



ClairCity received funding for the European Union's Horizon 2020 research and innovation programme under grant No. 689289.

WeCount has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 872743.



Engaging young people as active citizens and citizen scientists

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Citizens at the
Centre



WECOUNT

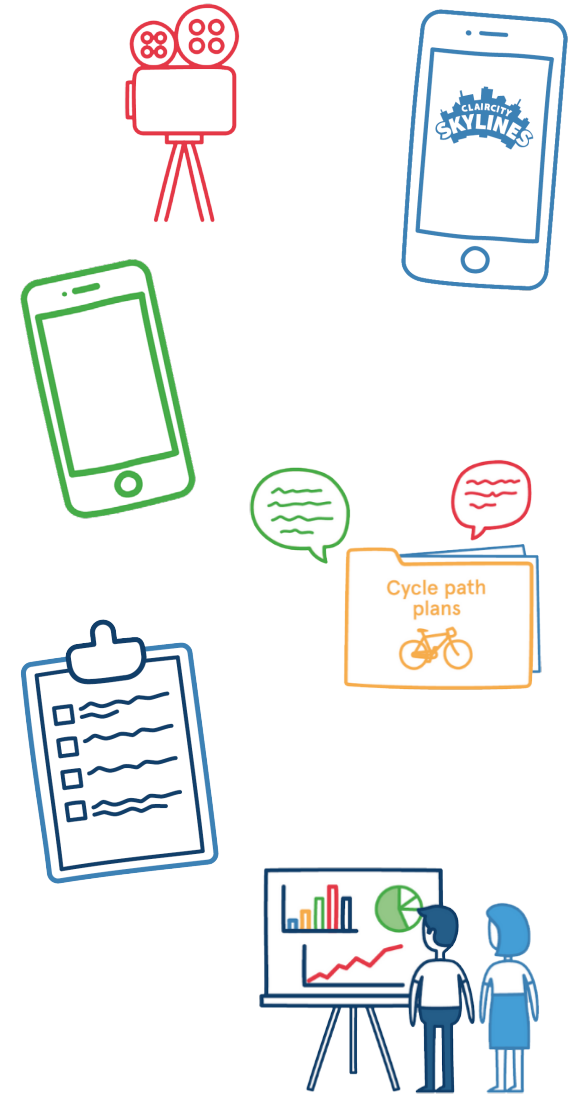
we-count.net

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Introduction

- The **primary objective** of the session is to introduce different ways to involve young people in understanding more about the Climate and Ecological Emergencies, and how to activate them as citizen scientists.
- The webinar presents data from two projects:
 - ClairCity – citizen-led air pollution reduction in cities (2016-2020 EU No. 689289)
 - WeCount – citizen scientists observing traffic (2019-2021 EU No. 872743).
- We will discuss the specific **challenges and opportunities** that citizen inclusive modelling offers for understanding **air quality, carbon emissions and their health impact** in some European cities and regions.
- We will also discuss how technology can enable young people to act as citizen scientists.



Climate and Ecological Emergency



Citizens at the
Centre

Climate change – what's it all about?

Electricity and heating



Using more than we need

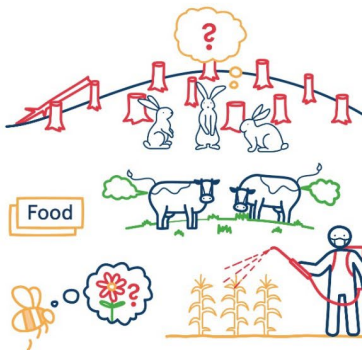


Many of our daily actions result in burning fossil fuels – when we drive our cars, fire up a gas boiler, or use electricity from non-renewable sources

