Involving citizens in policy making: Lessons from ClairCity

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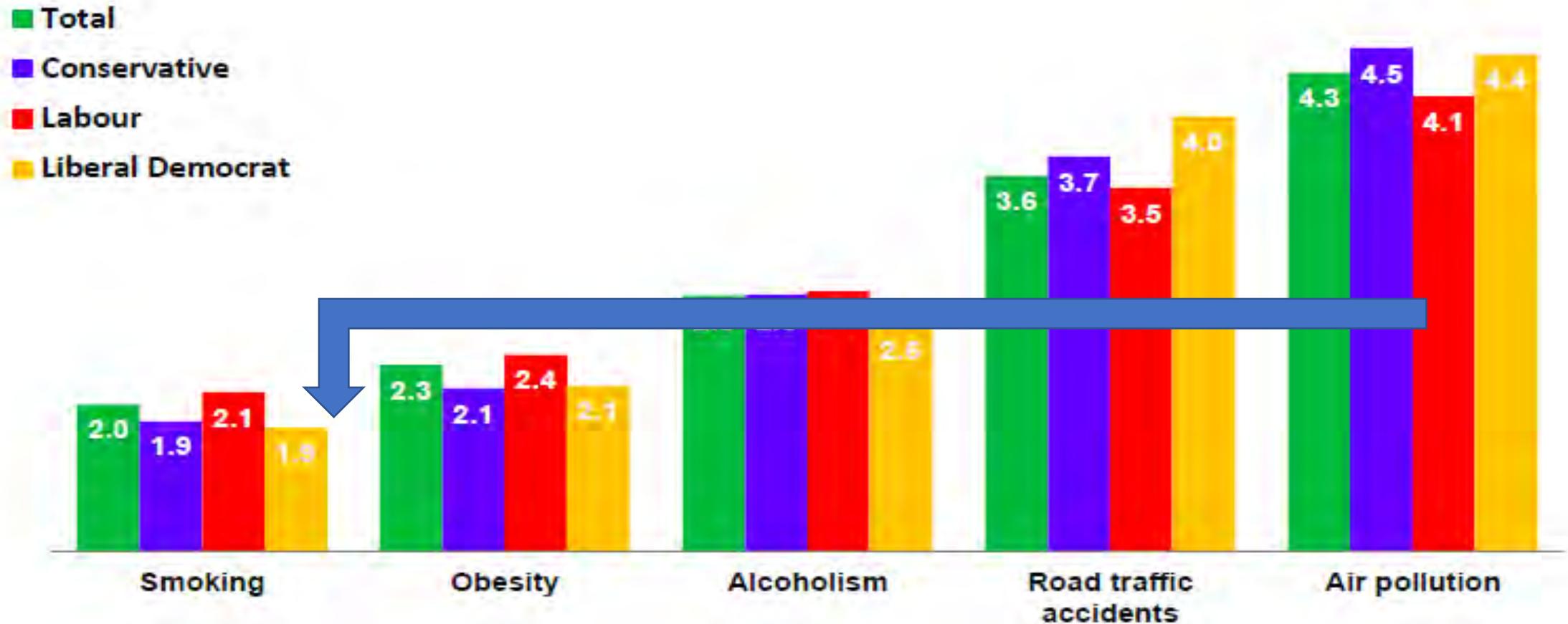
@HayesEnda @ClairCity

Aveiro, Portugal, 10th April 2019

We choose air pollution (& impacts)!

- Air pollution is a consequence of **political, economic and societal choices** and the availability of technology. Air pollution has a dynamic relationship with these factors.

- Our **social, political and economic responses** to air pollution have often lagged behind our awareness and understanding of the impact of air pollution.

- The **public's willingness** to accept a particular amount of pollution changes over time.

- The ability and willingness of our institutions to tackle air pollution **varies with the level of public concern**, the economic costs of change, the impacts of air pollution and the availability of technological solutions.

Political Understanding ≠ Political Will

Legend:
- Total (green)
- Conservative (purple)
- Labour (red)
- Liberal Democrat (yellow)

Risk Factor	Total	Conservative	Labour	Liberal Democrat
Smoking	2.0	1.9	2.1	1.9
Obesity	2.3	2.1	2.4	2.1
Alcoholism				2.5
Road traffic accidents	3.6	3.7	3.5	4.0
Air pollution	4.3	4.5	4.1	4.4

Rank the following risk factors in terms of the number of early deaths attributable to them in the UK annually (rank 1 is for the greatest number of deaths; and 5 is for the lowest number). Base 101

Are we having the right conversation?

People create pollution through technology

Traditional approaches to managing air pollution

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ClairCity approach to managing air pollution

Look at technology

Look at why people use the technology

Has research/policy/media failed?

Failure of policy to bring citizens, communities and organisations on board?

1. **Poor perception of risk**: Issues are presented in abstract, descriptive and analytical formats.

2. **Psychological distance**: Focus on future consequences but costs/health not immediately recognised.

