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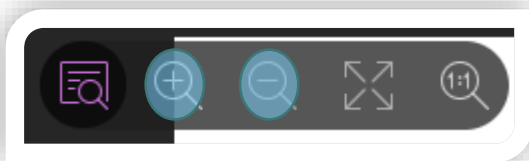


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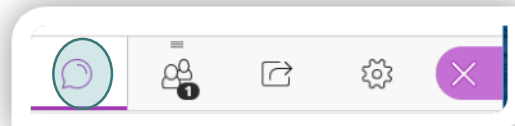
@ClairCity



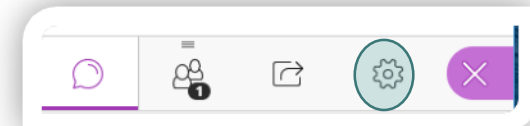
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Have a technical question or a question for the speakers, please write them in the chat box



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Presentations and the recording will be made available afterwards. Enjoy!



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

Webinar 3 - Lessons from putting citizens at the centre for air pollution and carbon emission reductions in cities

Lucia Bernal Saukkonen (DG Environment, European Commission)

Stephan Slingerland and Irati Artola (Trinomics, The Netherlands)

Enda Hayes (UWE Bristol, UK), Andrew Edwards (Bristol City Council, UK)

Moderator: Hans Bolscher (Trinomics, The Netherlands)



Citizens at
the Centre

www.claircity.eu



Overview

1. EU context, **Lucia Bernal Saukkonen** – 15'
2. **Questions** – 10'
3. Introduction to the ClairCity project, **Enda Hayes** – 5'
4. Lessons for policy making – **Irati Artola and Stephan Slingerland** - 25'
5. Impacts of ClairCity on Bristol – Andrew Edwards – 10'
6. **Questions** – 15'



EU Clean Air Policy

- update -

25 June 2020

*European Commission
Clean Air*

Content

- EU clean air policy framework
- Ambient Air Quality (AAQ) Directives
- European Green Deal and future activities
- National Emission reduction Commitments (NEC) Directive
- Air quality and climate change

EU clean air policy framework



Ambient Air Quality (AAQ) Directives

Maximum concentrations of air polluting substances (PM₁₀, PM_{2.5}, SO₂, NO₂, O₃ + 8 more)

SETTING OBJECTIVES FOR GOOD AIR QUALITY

REDUCING EMISSIONS OF POLLUTANTS



National Emission reduction Commitments Directive

National emission totals (SO₂, NO_x, VOC, PM_{2.5}, NH₃)



EU-28 reduction targets btw. 2005 and 2030

Source-specific emission standards

- IED Directive
- MCP Directive
- Eco-design Directive
- Energy efficiency
- Euro and fuel standards



Fitness Check of the AAQ Directives

Scope: Evidence-based, retrospective analysis of whether EU actions are fit for purpose; identify regulatory burdens, overlaps, gaps, inconsistencies

Evidence:

- Literature review with more than 600 sources of evidence;
- Analysis of reported data as reported over the **period 2008 to 2018**;
- An **open public consultation** generated 489 responses;
- Replies to a **targeted questionnaire** from 43 stakeholders;
- Two **stakeholder workshops** (June 2018; January 2019);
- Seven **case studies** (in BG, DE, ES, IE, IT, SE, SK);
- Bespoke modelling and computations (**analysis of costs and benefits**);
- Desk review of **EU and national legislation**, as relevant.

Criteria: Relevance, Effectiveness, Efficiency, Coherence, EU Value Added



Four key conclusions

The AAQ Directives are ***broadly fit for purpose*** (with scope for improvements). In particular:

- The **monitoring network** benefits from continuous investment to ensure it is well maintained; additional guidance would be useful to address ambiguities.
- EU **air quality standards** have been instrumental in reducing concentrations and exceedance levels albeit subject to, at times considerable, delays.
- **Reliable and comparable information** is available, but with further scope to make use of e-Reporting possibilities, including an acceleration of reporting.
- The **clear requirement to take remedial action** when and where exceedances are observed has been decisive in triggering improvement in air quality.



Air pollution remains a health challenge

EU urban population exposed to air pollution above EU standards



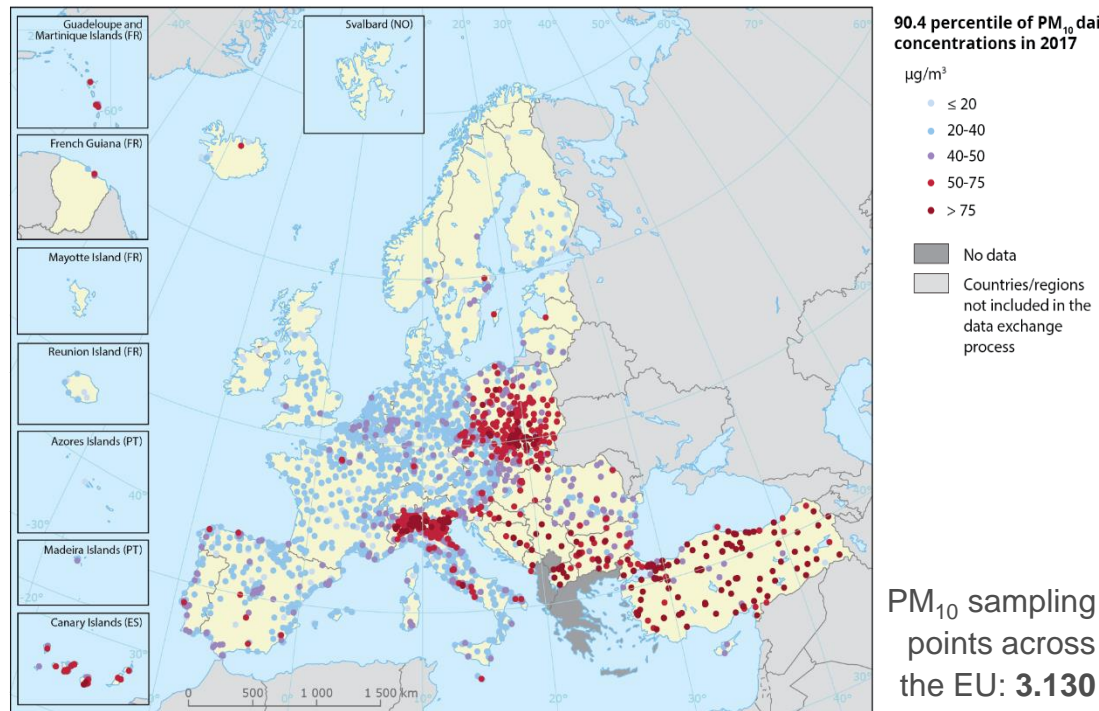
EU urban population exposed to air pollution above WHO Guidelines



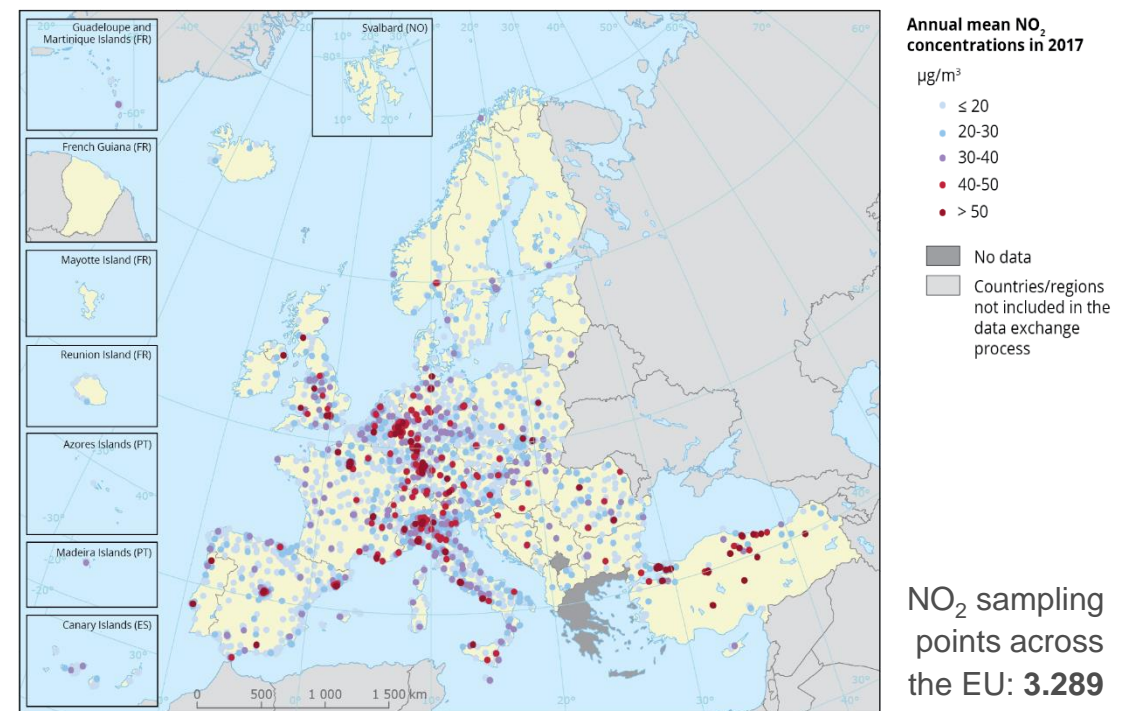


Air quality exceedances persist

PM₁₀ exceedances are often linked to fuel combustion (i.e. heating, transport)



NO₂ exceedances are often linked to traffic, in more than 130 cities in EU.