Our actions



Food



Transport

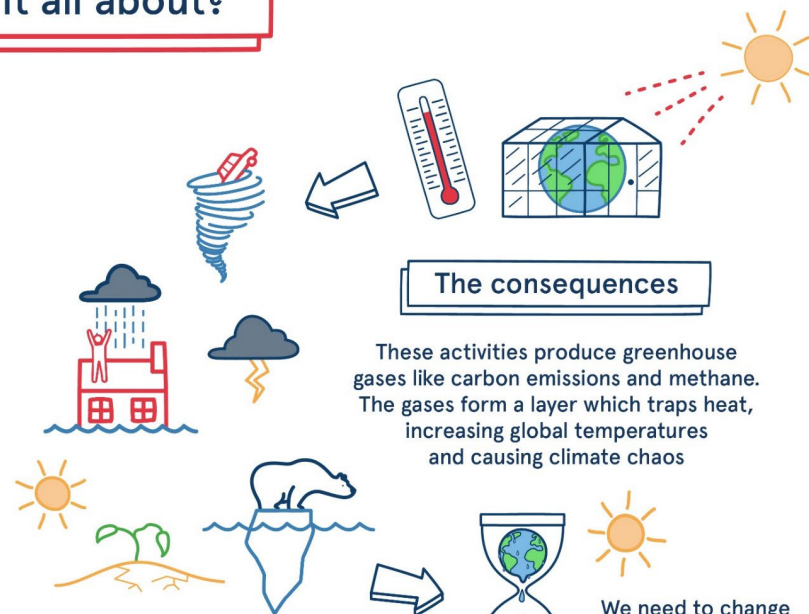


Industry



The consequences

These activities produce greenhouse gases like carbon emissions and methane. The gases form a layer which traps heat, increasing global temperatures and causing climate chaos



We need to change our behaviours now to reduce the impacts

A better future is possible – how will you play your part?



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WHAT IS AIR POLLUTION AND HOW DOES IT AFFECT US?



IT'S YOUR HEALTH

BREATHING POLLUTED AIR RAISES THE CHANCES OF HEART ATTACKS, STROKES, AND LUNG CANCER. IT MAKES RESPIRATORY CONDITIONS LIKE ASTHMA OR BRONCHITIS WORSE.



1 IN 8 DEATHS

AIR POLLUTION CAUSES ONE IN EVERY EIGHT PREMATURE DEATHS WORLDWIDE.



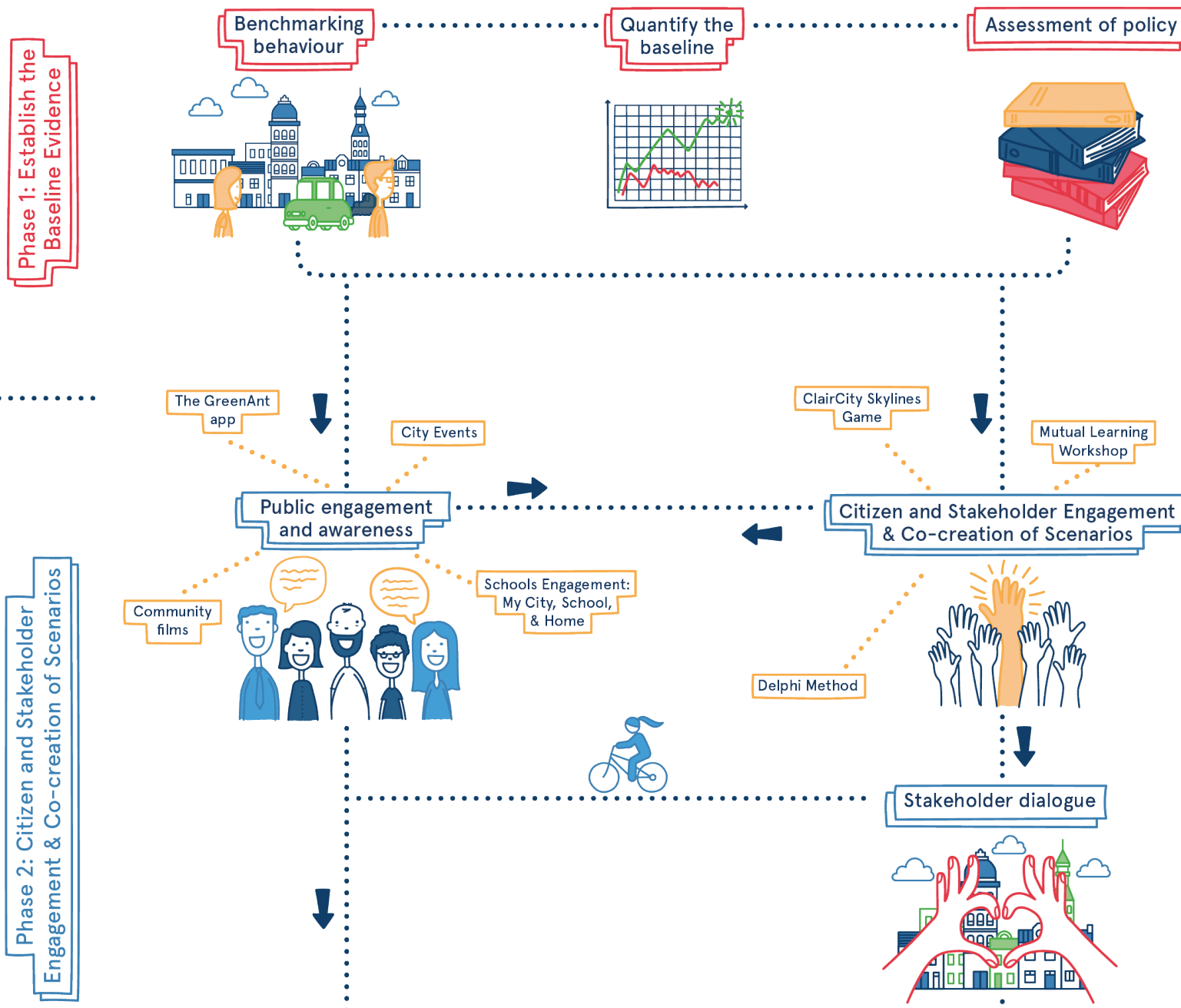
Citizen-led air pollution reduction in cities

Everyday, air pollution and carbon emissions are produced by our commutes to work, by heating our homes, or through our daily lifestyles.

