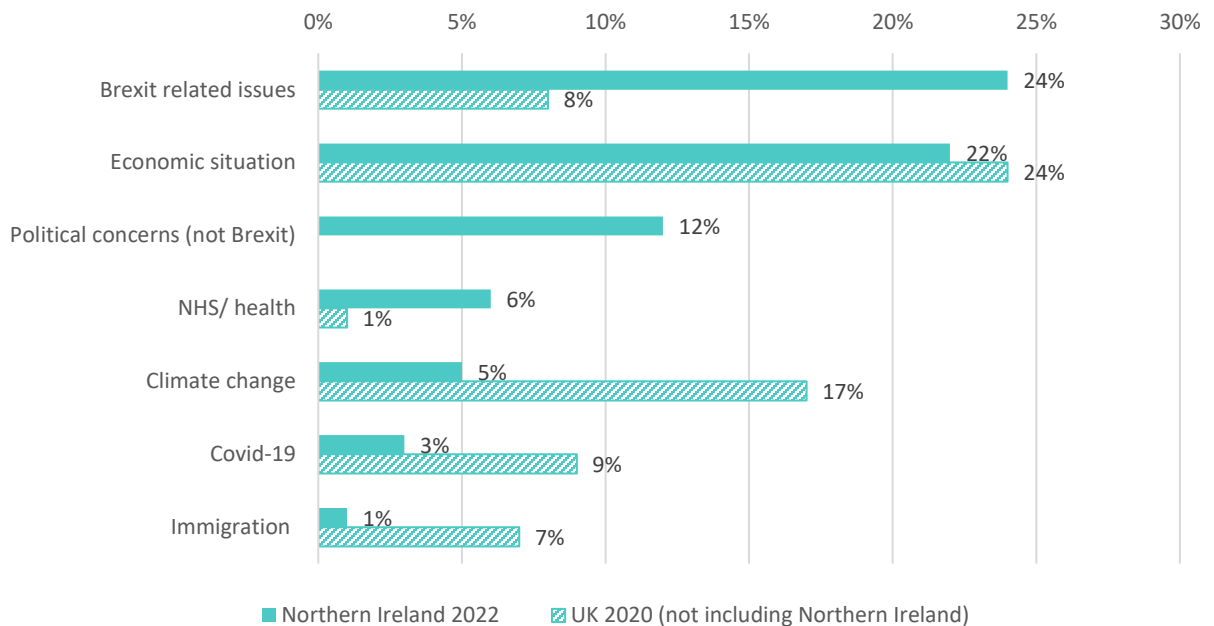
At the beginning of the survey, before the topic of the survey was revealed, respondents were asked (unprompted) to come up with what they think will be the top issue for Northern Ireland in the next 20 years.

Top priorities for people in Northern Ireland are issues like Brexit, the economic situation and non-Brexit related social issues, with climate change only being mentioned as the top issue for the next 20 years by 5% of respondents.

However, a lot of respondents indicated that they are very or extremely worried about climate change. In the Northern Ireland sample 25% of respondents expressed these feelings whilst in the opportunity sample this was as high as 50%.

**Despite the fact that other issues are perceived as bigger issues for their country in the near future, a large majority of 64% to 81% of respondents think that climate change needs to be addressed with high or extremely high urgency.**

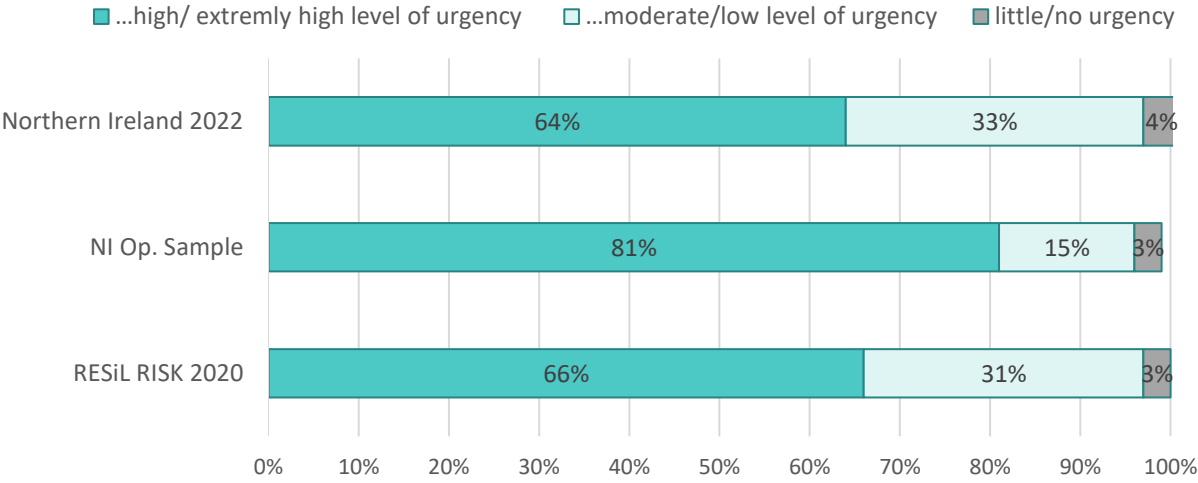
**Question 1. Issue relevance (Northern Ireland 2022 sample only): “What would you say will be the most important issue facing Northern Ireland in the next 20 years?” (open response coding)**



