

# Implementing climate justice in Glasgow City Region

ClimateJust In Scotland Event  
31 January 2018



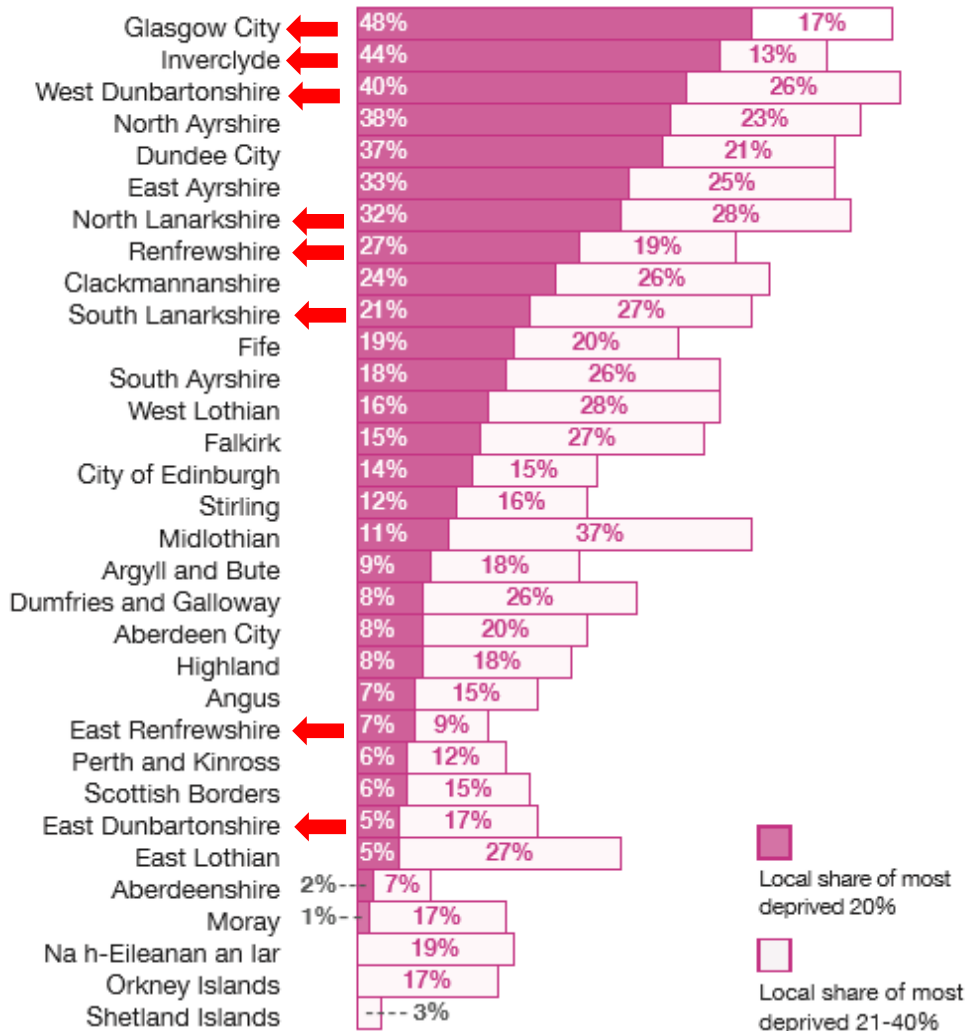
ClimateReadyClyde

# Glasgow City Region's inequality



- Glasgow City Region a place which has experienced significant inequality over the past 50 years
- Linked to wider economic decline and ambitions to regenerate the City Region – e.g. shipbuilding and tenements
- A 15-year gap in male life expectancy and an 11-year gap in female life expectancy
- Over a 13-year period between 1995-1999 and 2008-2012, male life expectancy increased across all neighbourhoods, whereas female life expectancy appeared to have fallen in four areas of the city.