The ClairCity aim was to create a major shift in public understanding towards the causes of poor air quality, inviting citizens to give their opinions on air pollution and carbon reduction to shape the cities of the future.

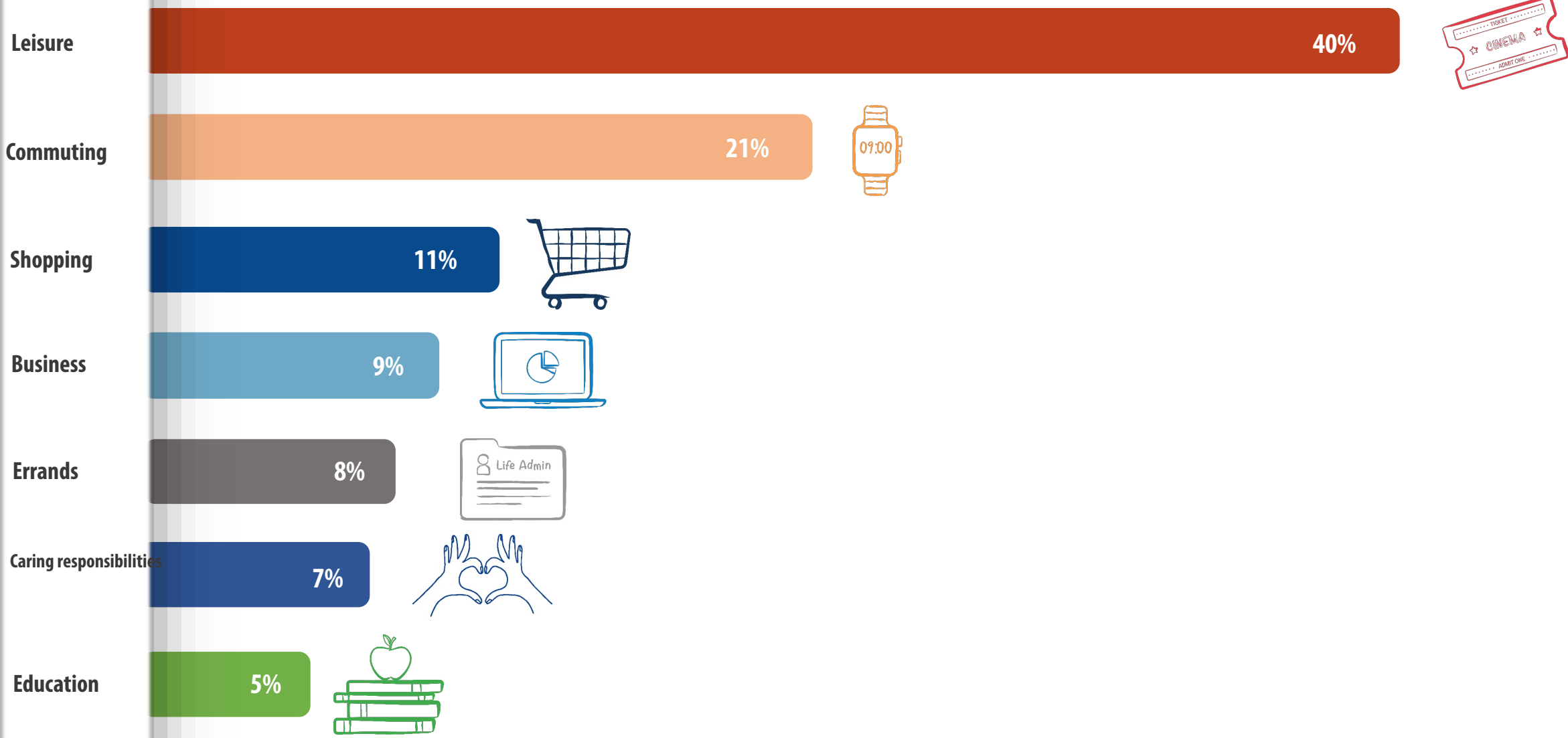


How the ClairCity process engages with a city & its citizens