**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

Beliefs about whether climate change is something that will happen far away in the future or to people and places that are far away from oneself are classified as psychological distance. The relevance of these types of beliefs for climate change concerns and implications for personal behaviours are well established in the literature.

This survey identifies some elements of psychological distance beliefs. In previous UK wide surveys, it was identified that a majority of people (71%) believe that we are already feeling the effects of climate change. In 2010 this belief was only held by 34% of UK respondents.

The current survey shows that in Northern Ireland at least half of respondents (53%-76%) think that we can already feel the effects of climate change. Respondents were also asked about how much of a threat they think climate change is to themselves and their family, Northern Ireland, the whole of the UK and people in developing countries. Results show that more respondents believe the threat for the UK to be very or extremely serious (62-64%) than the number of respondents perceiving climate change to be a serious risk for Northern Ireland (32%-48%). Furthermore, there was a big difference in the perceived risk to developing countries between the opportunity sample and the main Northern Ireland sample (42%-84%). In the Northern Ireland sample only 16% feel that they are at serious risk themselves (31% for the opportunity sample).

**Question 4.** *When, if at all, do you think Northern Ireland will start feeling the effects of climate change?*

	We are already feeling the effects	In the next 10 years	In the next 25 years	In the next 50 years	In the next 100 years	Beyond the next 100 years	Never
Northern Ireland 2022	53%	21%	10%	7%	3%	3%	4%
NI Op. sample	76%	10%	7%	3%	2%	1%	1%
UK 2020	71%	11%	9%	5%	1%	1%	2%

**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

Risk perception of specific climate change impacts was measured in this survey by asking respondents about their level of concern associated with each event. Flooding, coastal erosion and heavy storms were the climate change impacts most people classified as very or fairly serious threats to Northern Ireland (76-83%). Perceptions of heatwaves as a serious consequence of climate change has only recently gained awareness across the UK, with only a quarter of people asked in 2013 perceiving heatwaves as a serious or fairly serious risk. In Northern Ireland almost half of each sample would classify heatwaves and hot summers as very or fairly serious risks (42% Northern Ireland sample, 58% opportunity sample).

Personal experience with climate impacts plays an important role in shaping climate beliefs and responses to climate risks<sup>4</sup>. Survey results show that despite heatwaves being rated a less serious risk than for example flooding, most respondents (60%) have personal experience with discomfort during heatwaves and 32% know someone who experiences serious health impacts from heatwaves.

**Question 7.** *How serious of a problem do you think the following currently are for Northern Ireland, or do you not think they are a problem at all?*

	Fairly/very serious	
	Northern Ireland 2022	NI Op. sample
Snow	38%	33%
Cold winters	57%	47%
Mild winters	43%	50%
Dry period without rain	48%	63%
Heatwaves	49%	62%
Flooding	77%	87%
Periods of heavy rainfall	74%	80%
Hot summers	42%	58%
Coastal erosion	76%	77%
Heavy storms with strong winds, rain/hail	83%	84%

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

	Yes - to me		Yes – to someone close to me		No	
	Northern Ireland 2022	NI Op. sample	Northern Ireland 2022	NI Op. sample	Northern Ireland 2022	NI Op. sample
Flood damage to your home	8%	6%	14%	15%	79%	78%
Water restrictions/shortages due to low rainfall	36%	51%	9.5%	16%	55%	32%
Heatwave (discomfort/being unable to sleep)	60%	54%	11%	15%	29%	30%
Heatwave (health significantly affected)	17%	6%	15%	16%	69%	78%
Wildfires during drought periods (disruption to travel, loss of natural habitat)	6%	9%	8%	14%	86%	75%