Seven key lessons learnt

- Air quality remains a major **health and environmental concern**;
- Air quality standards have been instrumental, and **partially effective**, to reduce pollution;
- Current EU standards are **less ambitious than scientific advice**;
- **Limit values** have been more effective than other types of air standards;
- Legal **enforcement action** by European Commission, and civil society, works *(the effectiveness of the latter being linked to the functioning of access to justice at national level and the dynamism of NGOs)*;
- Scope to further harmonise **monitoring, modelling**, and **air quality plans**;
- Not all reported data equally useful, **e-reporting** allows for further efficiency.



The Commission will draw on the lessons learnt from the evaluation of the current air quality legislation.

It will also propose to strengthen provisions on monitoring, modelling and air quality plans to help local authorities achieve cleaner air.

The Commission will notably propose to revise air quality standards to align them more closely with the World Health Organization recommendations.

#EUGreenDeal

Communication on the European Green Deal
(COM/2019/640 final)



Monitoring, modelling, air quality plans

Stakeholders, and especially local and regional authorities pointed to a **need to further improve guidance** on air quality monitoring, modelling and plans.

Issues that have been raised during the fitness check include (examples):

- number and type of sampling points
- micro- and macro-scale siting
- data quality objectives
- continuity of measurements
- role of modelling in air quality assessment
- quality and harmonisation of modelling
- complementary air quality assessment methods
- scope of and requirements for low-cost sensors
- Indicative measurements and objective estimation
- minimum elements required for air quality plans
- coordination between different levels of governance
- cost and benefits of measures
- access to air quality data
- ...

Other immediate priorities



Exceedances gap persists – continued push towards **full implementation** of existing clean air legislation (see also COM (2018) 330 ‘Cleaner Air for All’).

Continued enforcement action: currently, 31 cases addressing 17 Member States (+ UK) as relates PM₁₀, NO₂, and SO₂ exceedances, as well as monitoring gaps

EU funding for clean air: specific allocations for air quality of EUR 2 billion (2014-2020)

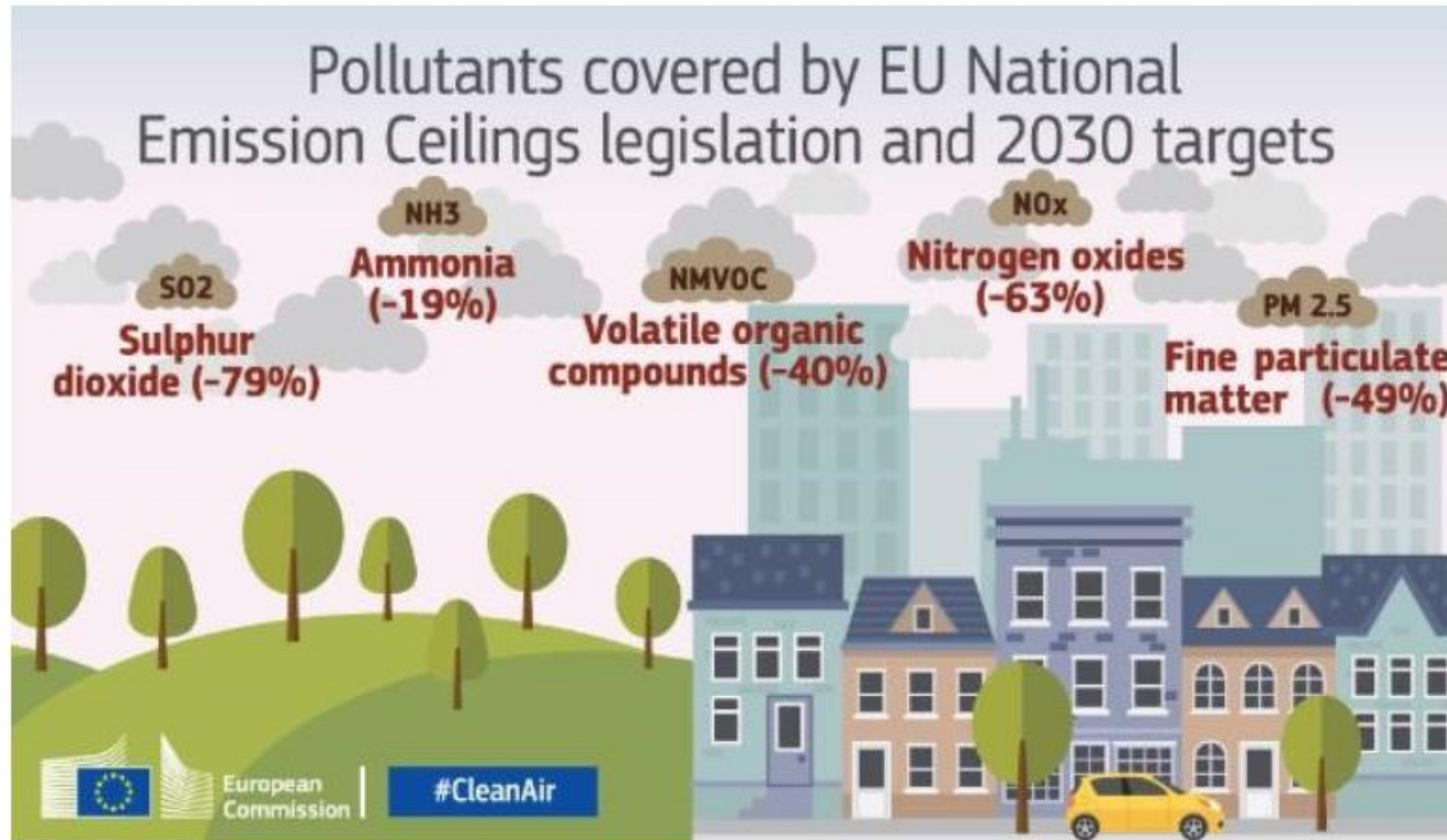
plus substantial indirect contributions, under cohesion policy (related to energy, transport, ...)

plus LIFE projects, Horizon 2020, EFSI funding, Urban Innovation Actions, ...

plus funds allocated in the Recovery Plan for Europe, including Next Generation EU, have scope to improve air quality further, ...

Implementation support: bringing together Member States, regions and cities, incl. Environmental Implementation Review, Clean Air Dialogues, Clean Air Forum

National Emission reduction Commitments (NEC)



Forthcoming NEC Directive related reports

NEC implementation report where the Commission analyses MS obligations, in particular:

- *Achievement of the Emission Reduction Commitments*
- *National Air Pollution Control Program: key governance tool where MS explain how they will reach their Emission Reduction Commitments*
- *Monitoring of ecosystem impacts of air pollution*
- *Review of emission inventories and projection*

Q4 2020 - **Second Clean Air Outlook**: modelling results analysing how NEC commitments can be best reached, at lowest costs, maximizing synergies with climate measures.

Air and Climate policies

- Closely linked: synergies (e.g. buildings renovation, electric vehicles) but also risk of trade-offs (e.g. bioenergy in domestic heating)
- Linked via legislation: cross-references in Energy Union Governance legislation and in NEC Directive, to use inputs from each other
- Commission recommendations on draft National Energy and Climate Plans (NECP)
>> recommendation related to the lack of analysis of air impacts for 26 Member States
- Links made in COM analysis of NAPCP and NECP
- Taking air co-benefits into account in climate policy reduces the social costs of the measures needed.

Thank you

env-air@ec.europa.eu

Q&A

Presentations and the recording will be made available after the Webinar

ClairCity is committed to the principles of Open Access. All relevant data and methodologies will be available in the coming week on our ClairCity community page on Zenodo.



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Introducing ClairCity

Enda Hayes, University of the West of England (UWE-Bristol), UK



Citizens at
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Citizen-led air pollution reduction in cities

Everyday, air pollution and carbon emissions are produced by our daily practices, activities and behaviours.

Understanding how we live and the societal factors that influence our daily behaviour is key to improving air quality, reducing carbon emissions and improving public health.



The ClairCity concept...

Where and what?



Who and why?



ClairCity



We need to see
AIR POLLUTION 
as a social problem 
ClairCity

**PEOPLE
CREATE
POLLUTION
NOT
TECHNOLOGY**

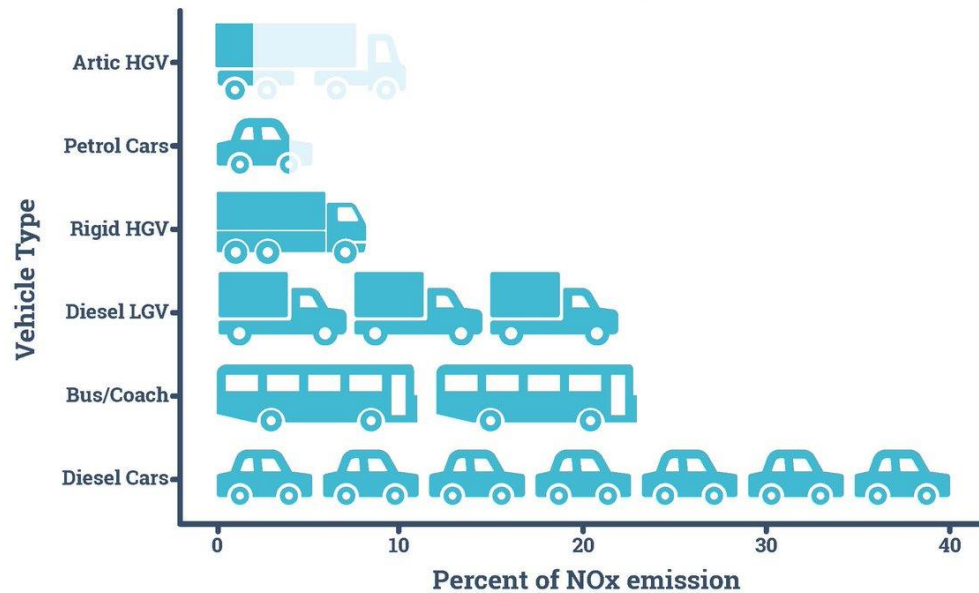
A blue square containing a white line-art illustration of a city scene with a tall building, a house, a tree, and people. Below the illustration is a white cloud shape containing the text "ClairCity".