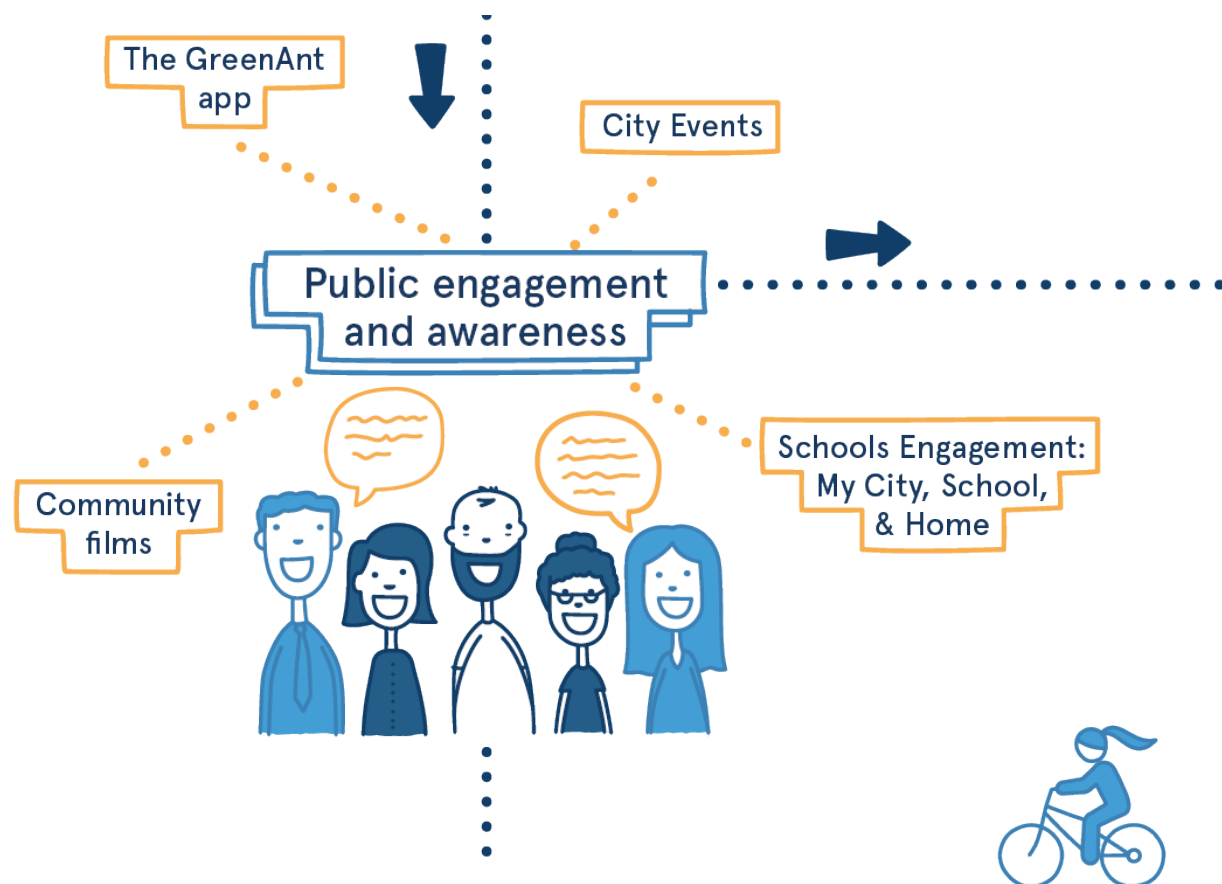


Baseline reports e.g. why we travel... relative distance contribution of our travel activities in Bristol



*Data gathered in 2015 to show baseline behaviours (% rounded)

Engagement tools



Community films



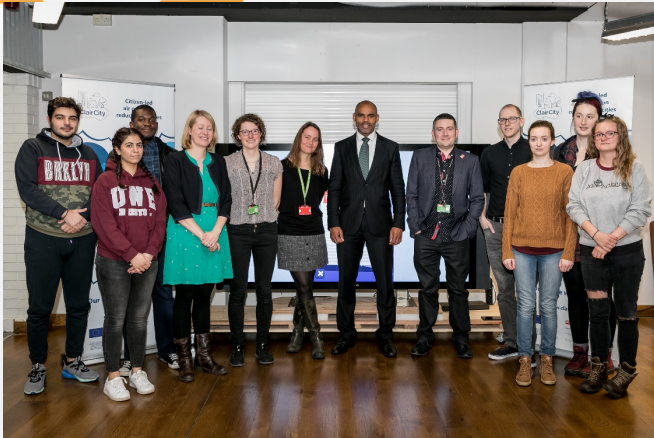
Schools Engagement:



City Events

Engagement tools

ClairCity Skylines



Delphi Method



ClairCity Skylines Game

Mutual Learning Workshop

Citizen and Stakeholder Engagement & Co-creation of Scenarios

Delphi Method



Mutual Learning Workshop



Citizen-led policy making

- 1 Ban/phase out polluting vehicles
- 2 Make buses greener and cleaner
- 3 Cheaper public transport
- 4 Create alternatives to car use – walking and cycling
- 5 Reduce vehicle road space – increase public transport space
- 6 Improve walking environment
- 7 Charge older/more polluting vehicles entering the city
- 8 Promote electric vehicles
- 9 Awareness raising to promote active and public transport
- 10 Organisations to make it easier for employees to work from home
- 11 Make property developers prioritise air pollution and climate change
- 12 Build housing close to major employment zones
- 13 More local shops and facilities in neighbourhoods
- 14 Organisations to provide flexible working hours for employees
- 15 Improve energy efficiency for housing (rented/existing/new)
- 16 Increase generation of solar and wind power
- 17 Spread economic opportunities across different areas of the city

Example policies suggested (Bristol)

“Not enough public transport (train and bus) in terms of frequency and diversity. Current public transport are too expensive and I am living too far away from work to be able to cycle. I do want to change! Unfortunately it’s too challenging at the moment.”

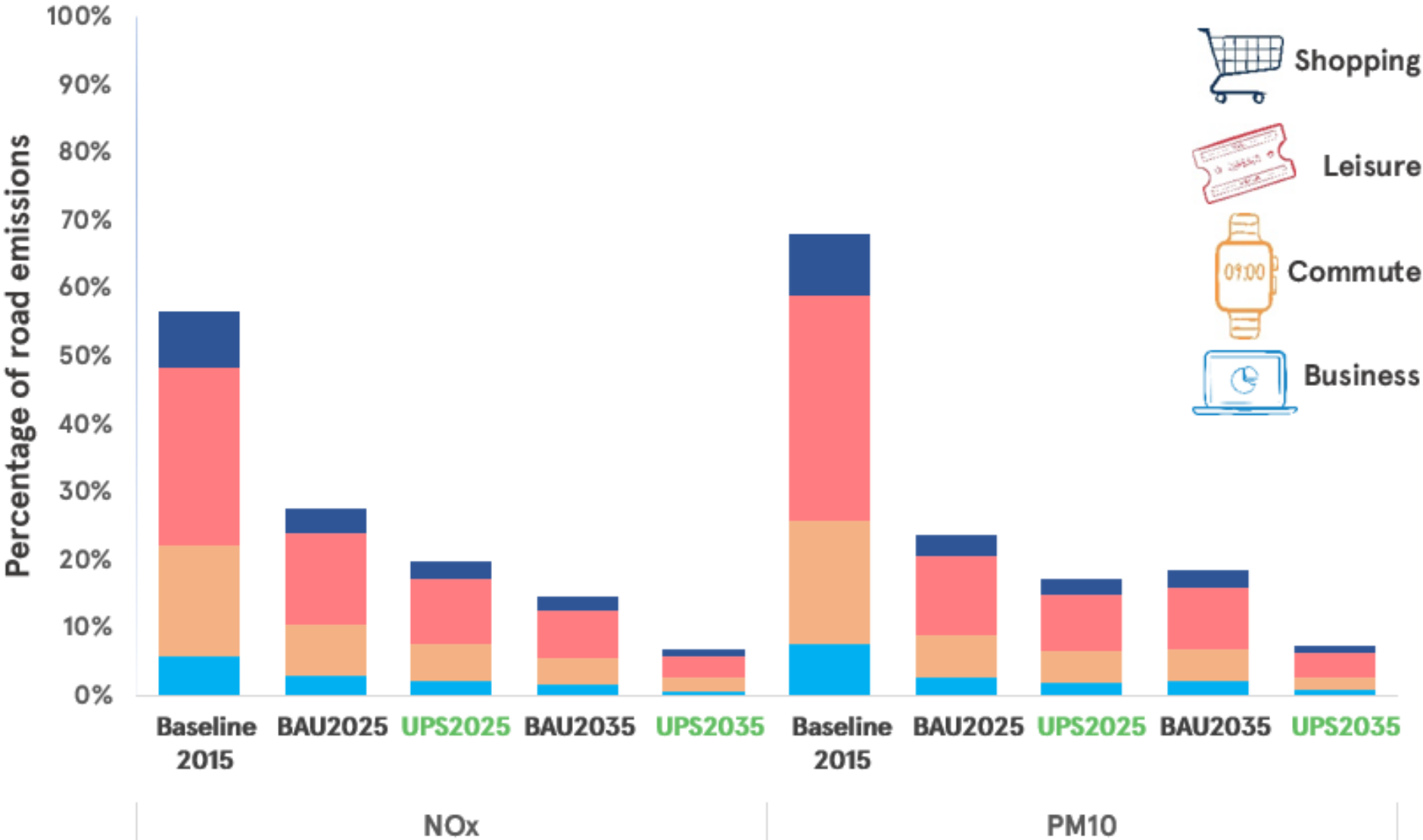
(Female, BME, degree qualification)

“Have you tried going to the countryside with two kids but without a car? No cycle lanes, no acceptable buses at most places.”