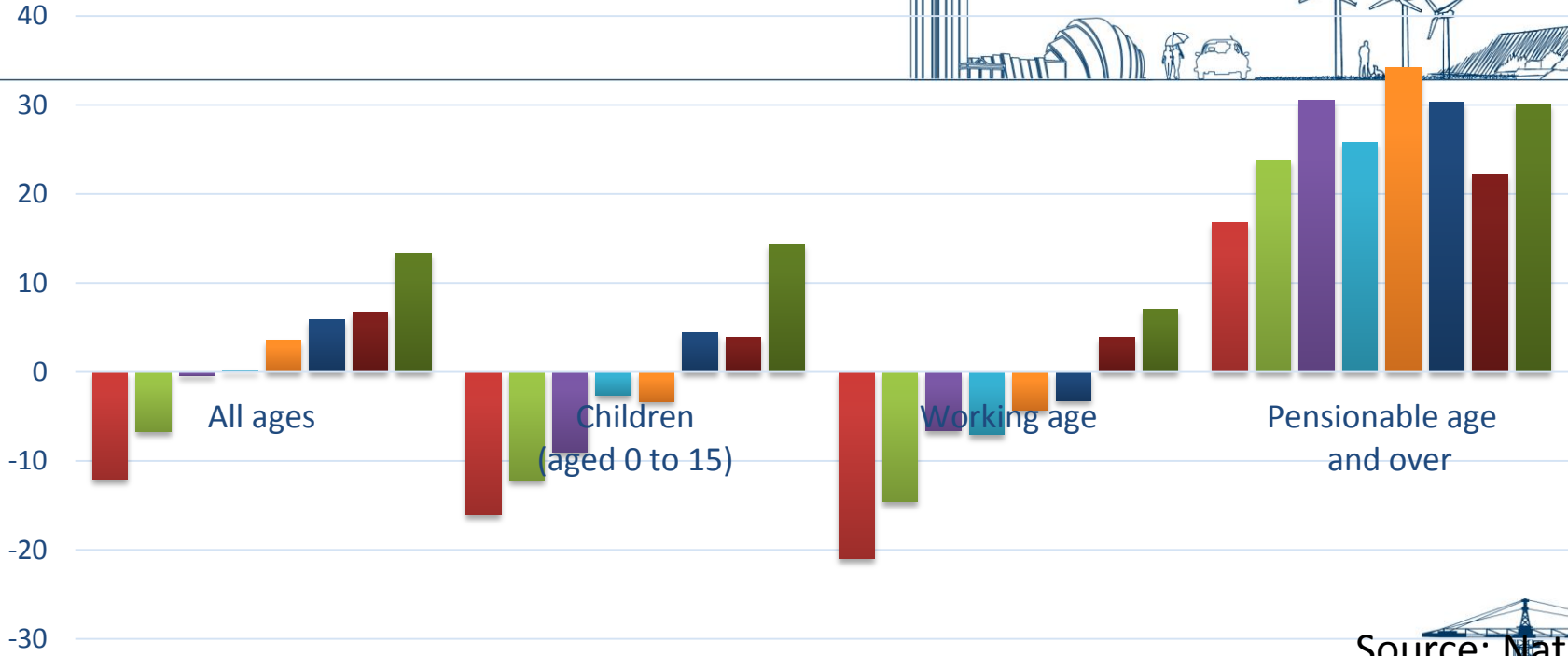
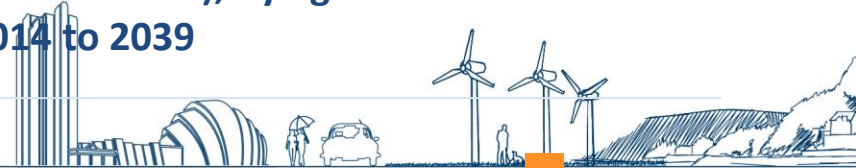