ClairCity



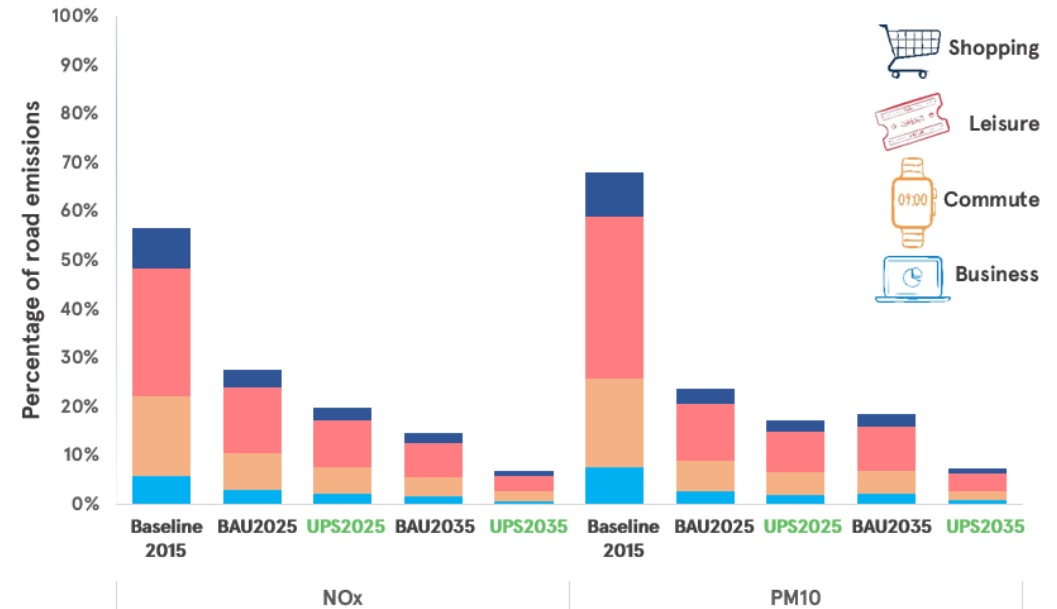
Unfortunately I use my car!

NOx emissions by vehicle type
Central Bristol: Transport sources



Data from Bristol City Council Cabinet Agenda, 15 Aug 2017, page 105.
Available from <https://democracy.bristol.gov.uk/documents/g2557/Public%20reports%20pack%2015th-Aug-2017%2016.00%20Cabinet.pdf?T=10>

Road transport NOx and PM10 emissions scenarios by motive



NOx and PM10 emissions by scenario and Motive

BAU = Business as usual UPS = unified policy scenario

Source: ClairCity Project

"Heavy loads, steep hills, small children, tired – I just want to get home!"

"I simply don't see accessibility and cost of public transport ever being better"

"I need flexibility to go where I want, when I want"

"I need to pick my kids up and work part time so don't have the time to cycle or take the bus"

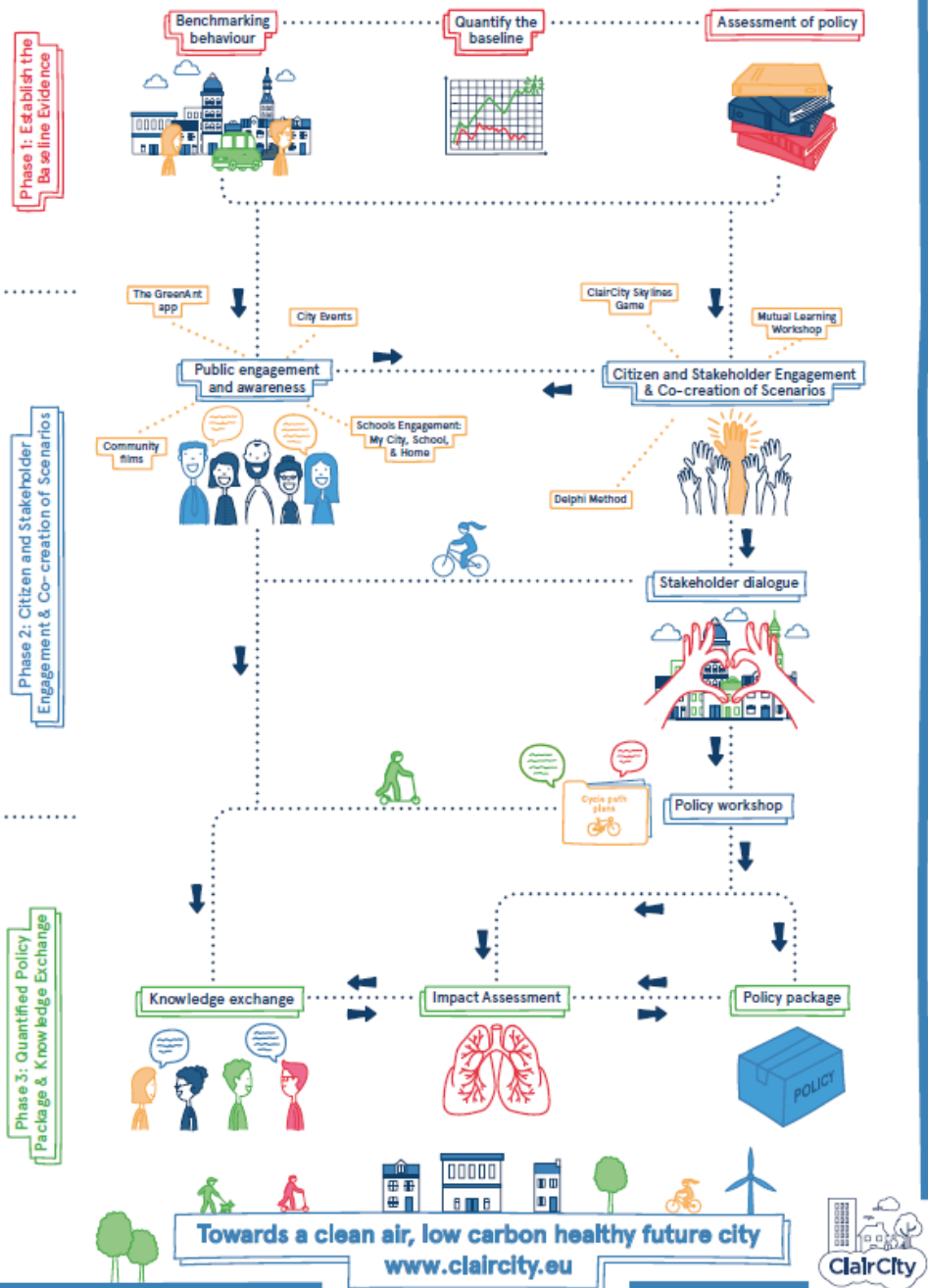
Project Aim & Objectives

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.

1. To put citizens' behaviour and activities at the heart of air quality and carbon management and policy making;
2. To develop a suite of innovative toolkits for enhanced quantification, engagement and impact evaluation;
3. To explore the integration of citizens behaviour in relevant city policies and ensure that future city policies are reflective of citizens visions for their future city; and
4. To raise awareness of environmental challenges and their solutions through proactive dissemination of the project outcomes.



How the ClairCity process engages with a city & its citizens

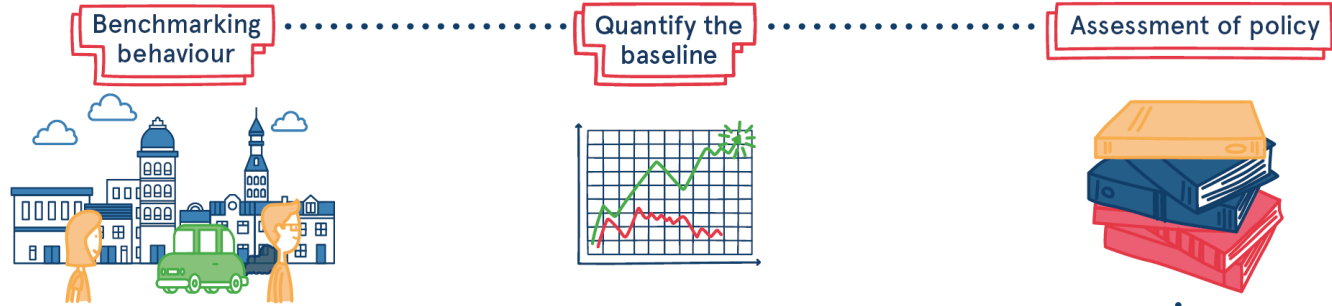


The ClairCity process...