(Male, white, degree qualification)



Road transport NOx and PM10 emissions scenarios by motive

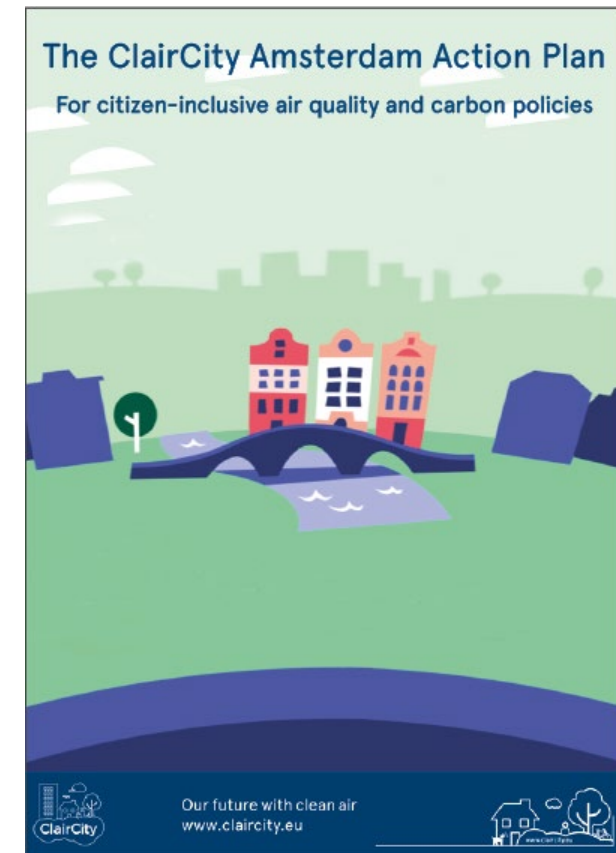
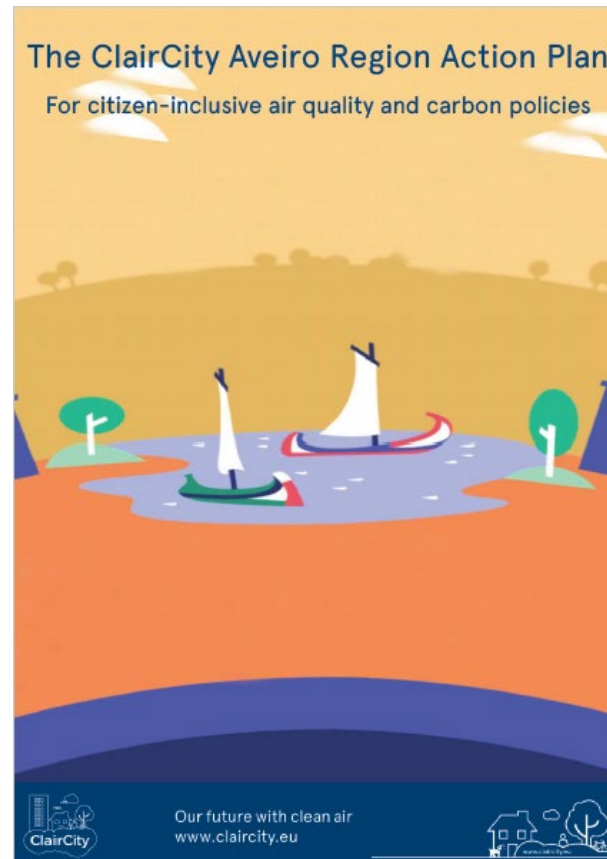


NOx and PM10 emissions by scenario and Motive

Citizens were more ambitious than Business as Usual

Policy packages

www.claircity.eu/reports/



www.claircity.eu





ClairCity results

770,253
Twitter
impressions



5,801
YouTube
video views



1,418
Facebook
followers



33,678
Website
visitors



818,736
citizens
involved across
6 cities and
regions

82
Policy makers
consulted



132
stakeholders
involved in Mutual
Learning Workshop



65
Older people
filmed



4887
citizens involved
in Delphi
process



8302
direct
engagements



>1000
children engaged
in public events
and lessons

447
school children
engaged in My
School, My City,
My Home
competition



Demographics

62.5%		Men
25%		16-24
81%		workshop participants older men

Activities

74%		intend to change their behaviour
98%		found policy workshop useful
21%		knowledgeable before playing
61%		found schools activities useful