3. **Negative framing**: issues framed against losses to society e.g. higher taxation, reduced consumption, low quality of life etc

4. **Better contextualisation** to allow people to make sense of data in relation to the real world

5. **Overwhelming** people with evidence?
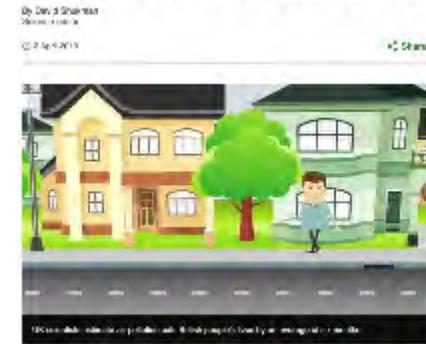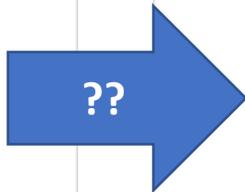
Giving citizens a voice

Citizen & Stakeholder Engagement

Giving data context through citizens - Delphi

ClairCity in practice
Our future with clean air

How do people currently travel to work in Bristol?

- Car only, 129, 29%
- Car and other modes, 73, 17%
- Non-car, 239, 54%
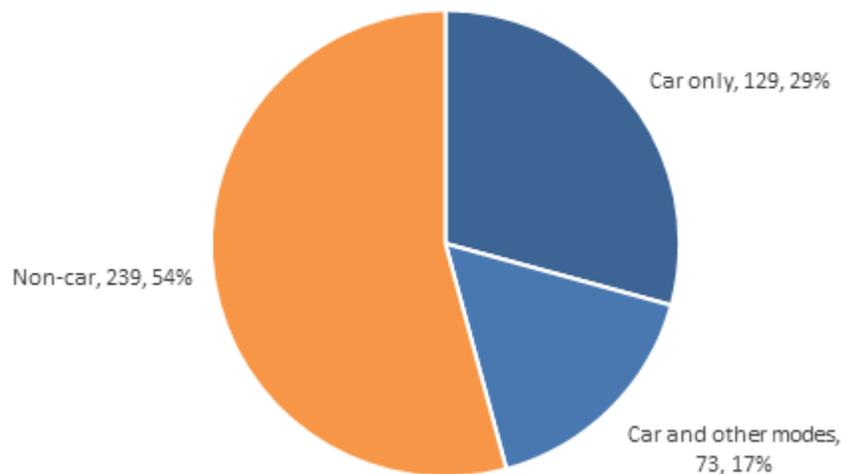
How do people want to travel to work in the future in Bristol?

- Car only, 64, 15%
- Car and other modes, 46, 10%
- Non-car, 329, 75%
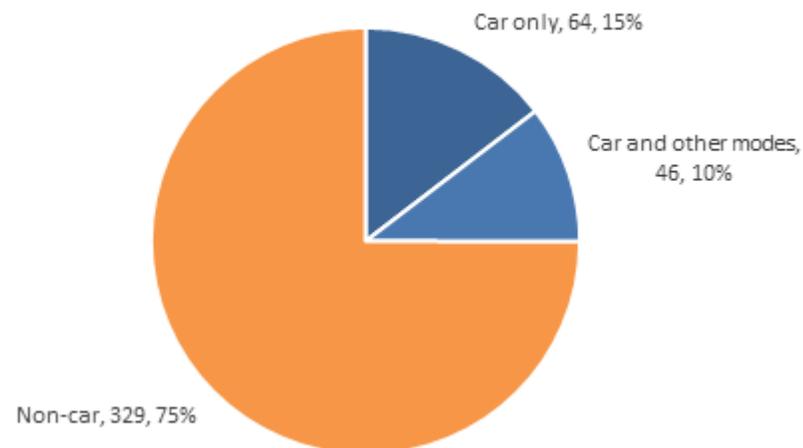
Present home heating Bristol

- Electric, 55, 10%
- Other, 10, 2%
- Oil, 8, 1%
- Renewables/ other green, 13, 2%
- Solid fuel, 49, 9%
- Gas, 429, 76%
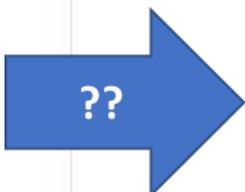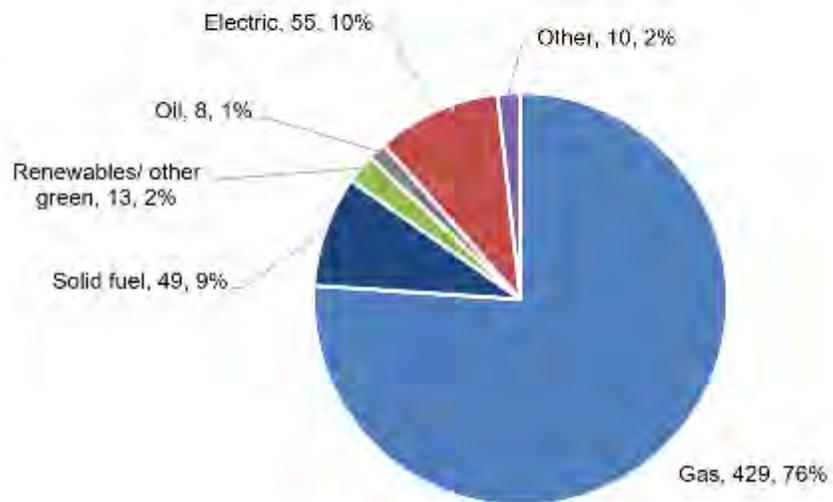
Future home heating Bristol