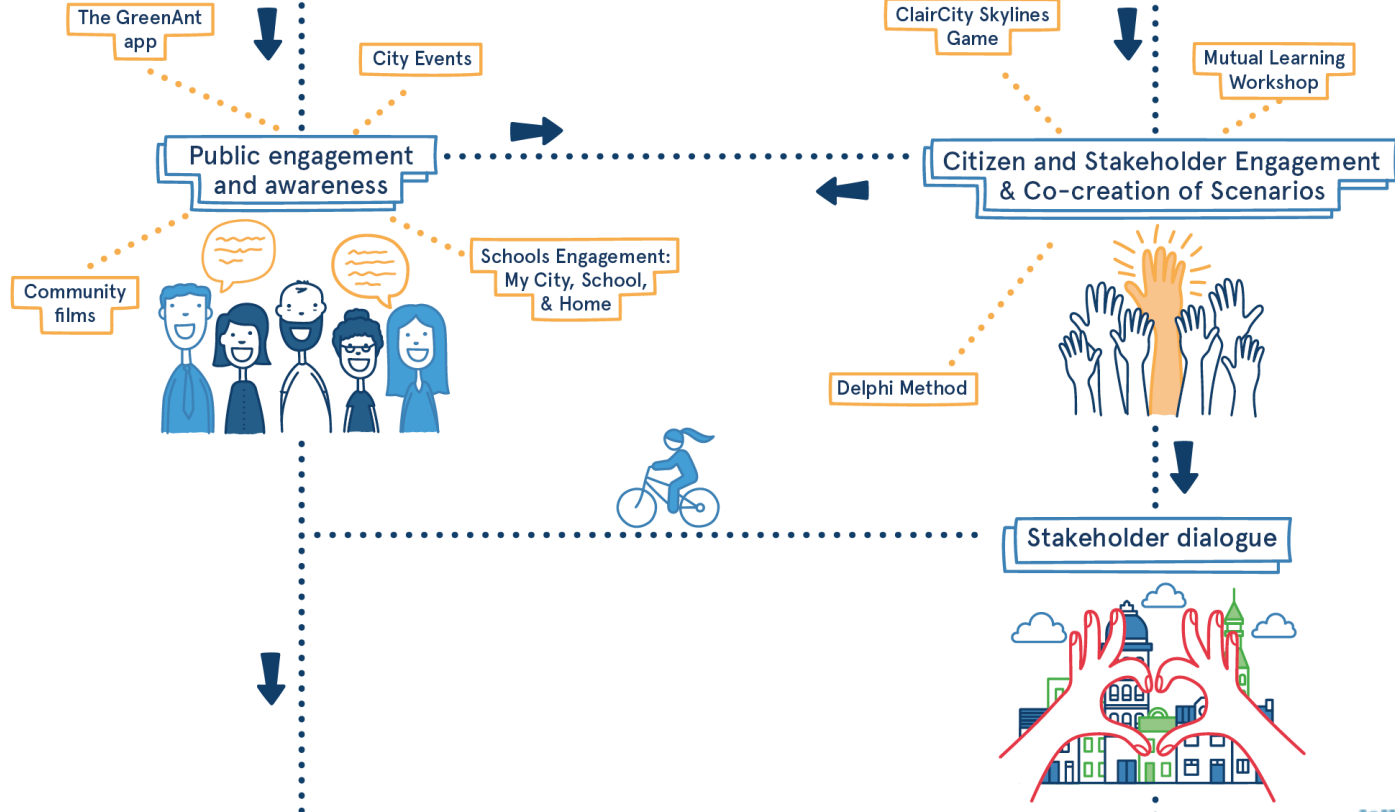


How the ClairCity process engages with a city & its citizens

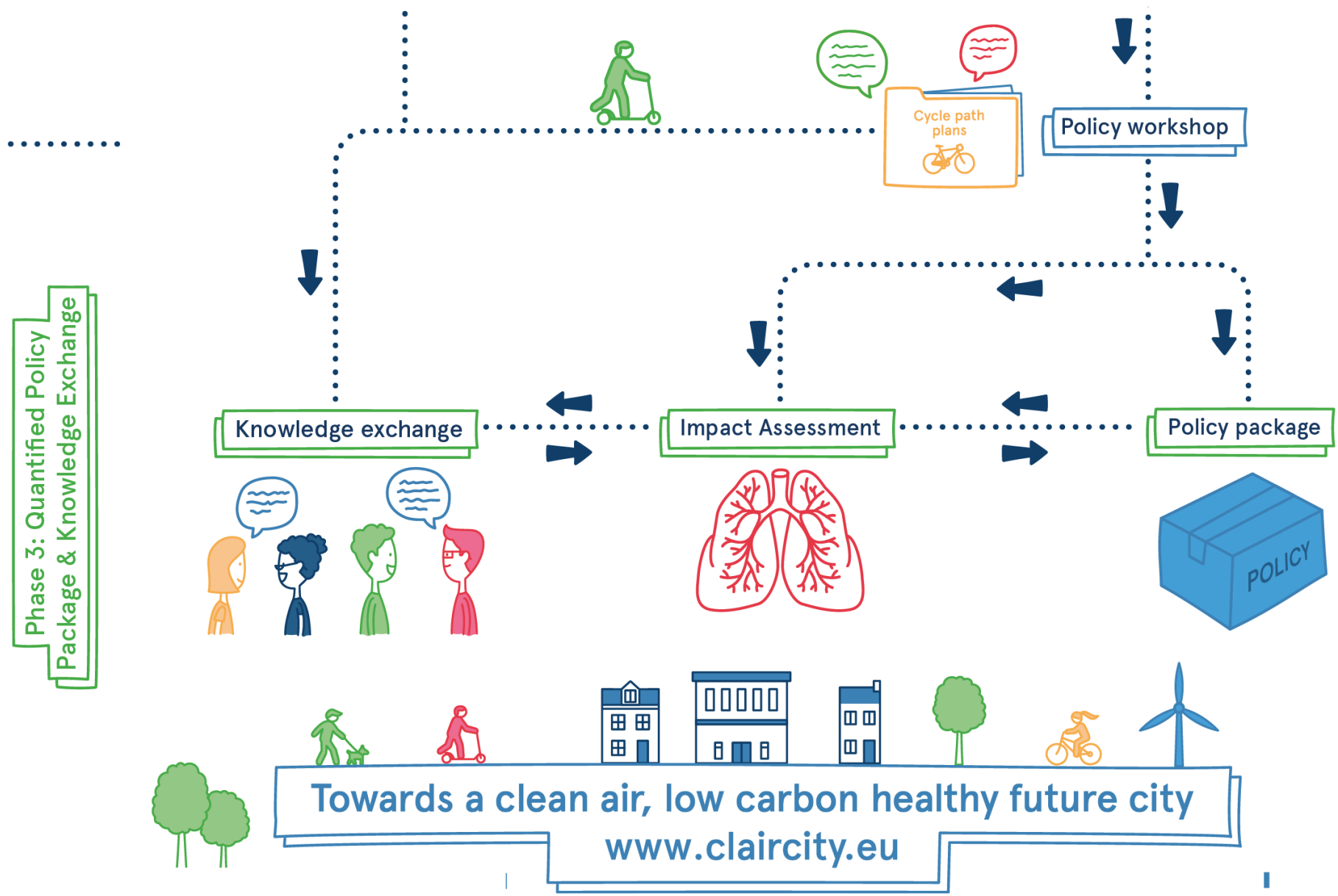
Phase 1: Establish the Baseline Evidence



Phase 2: Citizen and Stakeholder Engagement & Co-creation of Scenarios



How the ClairCity process engages with a city & its citizens





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Lessons for policy making

Irati Artola & Stephan Slingerland, Trinomics



Citizens at the Centre

ClairCity: innovative city air quality and carbon policies with citizens



ClairCity: innovative city air quality and carbon policies with citizens

- Six steps

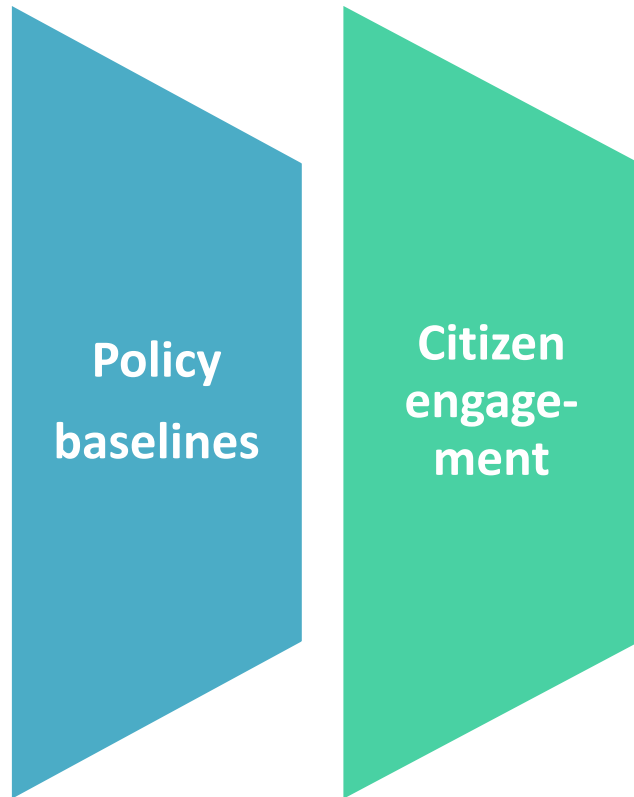
ClairCity: innovative city air quality and carbon policies with citizens