<sup>4</sup> Demski, C., Capstick, S., Pidgeon, N., Sposato, R. G., & Spence, A. (2017). Experience of extreme weather affects climate change mitigation and adaptation responses. *Climatic change*, 140(2), 149-164. doi:10.1007/s10584-016-1837-4

# SUPPORT FOR CLIMATE CHANGE ADAPTATION

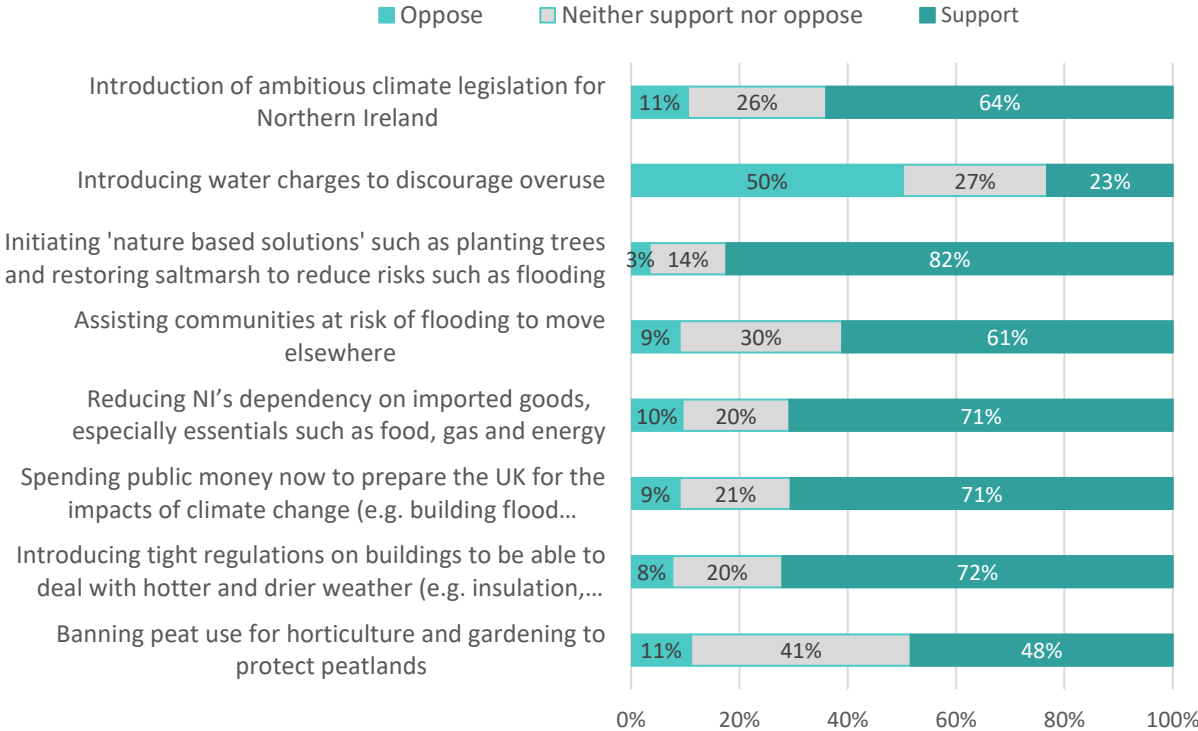
*Policy support*

This survey presented respondents with a range of different policies and strategies that address climate change risks, and asked to them to indicate their support or opposition to each strategy.