- Other, 21, 4%
- Electric, 22, 5%
- Gas, 96, 20%
- District Heating, 7, 1%
- Solid fuel, 38, 8%
- Renewables/ other green, 306, 62%

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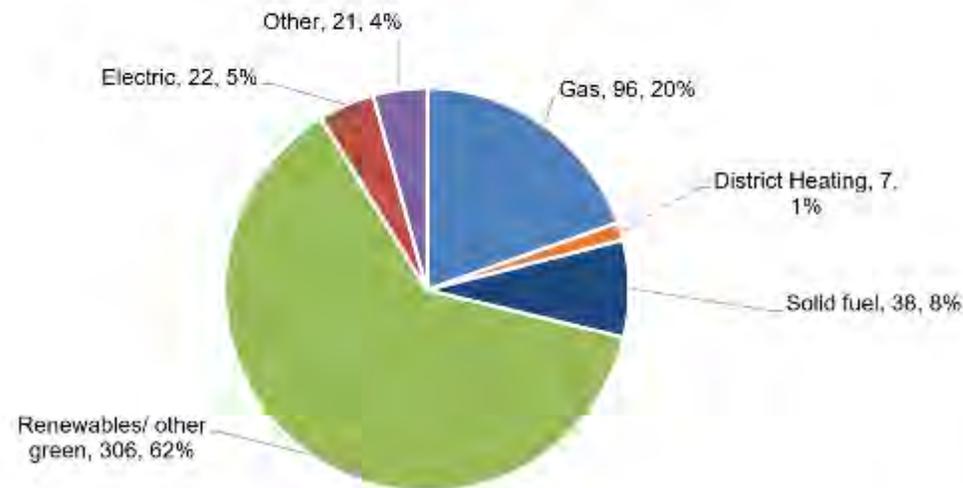
Why do car users want to change / not change?

Insufficient/poor quality public transport

"Bus times do not fit with work shifts. Would have to take 2 buses and twice as long to drive. Cycling facilities at my workplace are not great, no shower. Roads feel unsafe at peak times, cycle routes are just on edge of road, often randomly stopping just before difficult areas eg junctions"

Flexible/convenient

Safety fears

Lack of changing or shower facilities

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Barriers to change

Why are car users that are "looking for positive change" unable to switch to alternative modes of transport in Bristol?

- Negative public transport, 44
- Time/ distance, 12
- Other , 8
- Cost , 7
- Convenience, 6
- Safety, 5
- Poor health, 4
- Work, 4
- Lack of alternatives, 3
- Timing / timetabling, 2
- No / poor infrastructur...
- Discomfort, 2
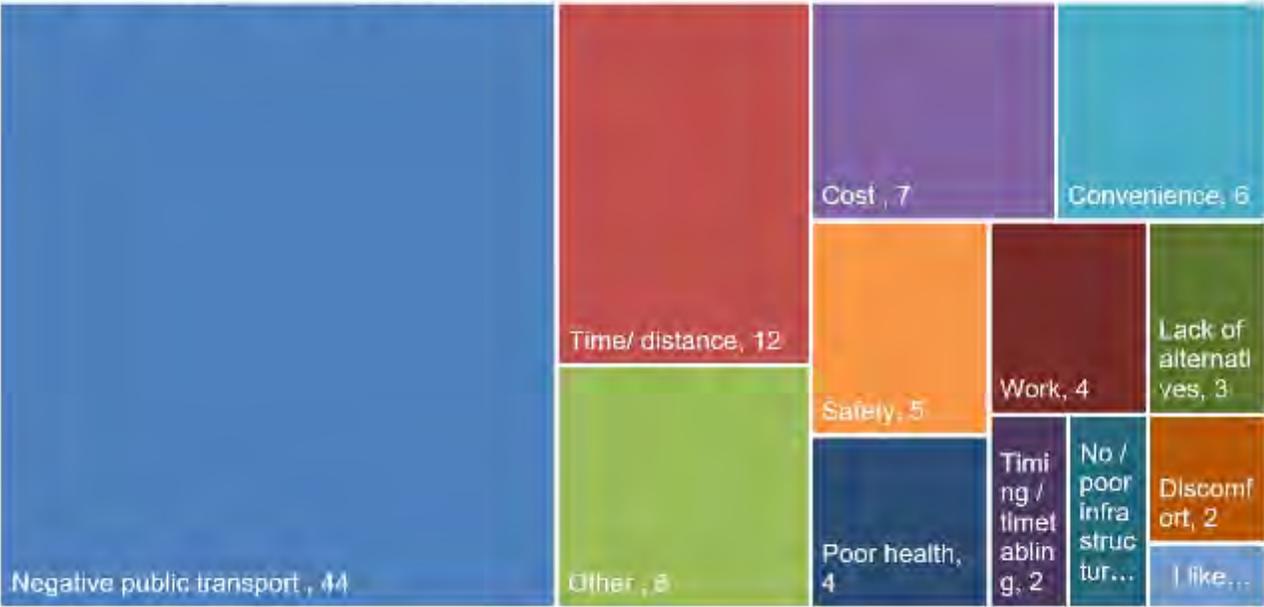- I like...