## SIMD share of most deprived datazones in Scotland

A difficult place to start from – but also a reason to focus on this issue



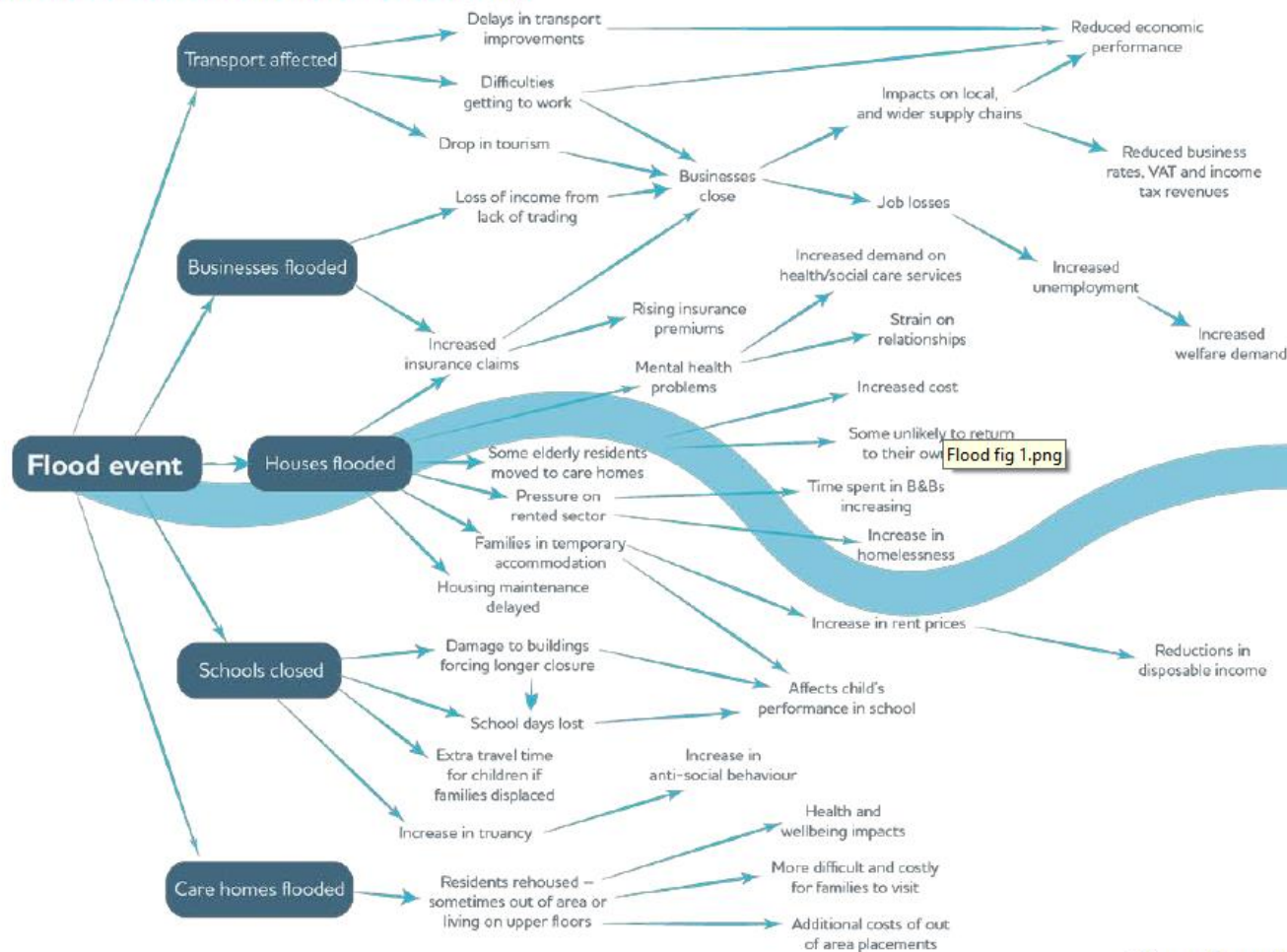
# Projected percentage change in population (2014-based), by age structure in Glasgow City Region, 2014 to 2039



- Inverclyde
- West Dunbartonshire
- North Lanarkshire
- Renfrewshire
- South Lanarkshire
- East Dunbartonshire
- Glasgow City
- East Renfrewshire

Source: National Records of Scotland

Figure 6: Cascade effects and wider costs of flooding



**Examples of impacts**

**2013/14**

- Dawlish railway line closure £60m – £1.2bn, (Devon Maritime forum, 2015)
- Cost to UK SMEs £831m. (FSB, 2014)
- 18,700 insurance claims totalling £451m, (Flood free homes, 2015)
- 7,800 homes, nearly 3,000 commercial properties flooded, one of UK's busiest ports closed for days (CIWEM 2015)

**2012**

- Newcastle – £8m+, 1000+ homes flooded, 500 internally, Metro, motorway, local roads and national rail closed. (Newcastle City Council, 2013)
- Net loss of £823,900 to 26 businesses in Calder Valley (DEFRA/Calderdale Council, 2015)