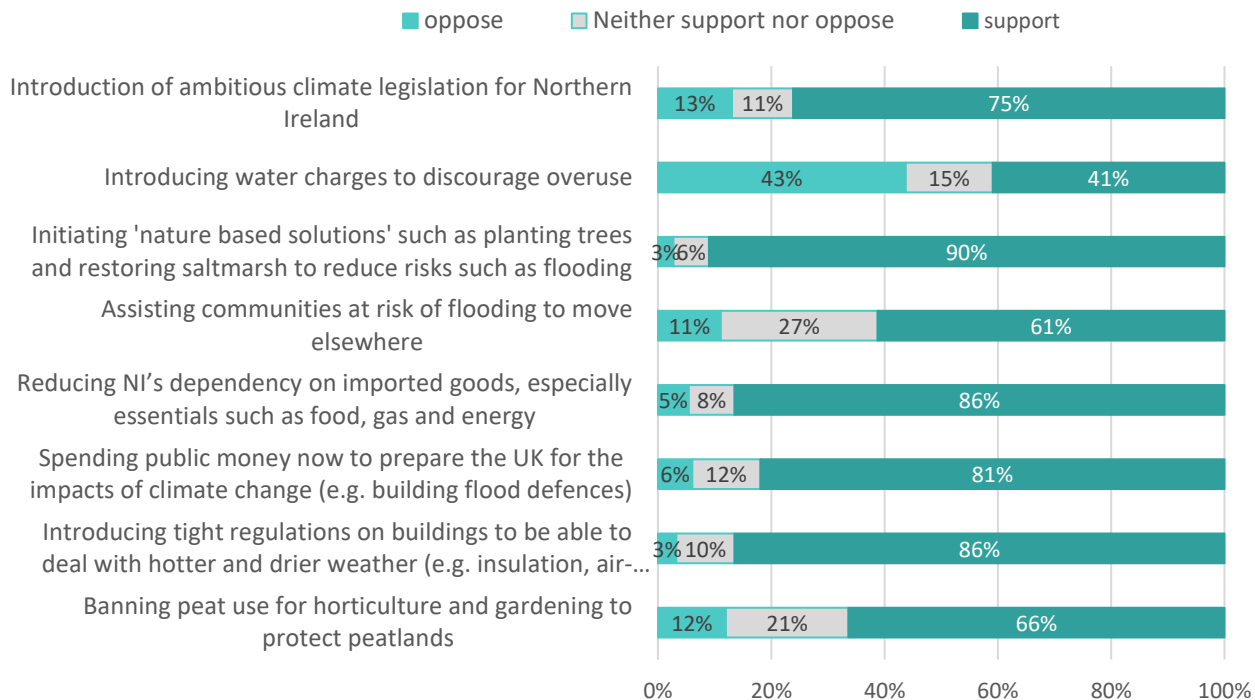
Most adaptation policies such as adopting nature-based solutions to increase flood defence or introducing tighter building regulations were supported by large majorities of respondents 64%-82%. A smaller majority were in favour of banning peat use for horticulture and gardening.

The introduction of water charges received the lowest level of support of all policies respondents were asked about. Only 23% of the Northern Ireland sample expressed their support for water charges, that might discourage overuse and half of respondents from the Northern Ireland sample said that they oppose this policy. In the opportunity sample the support was higher with 41% but this was still the least popular policy in this survey (see appendix for opportunity sample results).

**Question 9. Policy support (Northern Ireland sample only): Various policies might help reduce climate change or deal with its effects. To what extent do you support or oppose the development of the following policies in Northern Ireland?**



**Question 9. Policy support (opportunity sample only): Various policies might help reduce climate change or deal with its effects. To what extent do you support or oppose the development of the following policies in Northern Ireland?**