Legend:
- Negative public transport
- Time/ distance
- Other
- Cost
- Convenience
- Safety
- Poor health
- Work
- Lack of alternatives
- Timing / timetabling
- No / poor infrastructure
- Discomfort
- I like it
- Best option

Why are people that are "looking for positive change" unable to switch to alternative home heating in Bristol?
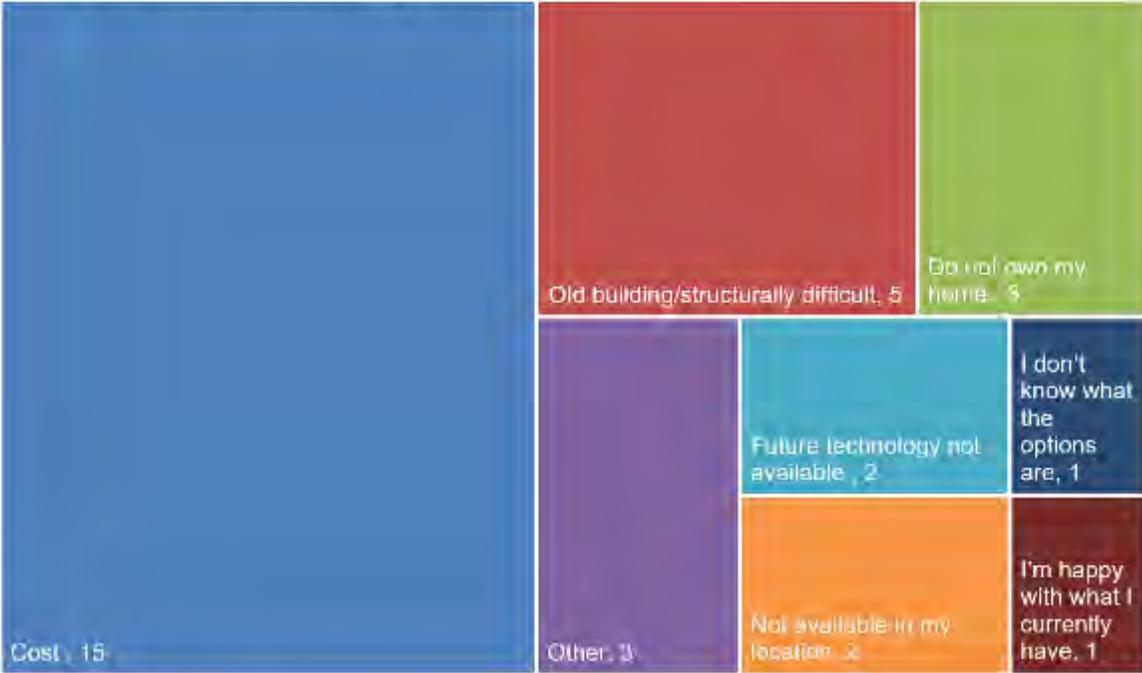
- Cost, 15
- Old building/structurally difficult, 5
- Do not own my home, 3
- Other, 3
- Future technology not available , 2
- Not available in my location, 2
- I don't know what the options are, 1
- I'm happy with what I currently have, 1

Legend:
- Cost
- Old building/structurally difficult
- Do not own my home
- Other
- Future technology not available
- Not available in my location
- I don't know what the options are
- I'm happy with what I currently have

Enabling change

Citizens' views on impact of proposed policy options in Bristol on their lives

	Policy
6	Improve bus service
20	Create segregated cycle lanes
7	Make buses free
5	Introduce trams
2	Open closed railway lines
14	Pedestrianise the city centre
16	Charge older/more polluting vehicles entering the city
15	Ban diesel cars from the city centre
1	Build an underground metro
19	Extend 20 mph speed limits
17	Introduce a vehicle scrappage scheme
12	Create more bus / 2+ lanes
9	Create more Park and Rides
8	Make parking free
4	Reduce the number of traffic lights
3	Build more / widen existing roads
11	Scrap Residents' Parking Zones
10	Extend Residents' Parking Zones
18	Scrap 20 mph speed limits
22	Build more motorway junctions
13	Scrap bus / 2+ lanes
21	Scrap cycle lanes

Legend: ■ Positive impact on my life ■ No impact on my life ■ Negative impact on my life