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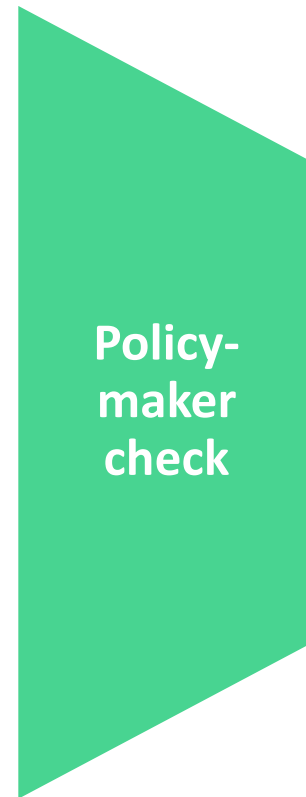
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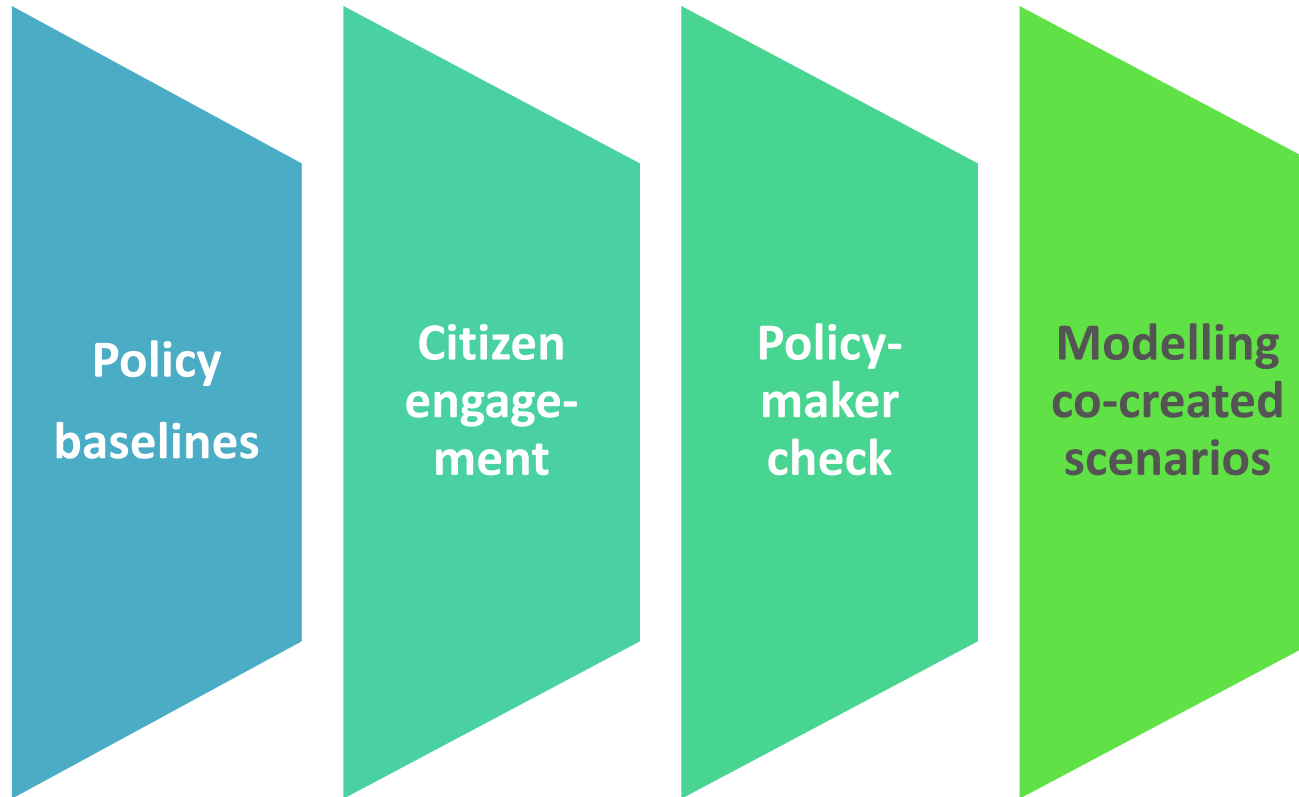
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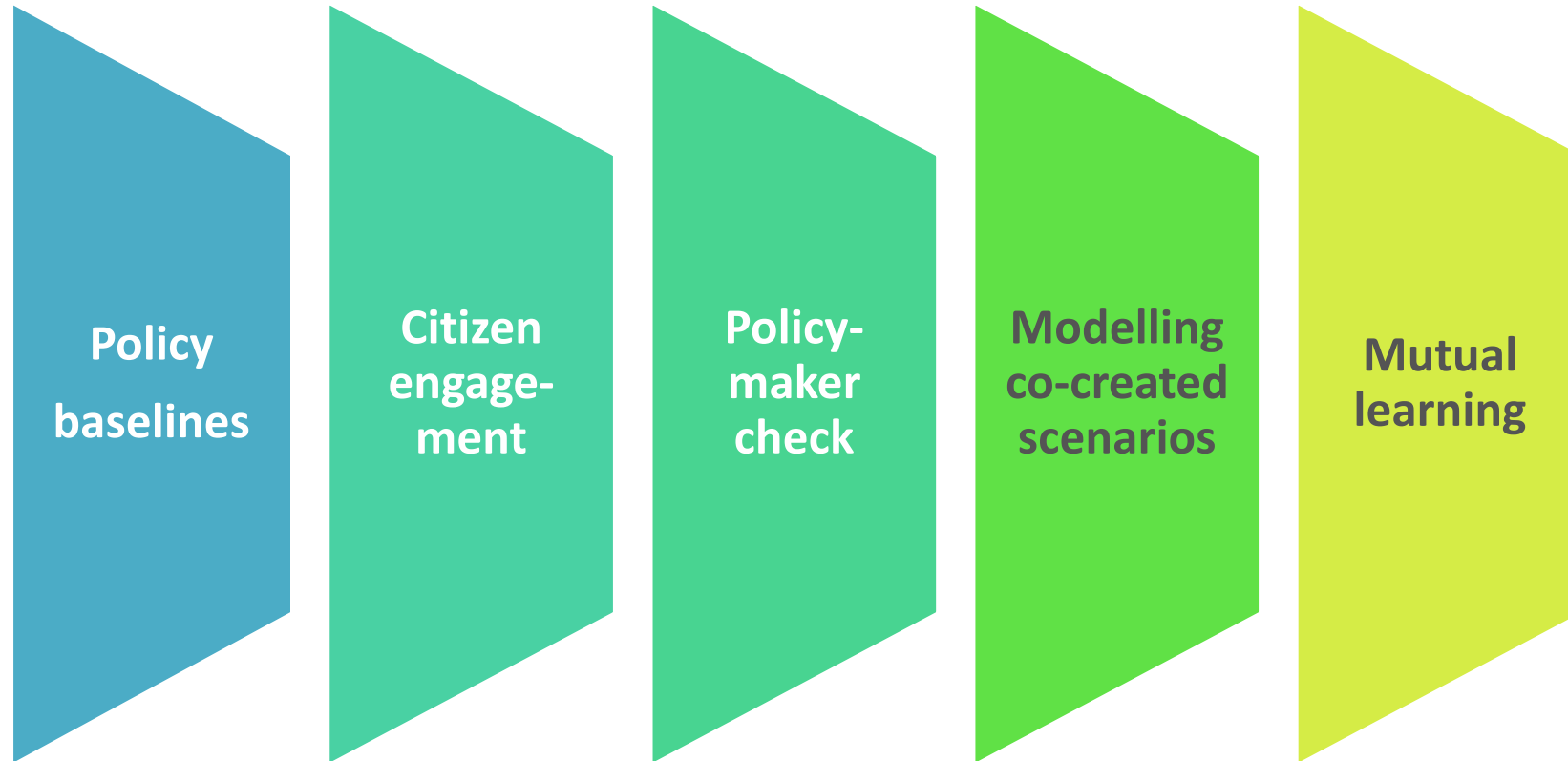
ClairCity: innovative city air quality and carbon policies with citizens