Engagement Findings



- the more participants understanding had improved, the more likely they were to change their behaviour

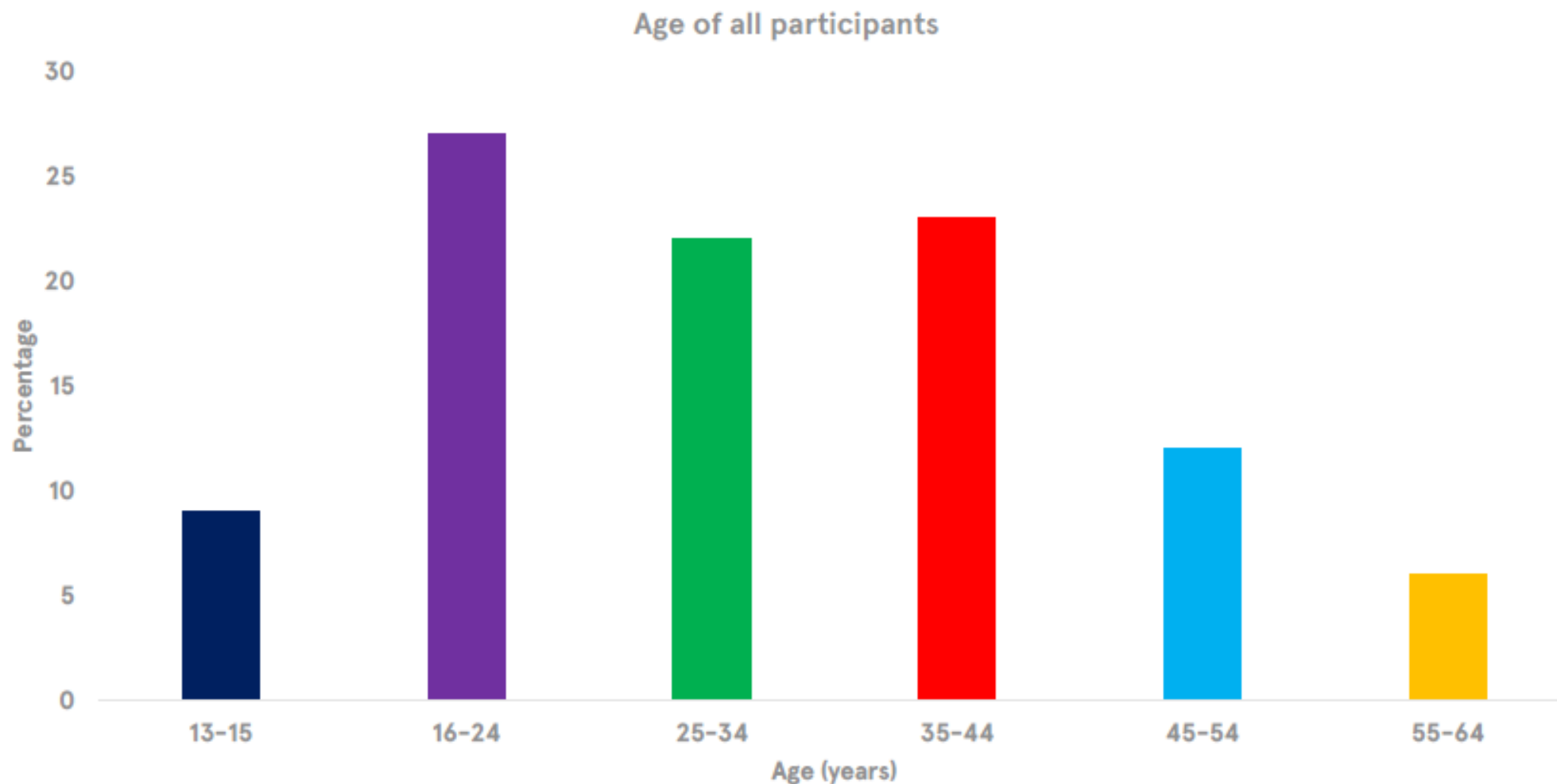


- the more participants enjoyed the activity, the more their understanding of air quality improved