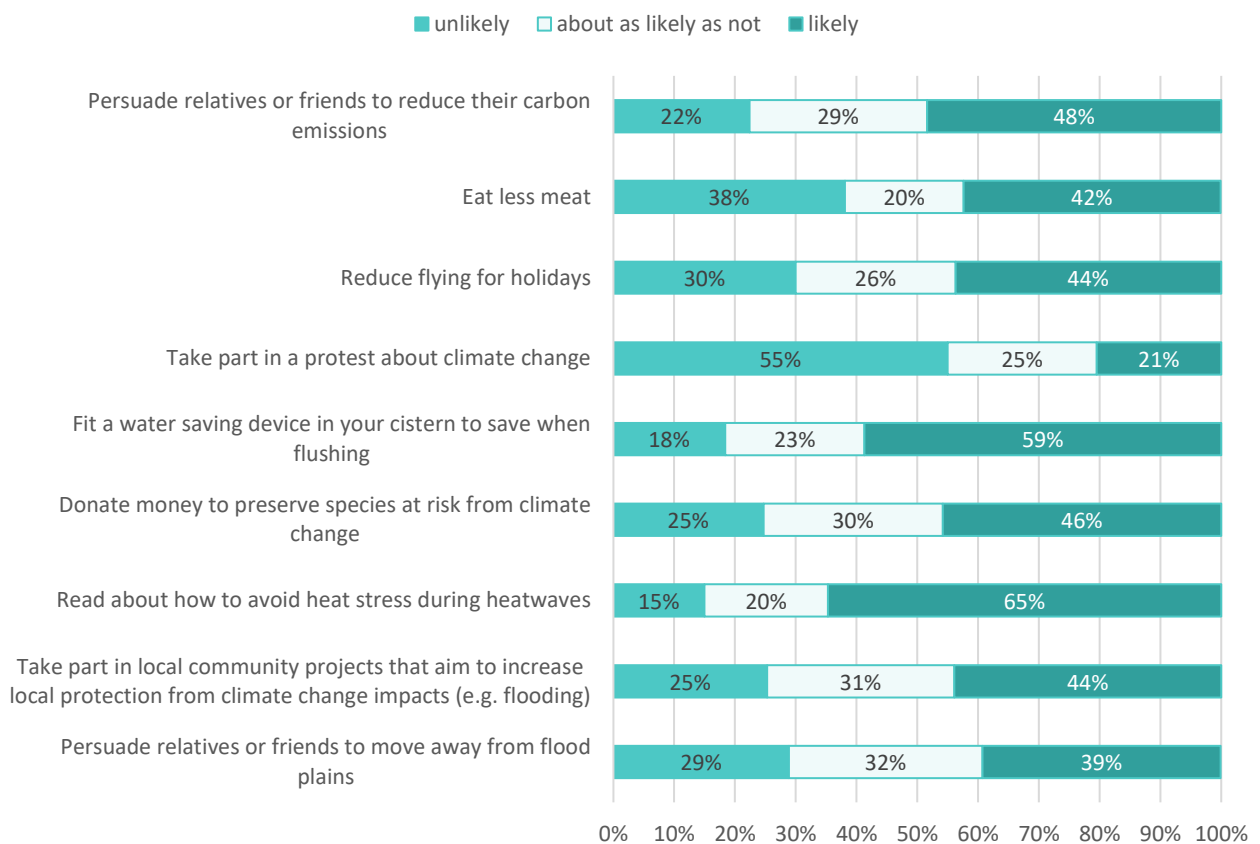


### Behavioural intentions

Respondents were asked about a number of climate change mitigation and adaptation actions and how likely they are to engage in each of these actions in the future (or already engage in). As with previous RESIL RISK results in the UK sample, the results show that on average people in Northern Ireland tend to be more willing to engage in adaptation than mitigation actions. Participating in climate protests was the least favourable action to take overall with persuading relatives to reduce their emissions being the most popular behaviour that would lead to carbon emission reduction.

With regards to actions that would help reduce the impacts of climate change, a majority of respondents indicated their intention to inform themselves about avoiding heat stress (65%).

**Question 10. Behavioural intentions: Please indicate how likely or unlikely you are to take each action in the future.**