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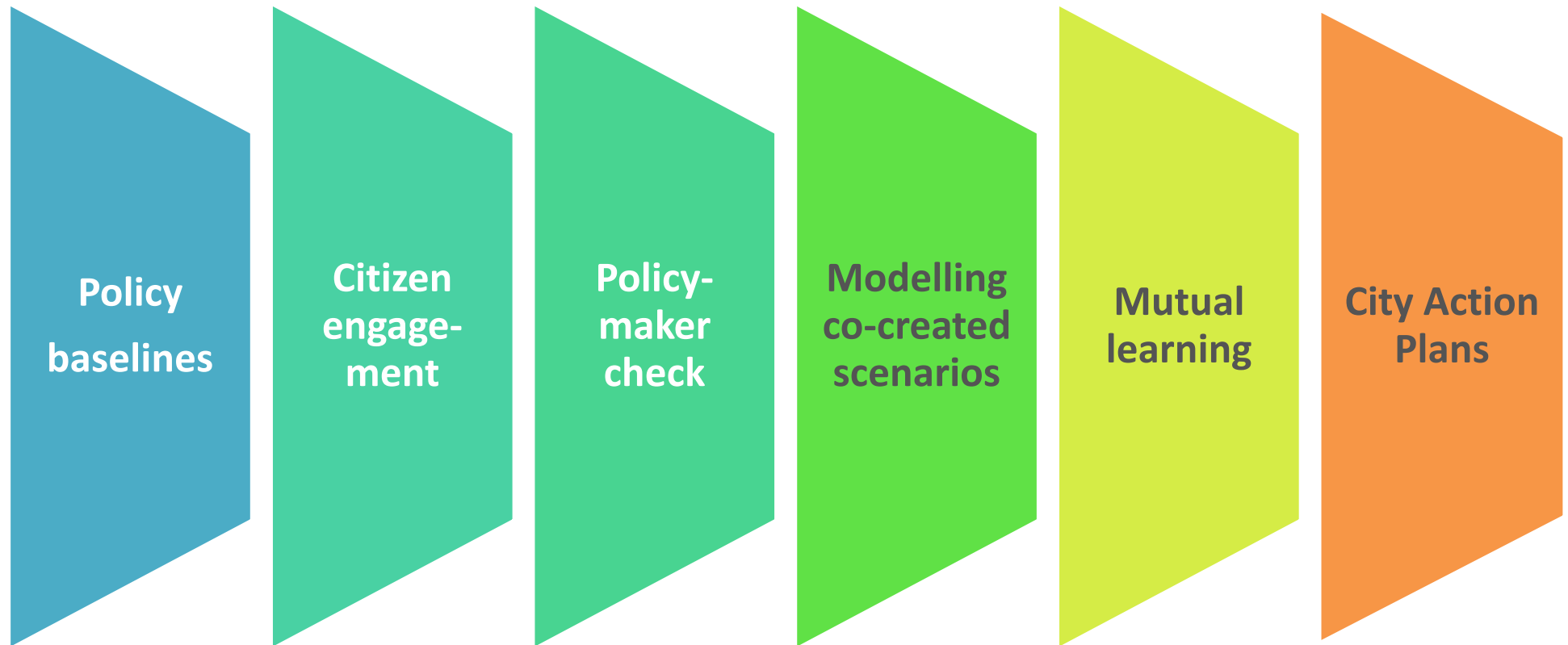
ClairCity: innovative city air quality and carbon policies with citizens

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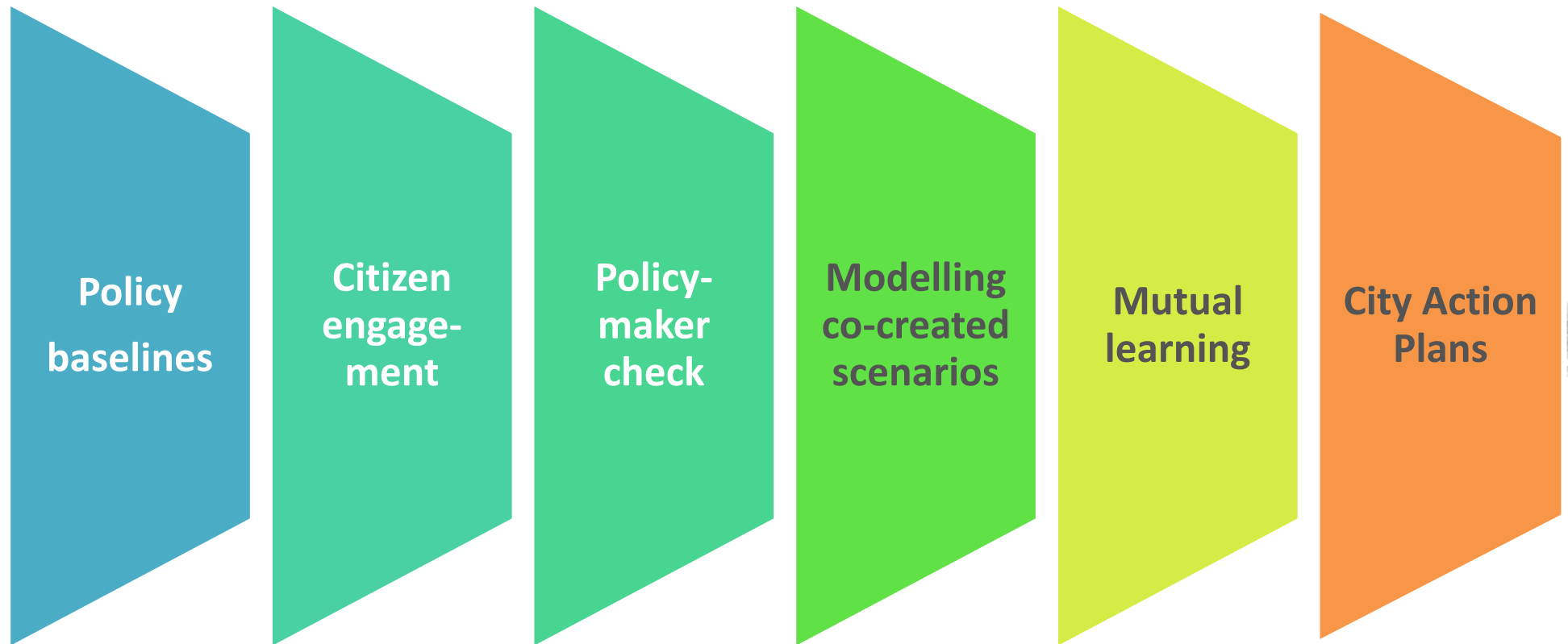
ClairCity: innovative city air quality and carbon policies with citizens

- Six steps



ClairCity: innovative city air quality and carbon policies with citizens

- Six steps
- Several innovations



Main outputs

- 20 reports: Baselines, Workshops, Policy Packages, Action Plans
- 77 interviews in 6 cities with policy makers and stakeholders
- 82 policy makers involved in policy workshops

For full reports:
www.claircity.eu/reports



ClairCity: A new method for policy co-creation and citizen-inclusive policy making

Policy baseline analysis

- Air quality and climate situation
- Citizen engagement
- Policies

Citizen engagement

Policy-maker check

Quantified impacts of citizens' policies

Mutual learning

Policy Recommendations & City Action Plan

Policy Baselines



Amsterdam



Bristol



Ljubljana



Sosnowiec



Genoa / Liguria Region



Aveiro Region

Policy Baselines



Amsterdam



Bristol



Ljubljana



Sosnowiec



Genoa / Liguria Region



Aveiro Region

- All case study cities have 'green ambitions'

Policy Baselines



Amsterdam



Bristol



Ljubljana



Sosnowiec



Genoa / Liguria Region



Aveiro Region

- All case study cities have 'green ambitions'
- Cities have the power to go beyond national requirements