**2007**

- Total estimated at £3.2 billion, based on infrastructure damage (health and social costs not included). (DEFRA 2010)
- Cost to Local Authorities of £250m (Audit Commission 2007).
- 400,000 pupil school days lost due to school closures (HPA 2012)
- Sheffield £30m – inc. £20m roads, £3m Housing. (City Council/BBC)

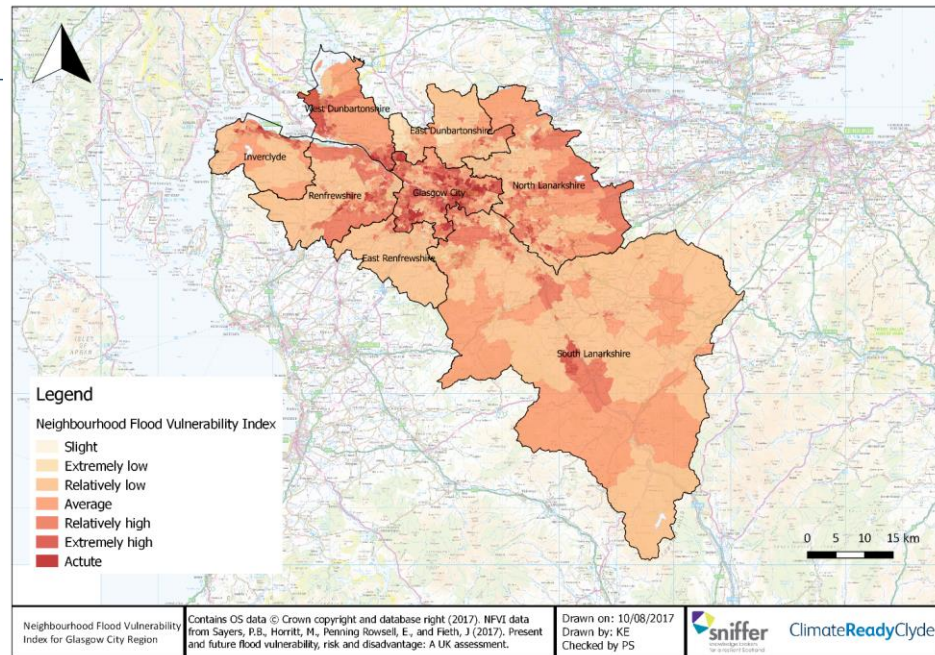
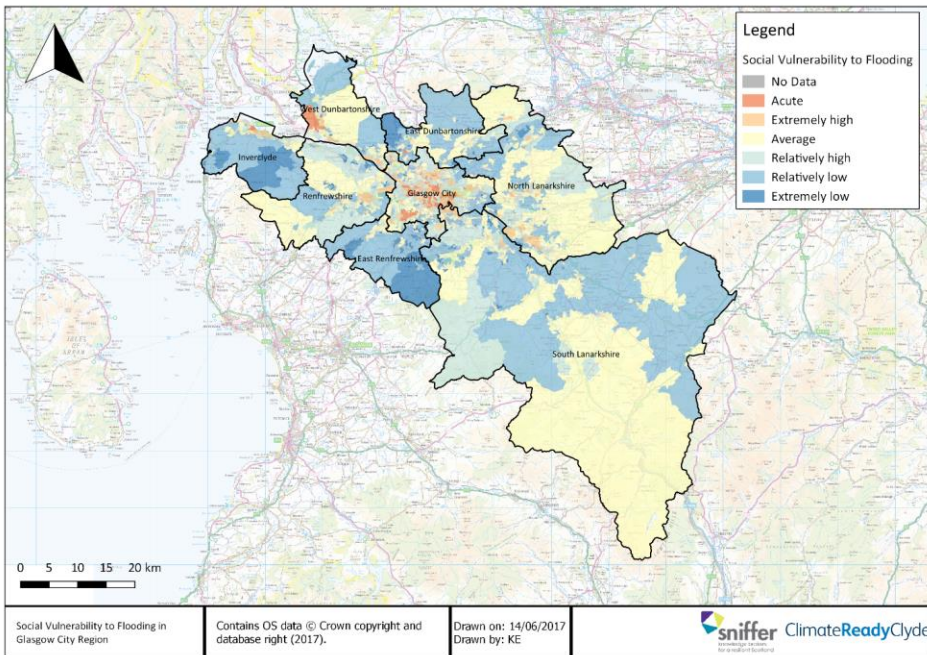
**2005**