Citizens' views on impact of proposed policy options in Bristol on their city

	Policy
6	Improve bus service
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22	Build more motorway junctions
11	Scrap Residents' Parking Zones
18	Scrap 20 mph speed limits
13	Scrap bus / 2+ lanes
21	Scrap cycle lanes

Legend: ■ Positive impact on my city ■ Neither good nor bad ■ Negative impact on my city

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Making it engaging: ClairCity Skylines Game
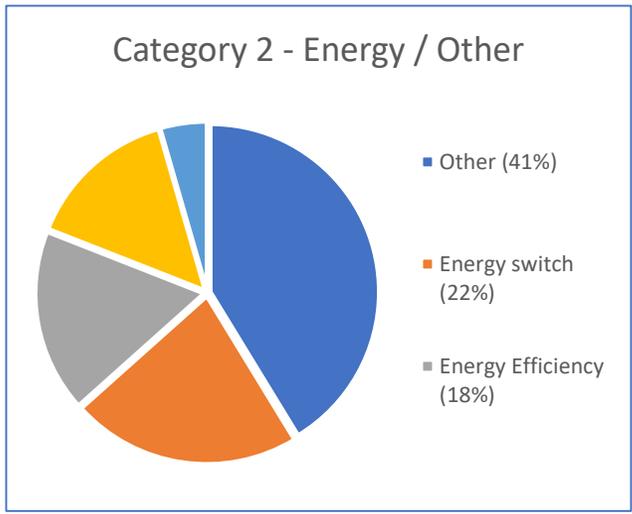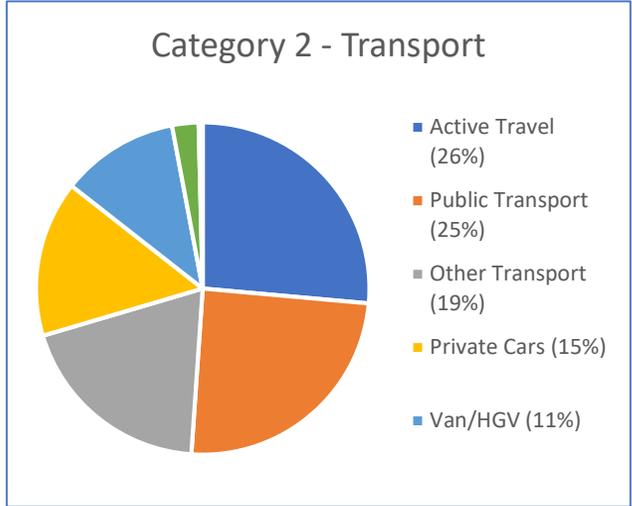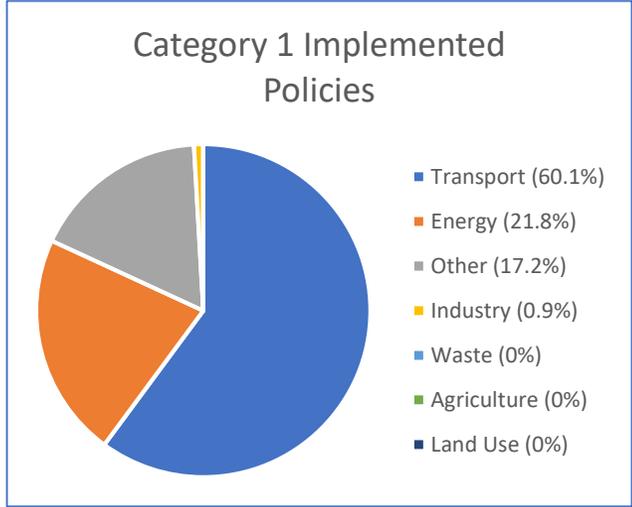
Attribute scores drive all AV-FX

Game world areas decay or regenerate

City smog or decay (climate and economy)

Citizen health + satisfaction (sick or happy)

Attribute	Area	Visual Effect
Climate	Green Space	Smog
Economy	Bank	Dereliction
Health	Hospital	Citizen Sickness
Satisfaction	Tourist Area	Citizen Happiness

Understanding public perceptions & acceptability

Category 1 Implemented Policies

- Transport (60.1%)
- Energy (21.8%)
- Other (17.2%)
- Industry (0.9%)
- Waste (0%)
- Agriculture (0%)
- Land Use (0%)

Category 2 - Transport

- Active Travel (26%)
- Public Transport (25%)
- Other Transport (19%)
- Private Cars (15%)
- Van/HGV (11%)

Category 2 - Energy / Other

- Other (41%)
- Energy switch (22%)
- Energy Efficiency (18%)