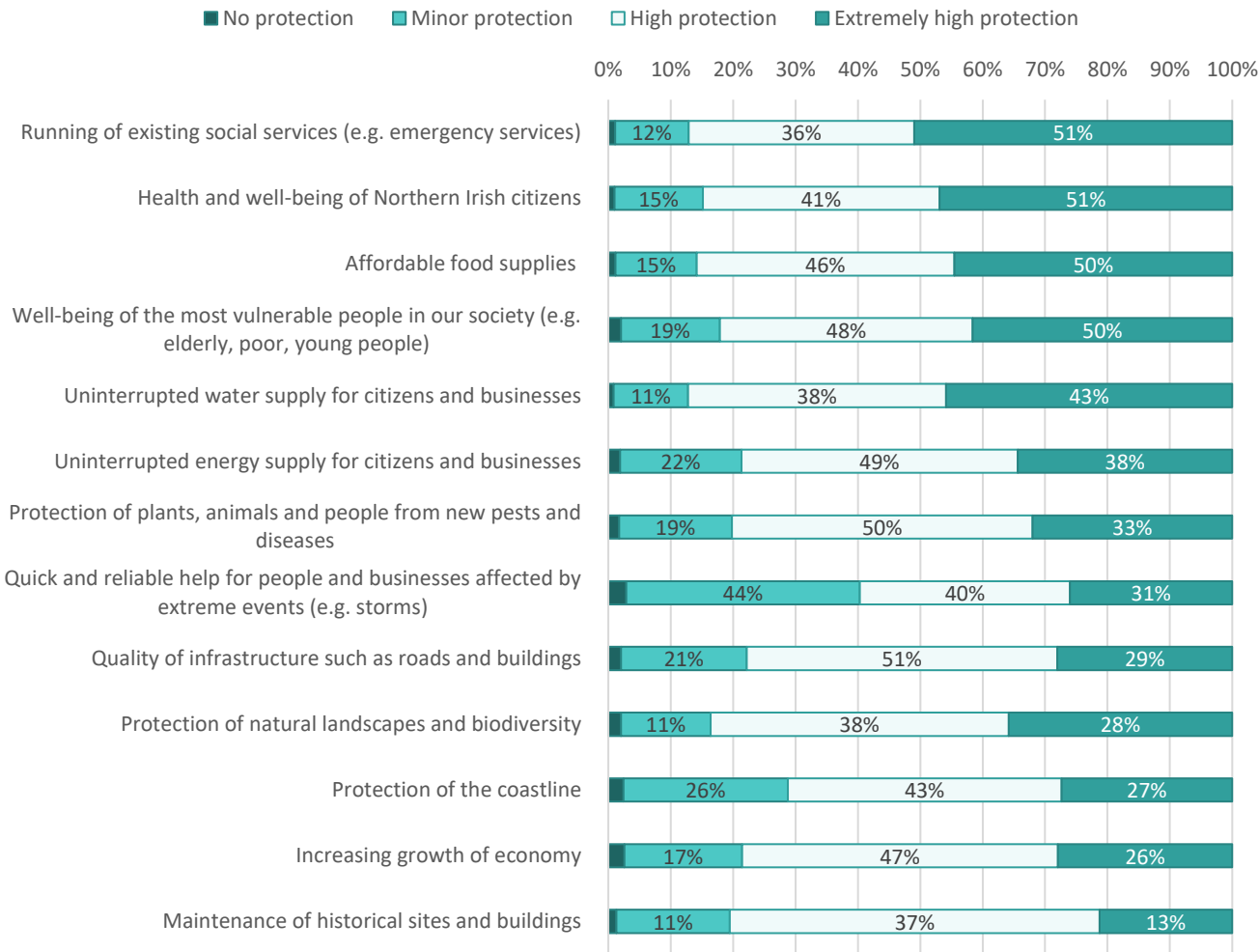
# PRIORITIES FOR ADAPTATION

To understand current public support for building climate resilience it is important to understand what people want to see protected. The survey presented respondents with a list of goods and services that might be affected by climate change impacts and then asked what level of protections they would like to see for each item.

The top priorities for people in Northern Ireland were the safeguarding of basic services such as social services, health and wellbeing, food and the protection of the most vulnerable people in society.

Lowest priority were the maintenance of historic sites and buildings, the protection of the coastline and increasing the growth of the economy.

**Question 12.** For each of the following items, please indicate what level of priority they should receive when preparing for a changing climate in Northern Ireland.



# WHAT CLIMATE ACTION WOULD YOU LIKE TO SEE?

Respondents were asked through open response questions about what climate action they would like to see from their government or other people around them. See a few examples below:

If there was one thing/policy you would recommend the national government to do in relation to climate change, what would it be?

Pay the workers enough so that they could care about climate change. At the minute the cost of living is so high climate change is the least of my worries

The current system doesn't work and needs rebuilding

cashback for being more green

Less reliance on imported goods, creating more local jobs within vulnerable communities

Environmental polluters heavily fined

I am not knowledgeable enough in the subject but I would like them to be more honest when discussing the matter and not using it to garner public approval or for point scoring

Better value and reliable public transport so less people use cars as much... Politicians to set the example by using more public transport. Less of the "do as i say, not as i do" attitude from them

If there was one thing you would want to see other people doing in relation to climate change, what would it be?

Insulate homes

Get rid of their wood and coal burning stoves which emit particles into your lungs.

Help each other through difficult times

Acknowledging it exists and will impact us in our lifetime

Increased use of public transport/walking/cycling/electric vehicles

Reduce, reuse, recycle not just waste but water too

# PERCEPTION OF ACTORS

We asked respondents who they thought is mainly responsible for preparing the country for the impacts of climate change. The Northern Irish government was the top pick in both samples with 38% and 55% choosing them as the main actor. The UK government was the second most popular actor in both samples but received considerably fewer votes. The international community, businesses but also more local actors were only chosen by a few respondents ≤6% as carrying responsibility for climate adaptation.