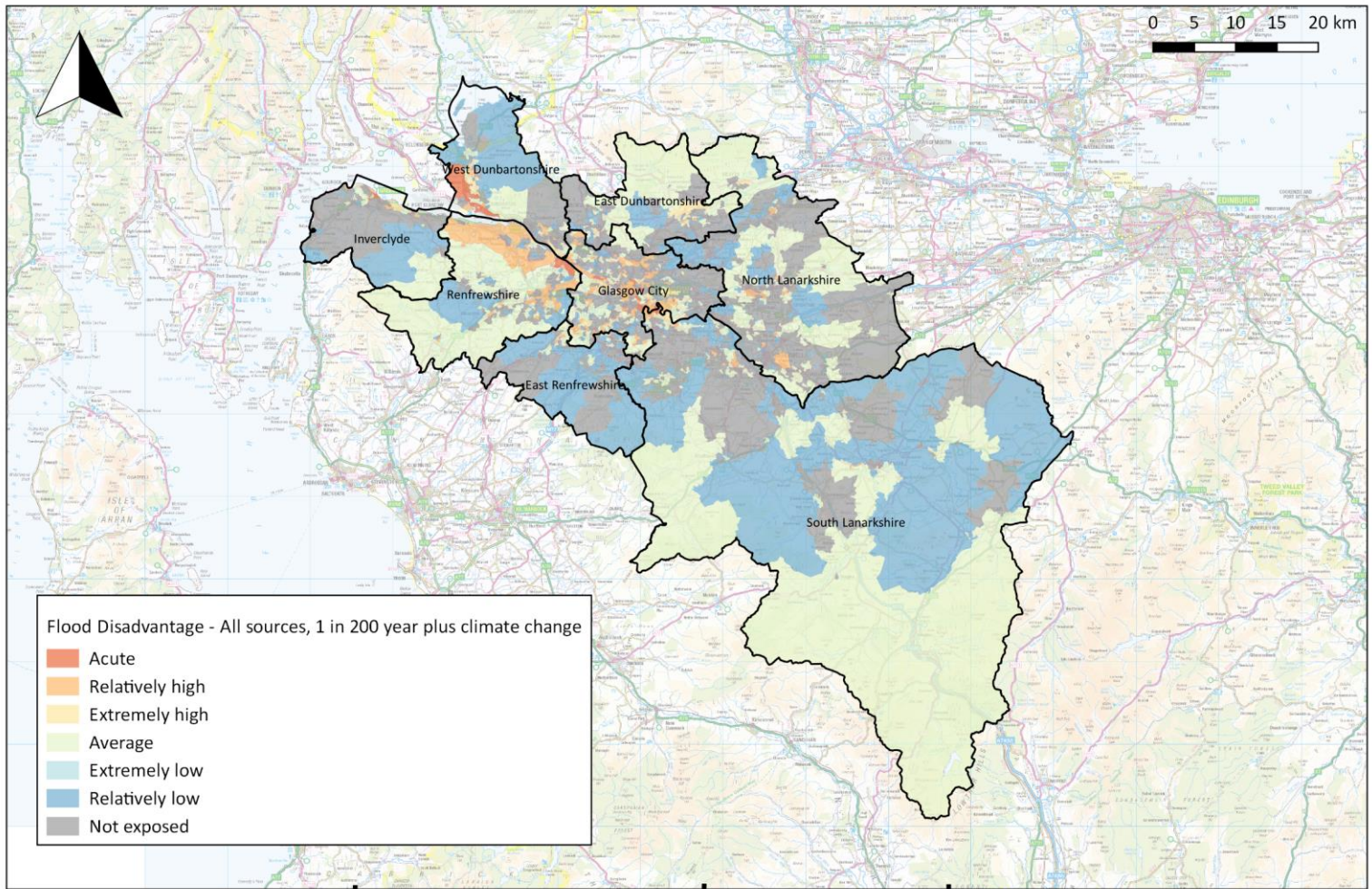
- Carlisle – £400m, 3 deaths, 3500 homes flooded (APSE)