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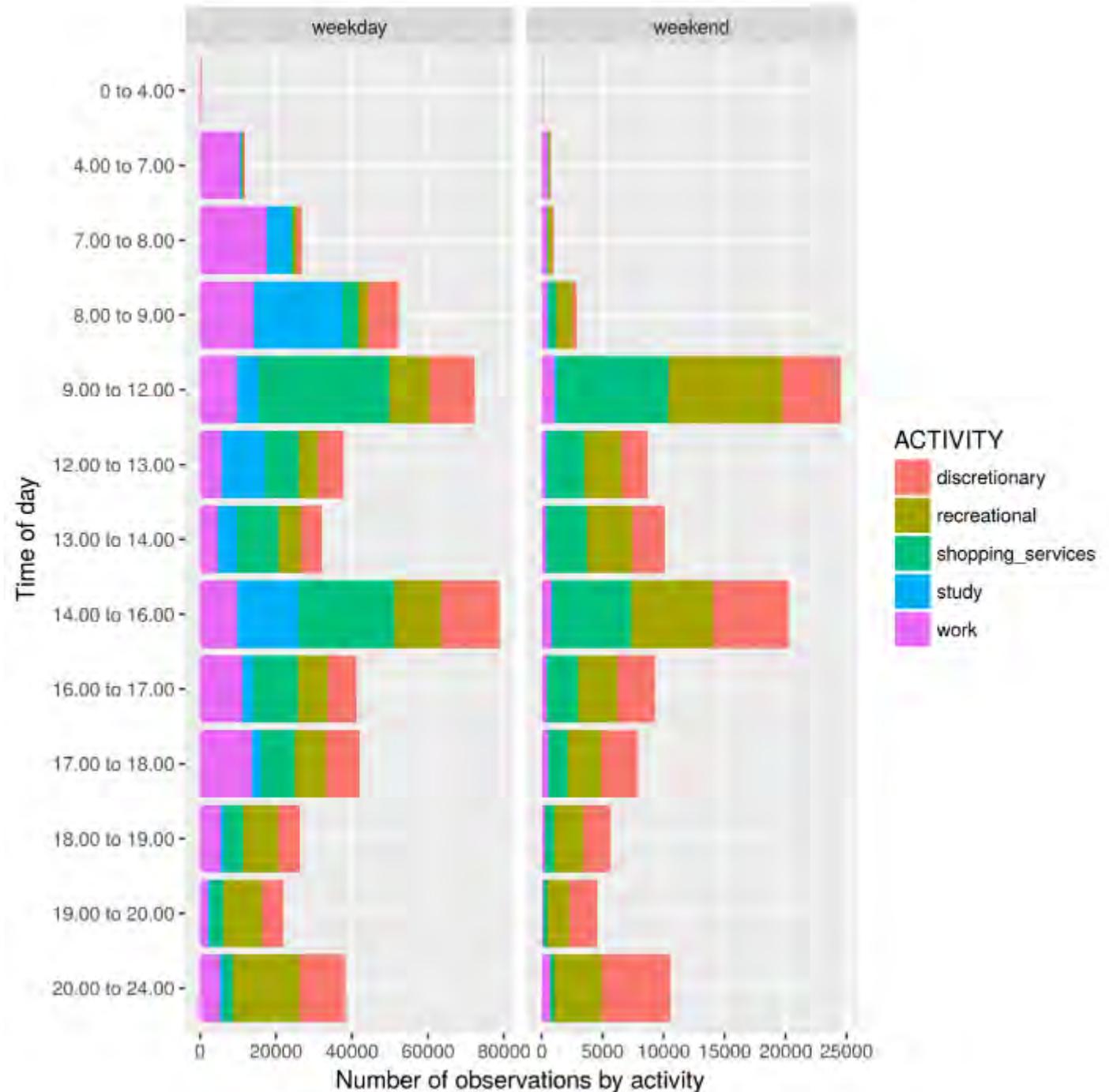# Other Engagement Activities in ClairCity