Policy Baselines



- All case study cities have 'green

Each city is different,
basic policy frameworks are the same



Sosnowiec

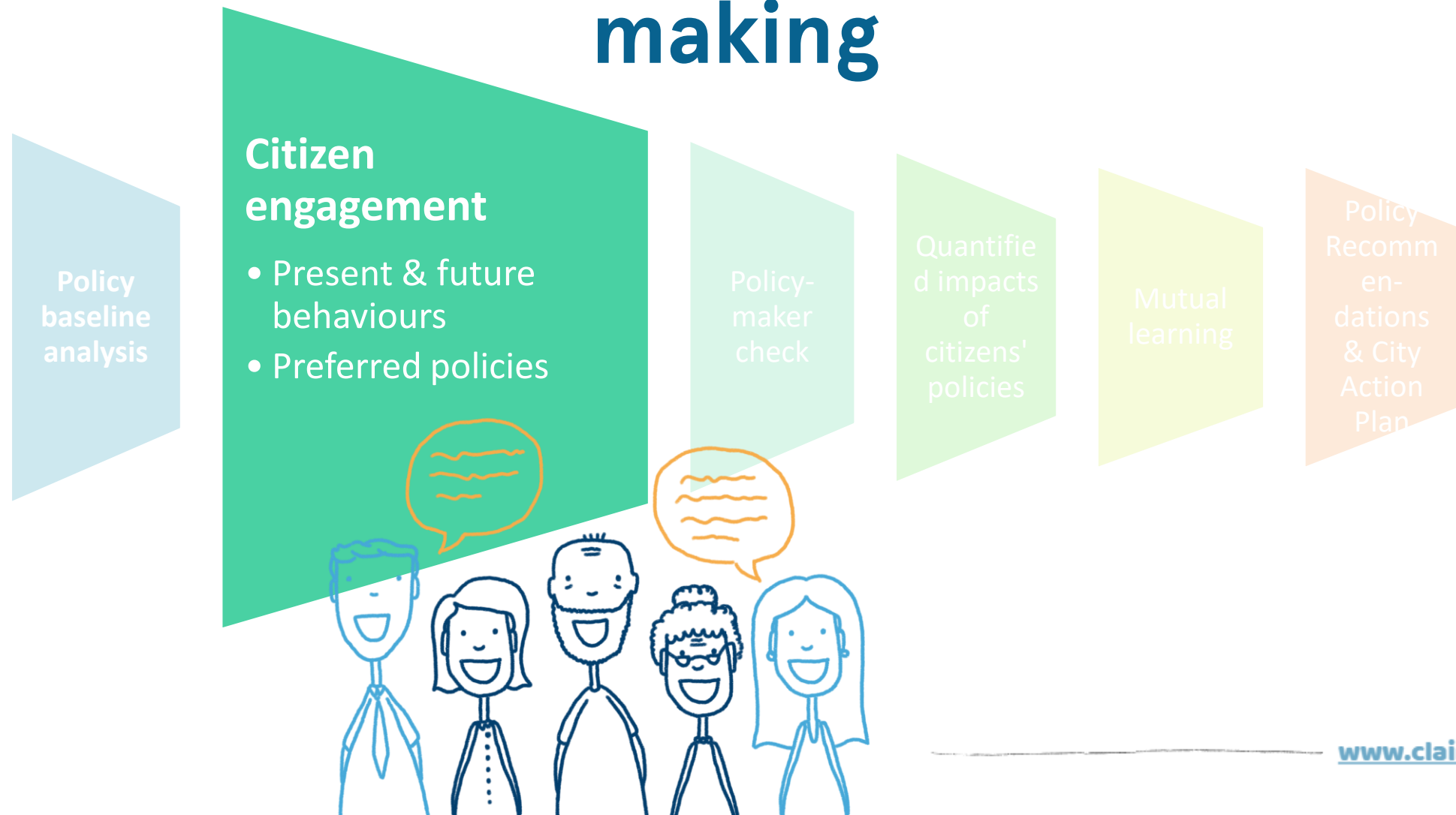


Genoa / Liguria Region



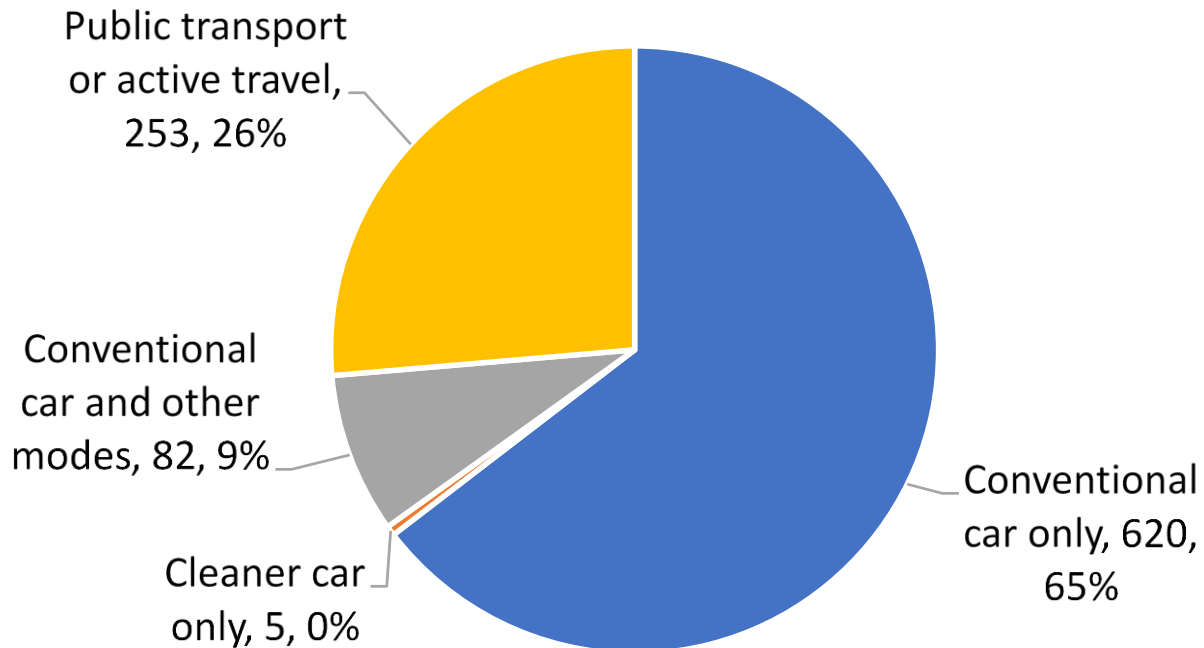
Aveiro Region

ClairCity: A new method for policy co-creation and citizen-inclusive policy making

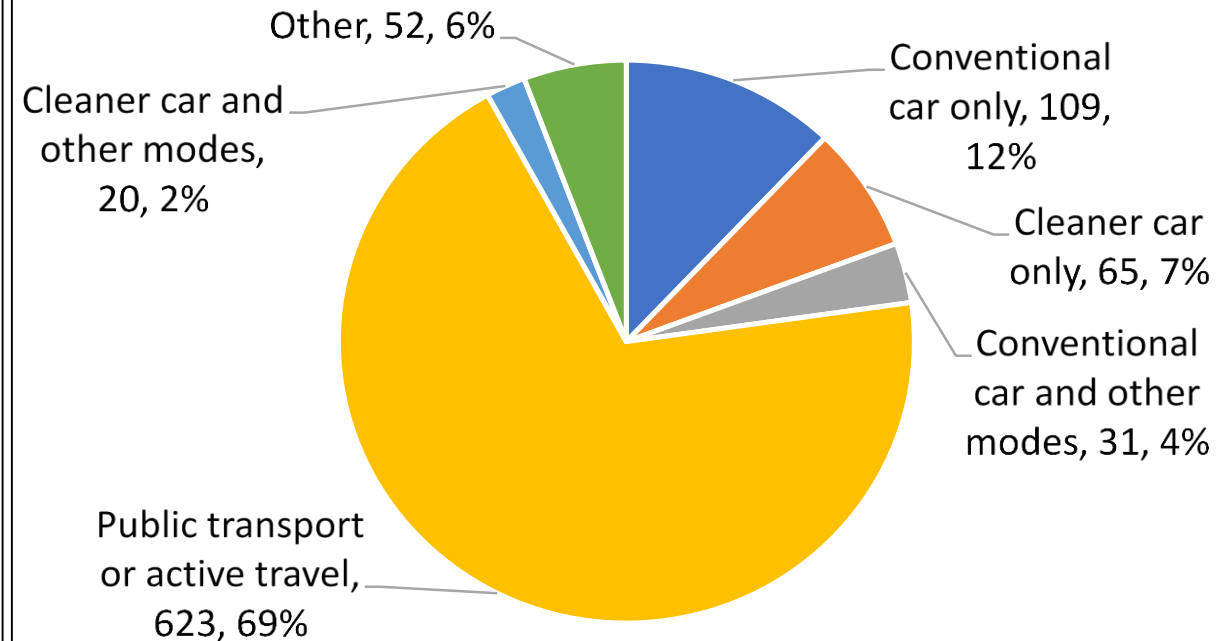


Engagement: Current vs future behaviour (transport, commuting)

How do people *currently* commute in the Aveiro Region?



How do people want to commute in the *future* in the Aveiro Region?



Sample = 856 respondents

Citizens' current behaviours and intended changes for the future (transport, commuting)

*"The prices of public transport are high.
It's cheaper to travel by car than to buy a bus pass"*

*"Due to lack of time I prefer to go
by car"*

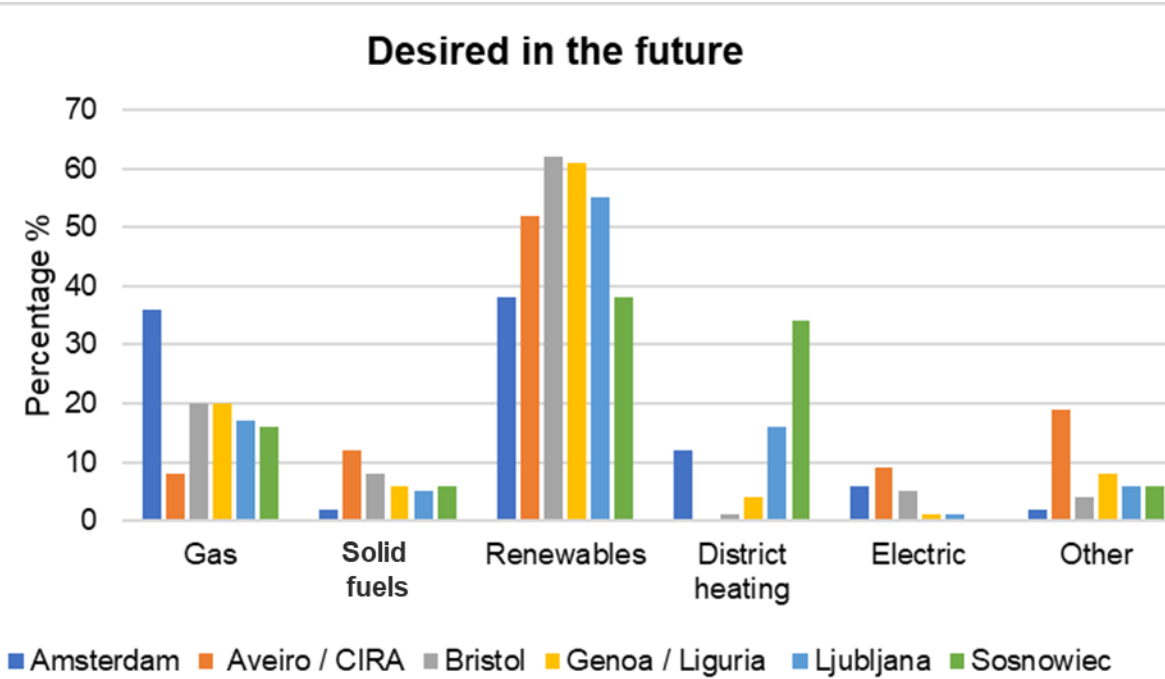
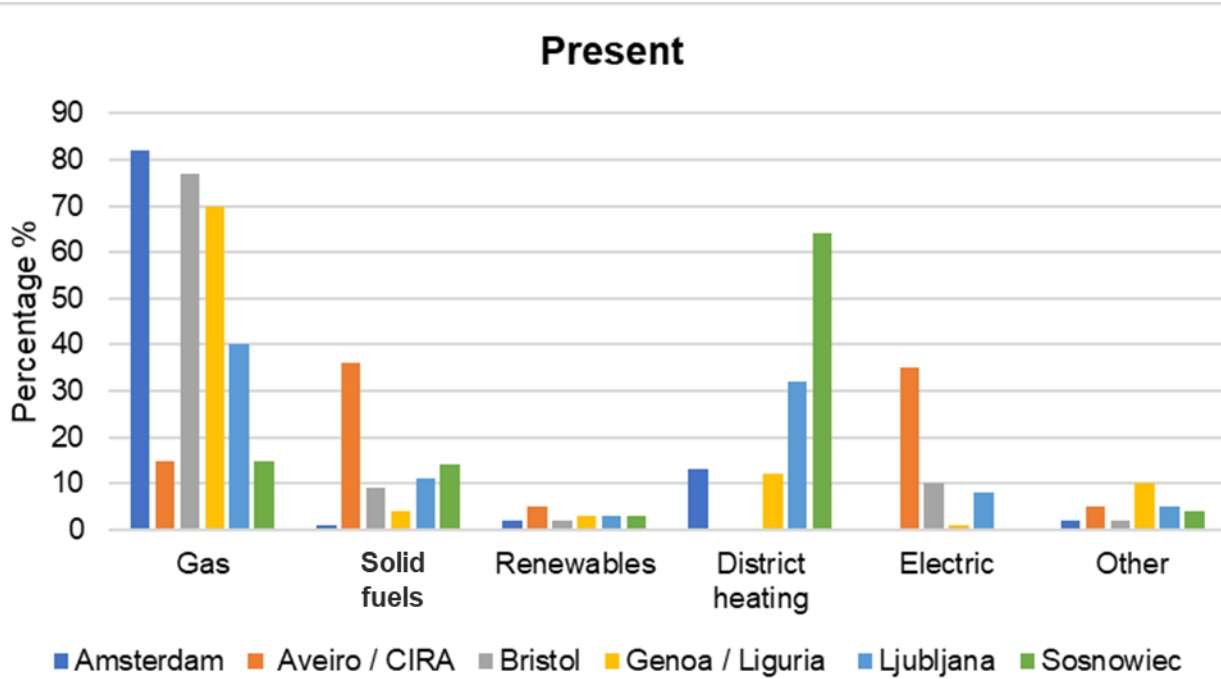
*"There is no public
transport to my workplace"*