Trust in actors is an important factor that influences effective climate change communication and mobilization of climate action <sup>5</sup>. The actors who are trusted the least are the Northern Irish government, the UK government and the media amongst both samples in Northern Ireland. The most trusted actors are scientists and scientific advisory institutions such as the Climate Change Committee and the Met Office followed by Environmental Charities.

**Question 16.** *Who is mainly responsible for preparing Northern Ireland for the impacts of climate change?*

	Northern Ireland 2022	NI Op. sample
The Northern Irish government	38%	55%
The UK government	25%	17%
Northern Ireland Department for Agriculture Environment and Rural Affairs (DAERA)	12%	10%
Individuals and their families	10%	7%
Local authorities/councils	6%	4%
Local communities	4%	2%
Business and industry	3%	2%
The international community	2%	2%
Environmental charities	1%	1%
Insurance companies	< 1%	< 1%

**Question 17.** *How much do you trust or distrust the following agencies, organisations, groups or people as sources of information about climate change and its potential impacts?*

<i>Strongly trust percentages</i>	Northern Ireland 2022	NI Op. sample
Scientists	38%	62%
Met Office	25%	37%
Committee on Climate Change	25%	41%
Environmental charities	25%	34%
Family/friends	21%	19%
International Government organisations	15%	24%
Extinction Rebellion	10%	10%
Your local authority/council	7%	5%
Northern Irish government	5%	19%
UK government	4%	4%
Journalists/the media	3%	3%

<sup>5</sup> Cologne, V., & Siegrist, M. (2020). The role of trust for climate change mitigation and adaptation behaviour: A meta-analysis. *Journal of Environmental Psychology, 69*, 101428.

# SUMMARY & RECOMMENDATIONS

## Perceptions of climate change & beliefs

- Most people in Northern Ireland currently state Brexit, economic and political concerns as the biggest issues for their country in the near future. Climate change was only seen as the top issue by 5% of respondents.
- Despite currently prioritising other issues above climate change, a clear majority of people see the need for high levels of urgency for climate action.
- The risk climate change poses to Northern Ireland is perceived as extremely or very serious by a quarter of respondents but for the UK as a whole two thirds of respondents classify the threat as very high.

## Risk perception

- Heavy storms, flooding and coastal erosion are classified as the most serious climate risk for Northern Ireland, with less risk perception of heatwaves.
- Despite few people being concerned about heatwaves, a majority of respondents report personal negative experiences with heatwaves, such as inability to sleep.

## Support for adaptation strategies

- A number of adaptation policies such as spending money on flood defences, adopting nature-based solutions, and tighter building regulations receive high public support.
- An introduction of water charges is more controversial than other adaptation strategies.

## Perception of actors

- The Northern Irish Government and the UK Government are seen to be the main actors responsible for preparing Northern Ireland for the impacts of climate change, but these actors are also amongst the least trusted sources of climate information (along with the media).
- The most trusted sources for Climate Information are scientists, followed by scientific advisory organisations and the environmental charities.



## Recommendations for public engagement

- **Do not hesitate to address climate change now.** Despite facing a range of serious issues at the moment, people in Northern Ireland want to see climate change addressed with high urgency.
- **Clarify seriousness of climate impacts for Northern Ireland.** The risk of climate change to Northern Ireland specifically is perceived as not very serious by most people. This would be a good time to talk about more local consequences of the global climate crisis for this country.
- **Communicate risks of extreme heat and adaptive responses to heatwaves.** People report personal experiences with heatwaves and plans to prepare themselves for extreme heat but at the same time heatwaves are not classified as a serious climate risk by many. Linking up personal experiences with climate change might increase risk perception and adaptation responses.
- **Focus adaptation strategies on providing basic needs and assisting vulnerable groups.** People prioritise the protection of basic supplies, social services and help the most vulnerable in society when it comes to building resilience towards climate impacts.
- **Improve trust in governments and utilize trusted actors.** Northern Ireland government as well as UK government receive very low levels of trust which can undermine the adoption of effective climate adaptation policies. Trust needs to be improved and it might be useful to communicate important adaptation messages through trusted sources such as scientists or government advisors instead.