'Seeing' people in the data

Establishing baseline evidence for a conversation

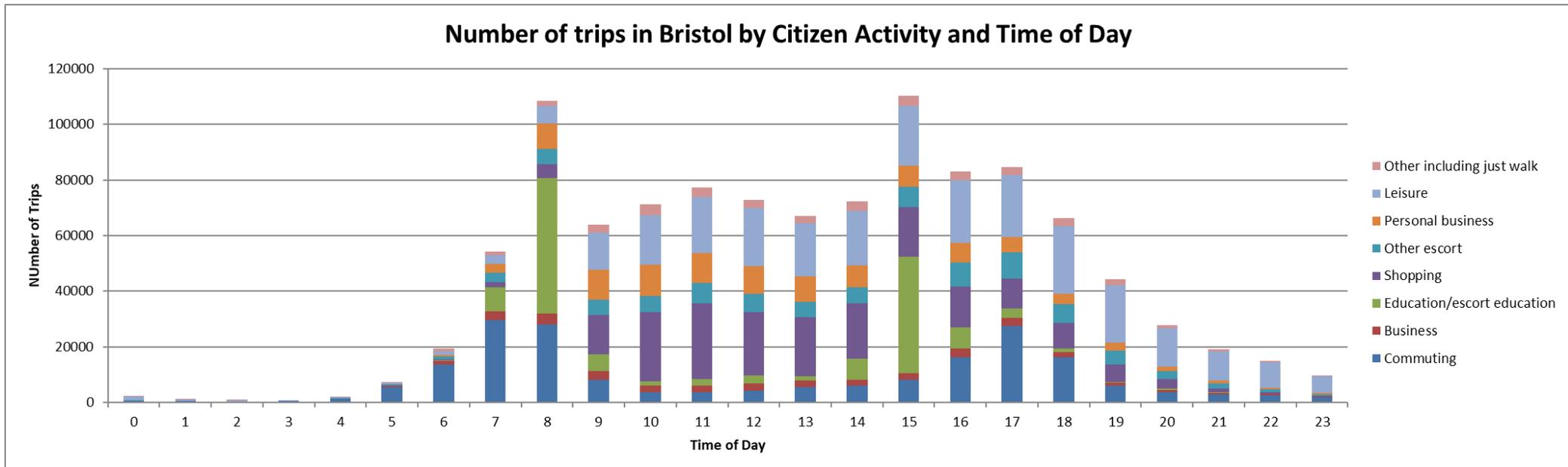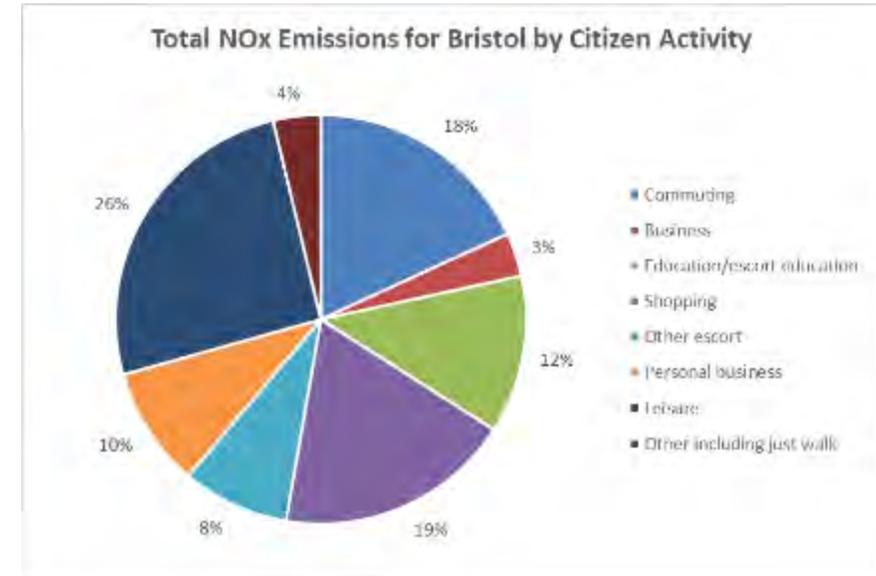# Quantifying our Behaviour: Transport

By passenger activities

By different purpose

Quantifying our Behaviour: Transport

- By different people
  - Age – gender – income
- By different modes
  - Car – Bus – Train – Bike – Walk
- Source apportionment temporally by citizen activities

Total NOx Emissions for Bristol by Citizen Activity

Number of trips in Bristol by Citizen Activity and Time of Day

Carbon Neutrality & Air Quality?