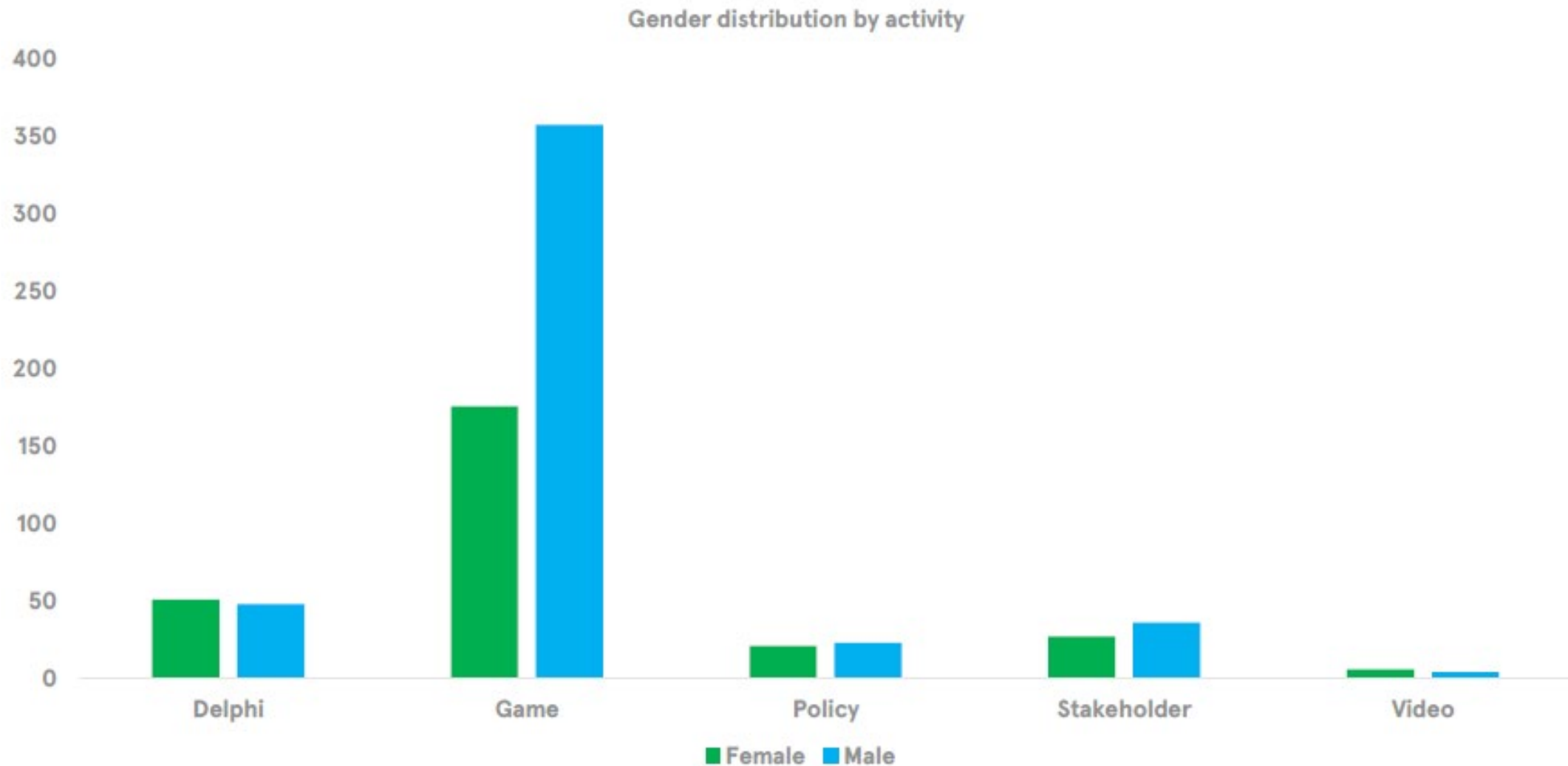


- the younger the participants, the more likely they were to say that they enjoyed the activity

Different activities needed to appeal to different ages



Different activities engage men and women

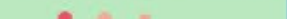




Sosnowiec



Liguria



Game stats

69,476
policies selected



2,800
unique users

63:37
Male:Female
ratio

83,339
'Years'
played

Top 5 Policies (16-34 year olds)

- ☐ Keep separate ticketing systems for all transport types
- ☐ Make property developers consider air pollution & climate change
- ☐ Ban bonfires
- ☐ Don't build new nuclear power stations to replace coal
- ☐ Build cycle superhighway lanes in the city



Bristol



Aveiro



ClairCity resources

Community activator pack

To support groups working for a clean air and zero carbon future



www.claircity.eu/take-action/community-activator

@Claircity
@WecountH

www.claircity.eu/take-action/educator

Educator pack

For engagement practitioners, teachers, and young people working for a clean air and net zero carbon future



Engaging citizens in clean air decision making

Findings from the evaluation of ClairCity



<http://www.claircity.eu/take-action/science-communicator/>

www.claircity.eu