N.B. These are partial, illustrative examples, only including some costs, and not capturing all impacts

Adapted from Audit Commission, *Staying afloat*, 2007  
 Source: Knox and England

# Social vulnerability to climate change





Flood Disadvantage in Glasgow City Region - 1 in 200 year return period plus climate change, all flooding

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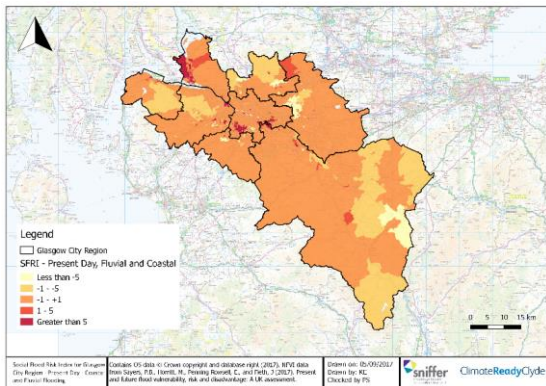
Drawn on: 10/05/2017  
Drawn by: KE



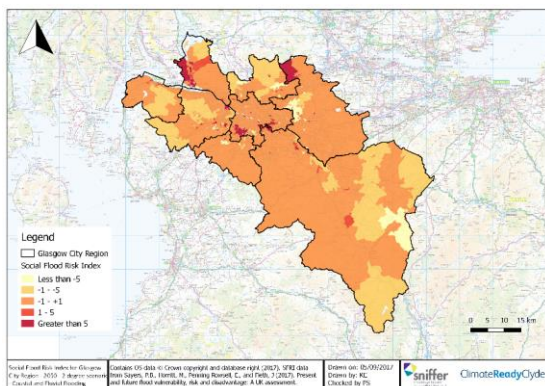
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Clyde

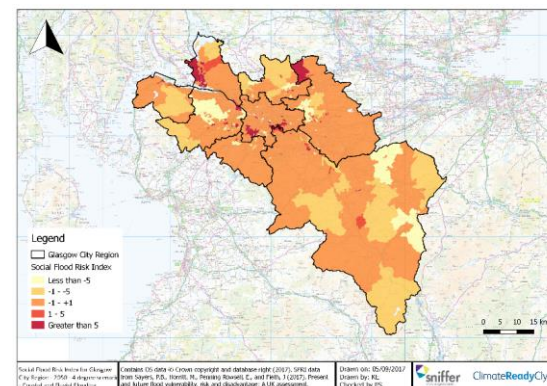
Present Day



2050s (2 degree pathway)

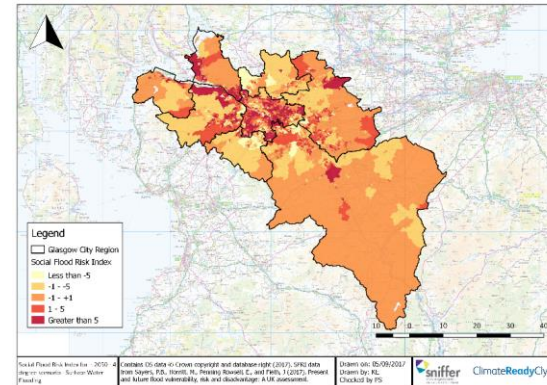
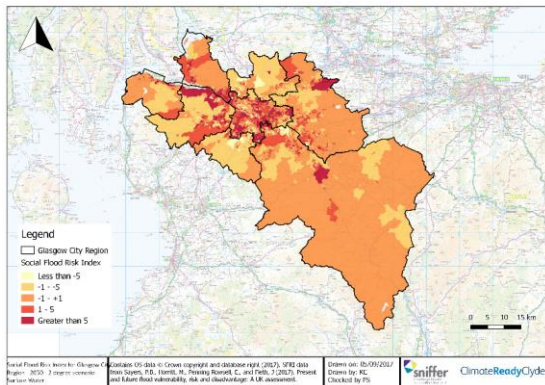
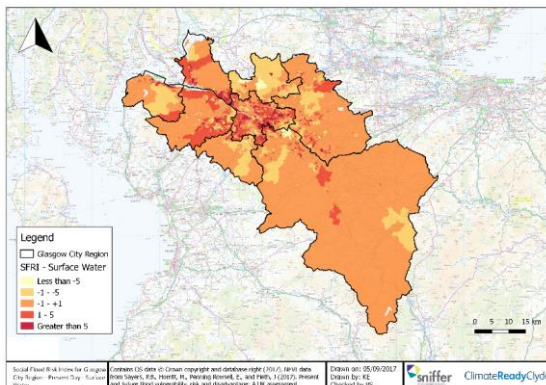