1. Need to manage terminology complexity and communicate local context of scopes and targets.

2. Need to refer to physical and tangible effects rather than ideas and concepts.

3. Need to use the language of hope – because people do care.

4. New to make people the experts - create space for discussion and link to how we live and work in the future.

5. Need to co-design solutions in focus groups and open door events.

Air Pollution

Carbon Neutrality

Inclusion & Equity

Health & Happiness

Mobility & Accessibility
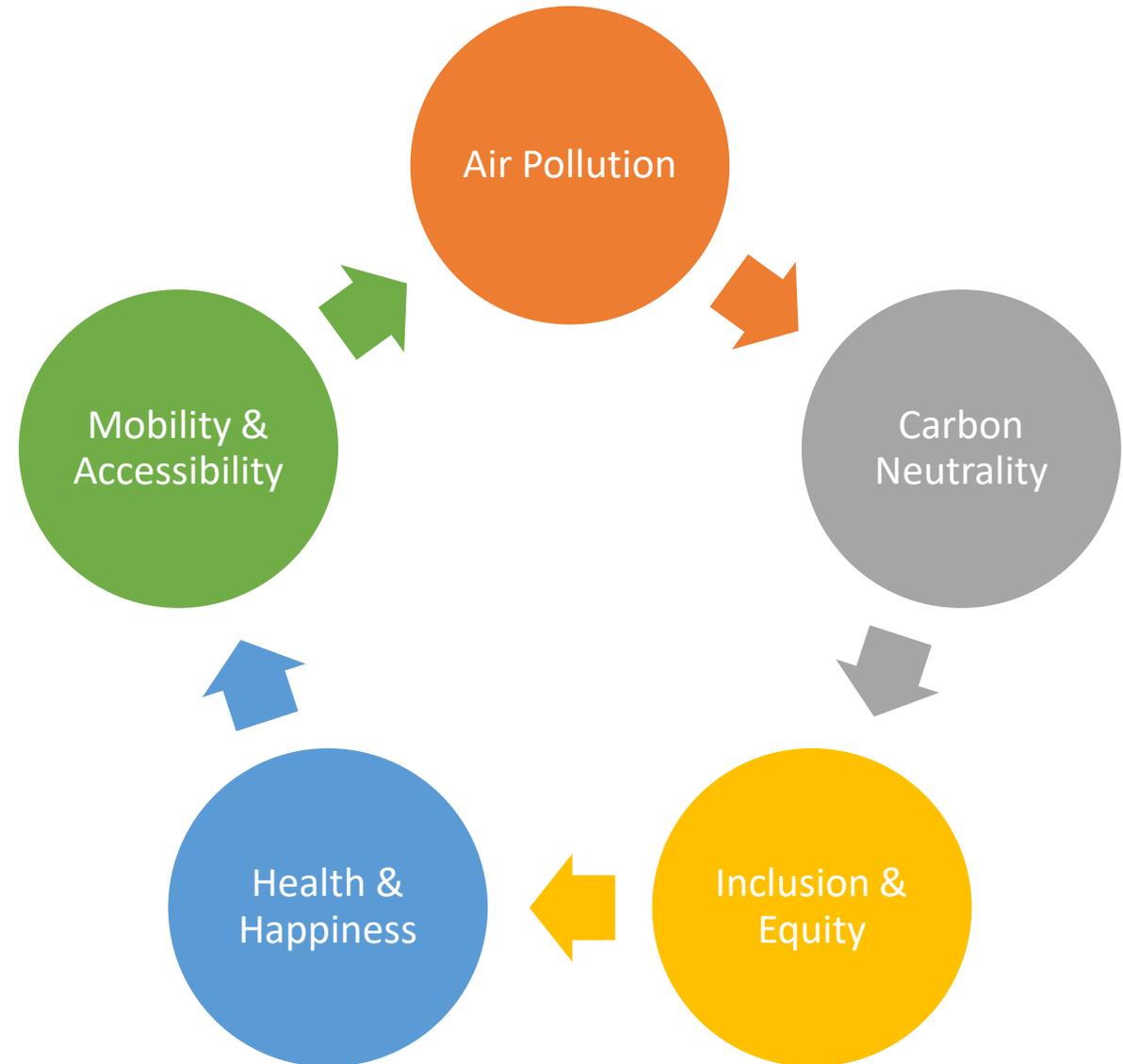
Health, Air Quality & Carbon

Engagement with 'upstream' stakeholders to identify barriers and opportunities to integrate health / AQ / carbon into urban developments.
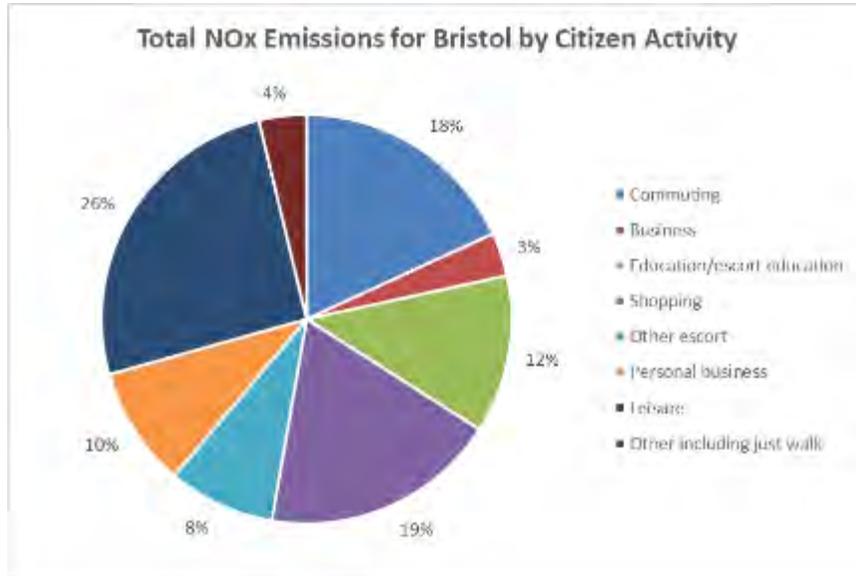
Public engagement on a variety of topics around health and the built environment including air pollution.

Using the SDGs to trigger a discussion

Derived from Longhurst, J., et al, (2018) Analysing air pollution and its management through the lens of the UN sustainable development goals. A review and assessment. In Casares, J. *et al* (Editors) Air Pollution XXVI WIT Transactions on Ecology and the Environment, 230. WIT Press, Southampton and Boston pp 3-14

Citizen-inclusive & citizen-informed

Total NOx Emissions for Bristol by Citizen Activity

- Targeted futures that identify 'enabling' policies so that greener choices/behaviour become the social norm for everyone
- Know your audience – go to them
- Be relevant by making it connect to the lived experience / expertise
- Find common ground
- Continuation of engagement
- Multiple engagement pathways
- Be positive

Thank You

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@HayesEnda @ClairCity

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