2050s (4 degree pathway)



Fluvial and Coastal

Pluvial

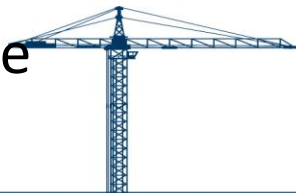




# Headline messages



- Current high levels of flood disadvantage in City Region – and projected to widen.
- Concentrated (but not isolated to) around the Clyde.
- Pluvial flood disadvantage a more significant concern than fluvial/coastal
- Social vulnerability a key part of this – suggesting need for mechanisms to reduce vulnerability and build adaptive capacity (not just reduce exposure), a key response



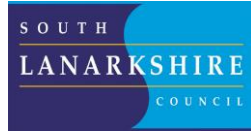
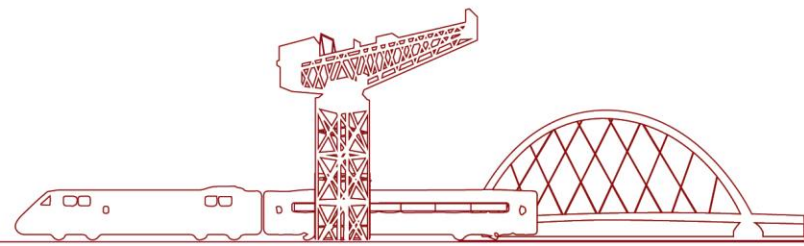
# Climate Ready Clyde



- A 3 year, initiative to support Glasgow City Region to meet the challenges of changing rainfall, and rising temperatures and seas.
- Building a shared understanding of climate risks and opportunities, and collaborating to adapt
- Delivering adaptation strategy and action plan for Glasgow City Region
- Strong commitment to embedding climate justice concepts



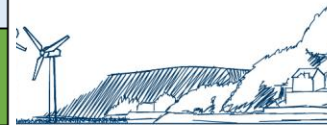
# Who's involved?



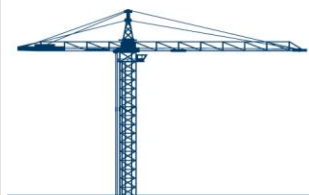
Risk/Opportunity	GROUP 1 PRIORITY	GROUP 2 PRIORITY
Risks to health from changes in air quality	Extremely Important	Extremely Important
Increased patient demand on NHS services from high winds, snow and ice, floods, cold weather	Extremely Important	Extremely Important
<b>Risks of increasing inequality due to climate impacts</b>	Not ranked	Extremely Important
Risks to health from vector-borne pathogens	Very Important	Very Important
<b>Risks to people and communities from flooding</b>	Very Important	Very Important
Increase in summer temperatures and heatwaves leading to excess summer deaths	Important	Important
Increase in summer temperatures and heatwaves leading to increased morbidity	Important	Important
Risks to the viability of coastal communities from sea level rise	Less Important	Less Important
Risks to business continuity of health and social care from extreme weather	Less Important	Less Important
Increased use of public space and tourism	Less Important	Less Important
Potential benefits to health and wellbeing from reduced cold	Less Important	Less Important
Opportunity for greater self-sufficiency due to increased food growing	Not ranked	Less Important



No.	Socially just principles	Criteria for successful adaptation	GCR
1	Taking into account current and future climate change impacts	<i>Effectiveness</i>	Evidence of consideration
2	Understanding the different factors that contribute to vulnerability	<i>Effectiveness</i>	Evidence of consideration
3	Developing responses which build adaptive capacity, support adaptation actions and consider both physical infrastructure and service delivery	<i>Efficiency</i>	Evidence of consideration
4	Considering and assessing all adaptation options to ensure the most beneficial are taken forward	<i>Efficiency</i>	Evidence of consideration
5	Identifying the distribution of vulnerable groups likely to be affected and recognising that vulnerability is dynamic and changes over time	<i>Equity</i>	Some evidence
6	Assessing the potential adverse implications of climate change for vulnerable groups and identifying targeted adaptation actions to address vulnerability	<i>Equity</i>	<b>Not considered</b>
7	Involving the communities most likely to be affected in developing and delivering plans and activities related to adaptation, and supporting community resilience longer term	<i>Legitimacy</i>	Some evidence
8	Being aware of the trade-offs that can arise in striving to achieve socially just adaptation and minimising the negative impacts for vulnerable communities as far as possible	<i>Legitimacy</i>	<b>Not considered</b>



Source: Cotton, 2017



# Other broader work



- Economics Implications of Climate Change study – will set out the distributional impacts of climate change costs - Completing June 2017
- Glasgow City Council – Equalities Impact Assessment for Adaptation Strategy
- Weathering Change – project looking at enabling Community Resilience in the face of climate change at grassroots level



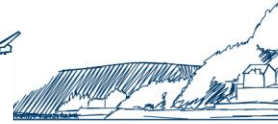
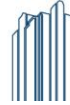
# Implications for City Region adaptation strategy



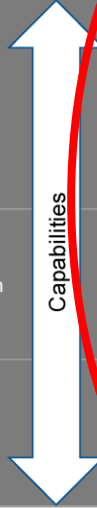
A two pronged approach:

- More SUBSTANTIVE efforts to enable future climate equality
  - Developing EVIDENCE AND UNDERSTANDING on who bears the costs of climate change and structuring actions accordingly
  - Substantive action to address these areas – with a view to fairness, equity and equality
- A more inclusive PROCESS
  - Equality impact assessment
  - Extra effort on consultation and engagement with vulnerable and disadvantaged groups

# Δ possible way forward?



		Governance levels		
		Sub-national	National	International
Pillars of social justice	CCD initiatives	<ul style="list-style-type: none"> <li>• Donor-funded programmes and projects</li> <li>• Business activities</li> <li>• Autonomous household and community responses</li> </ul>	<ul style="list-style-type: none"> <li>• Policy and legislation</li> <li>• Institutional arrangements</li> <li>• Public services</li> </ul>	<ul style="list-style-type: none"> <li>• Global agreements and frameworks</li> <li>• Climate and donor finance architecture</li> <li>• Policy mechanisms</li> <li>• Conceptual development</li> </ul>
	Recognition	<b>Priority research areas (example research approaches in brackets):</b> <ul style="list-style-type: none"> <li>• Comparison of sub-national stakeholders' preferences for CCD [22]</li> <li>• Analysis of stakeholder recognition through CCD design and implementation [34]</li> </ul>	<b>Priority research areas (example research approaches in brackets):</b> <ul style="list-style-type: none"> <li>• Evaluation of stakeholder preferences for, and engagement in national climate change planning [25]</li> <li>• Examination of whether and how the preferences of marginalised groups have been incorporated into national CCD planning and policy [89]</li> </ul>	<b>Priority research areas (example research approaches in brackets):</b> <ul style="list-style-type: none"> <li>• Examination of the key actors, organisations and ideas that shaped the emergence of CCD and related policy narratives [12]</li> <li>• Examination of stakeholder recognition and participation within the design and implementation of global agreements, frameworks and policy</li> </ul>
	Participation	<b>Priority research areas (example research approaches in brackets):</b> <ul style="list-style-type: none"> <li>• Analysis of stakeholder participation within CCD design and implementation [34]</li> </ul>		
	Distribution	<b>Priority research areas (example research approaches in brackets):</b> <ul style="list-style-type: none"> <li>• Evaluation of distributive trade-offs between beneficiaries [11,45]</li> </ul>	<b>Priority research areas (example research approaches in brackets):</b> <ul style="list-style-type: none"> <li>• Evaluation of distributive trade-offs created by policy and public services [90]</li> </ul>	<b>Priority research areas (example research approaches in brackets):</b> <ul style="list-style-type: none"> <li>• Global analyses of climate finance flows [91,92]</li> </ul>



Source: Wood et al. 2018



Context





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