*"Work is about 5 km from my house and
there is no adequate public transport"*

*"Public transport is lacking, there are no connections or
schedules compatible with my needs"*



Engagement: Current vs future behaviour (heating)



Engagement: Current vs future behaviour (heating)

Present

90

Desired in the future

70

There can be a mismatch between citizens wishes
and policy makers' priorities

Policy preferences of citizens – the measures that citizens want

Better public
transport

Cheaper public
transport

Cleaner buses /
replacement of old
fleet



Limit parking for
cars

Encouraging e-
mobility

Car-free city
centres / banning
diesel cars



More cycling
infrastructure and
parking

More space for
pedestrians /
walking



Accelerate the
uptake of solar
panels

Replace domestic
heating systems



Policy preferences of citizens – the measures that citizens want

Citizens do not necessarily come up with innovative policies, but want faster and more ambitious implementation of existing policies

Accelerate the uptake of solar panels

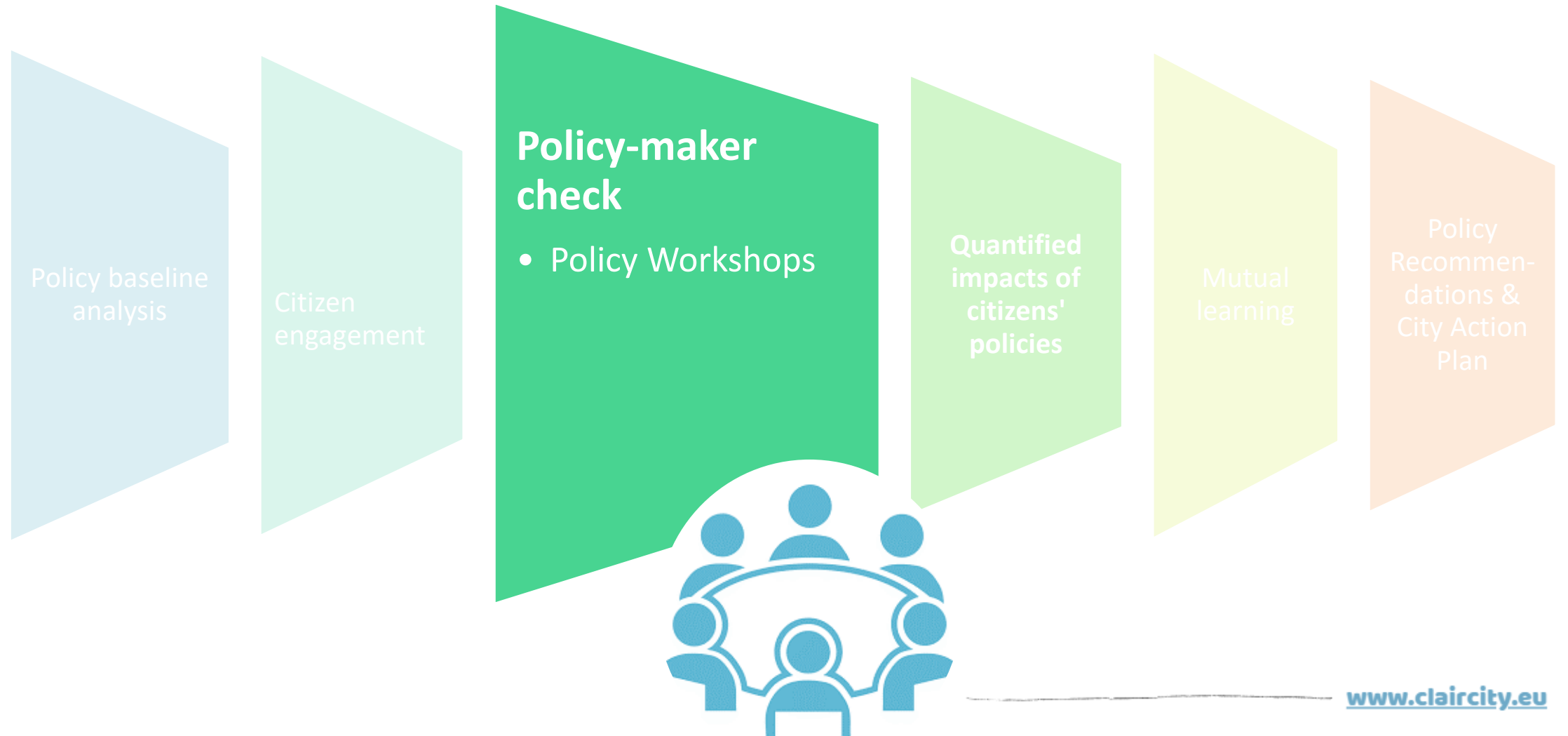
Replace domestic heating systems



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ClairCity: A new method for policy co-creation and citizen-inclusive policy making



Policy Workshops



Policy Workshops

- Some cities restrict ambitions of citizens more than others



Policy Workshops

- Some cities restrict ambitions of citizens more than others
- Costs important to policy makers



Policy Workshops

- Some cities restrict ambitions of citizens more than others
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- Change in behaviour of citizens is difficult



Policy Workshops

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- Discouragement of private car use remains a sensitive issue



Policy Workshops

- Some cities restrict ambitions of citizens more than others
- Costs important to policy makers
- Change in behaviour of citizens is difficult
- Discouragement of private car use remains a sensitive issue
- Output:
 - Co-created scenario =**
 - Citizen measures + Policymakers check**



Policy Workshops



The Policy Workshops led to a co-created scenario that is both realistic as well as ambitious

use remains a sensitive issue

- Output:

**Unified Policy Scenario (UPS) =
Citizen measures + Policymakers check**



ClairCity: A new method for policy co-creation and citizen-inclusive policy making

Policy baseline analysis

Citizen engagement

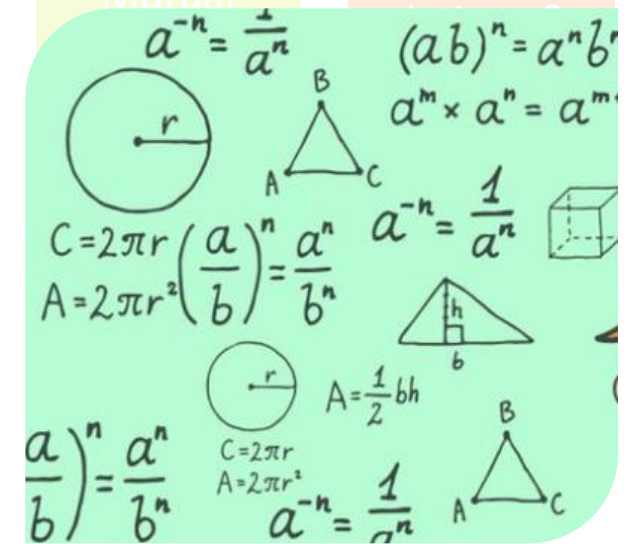
Policy-maker check

Quantification of impacts of co-created scenario against BAU

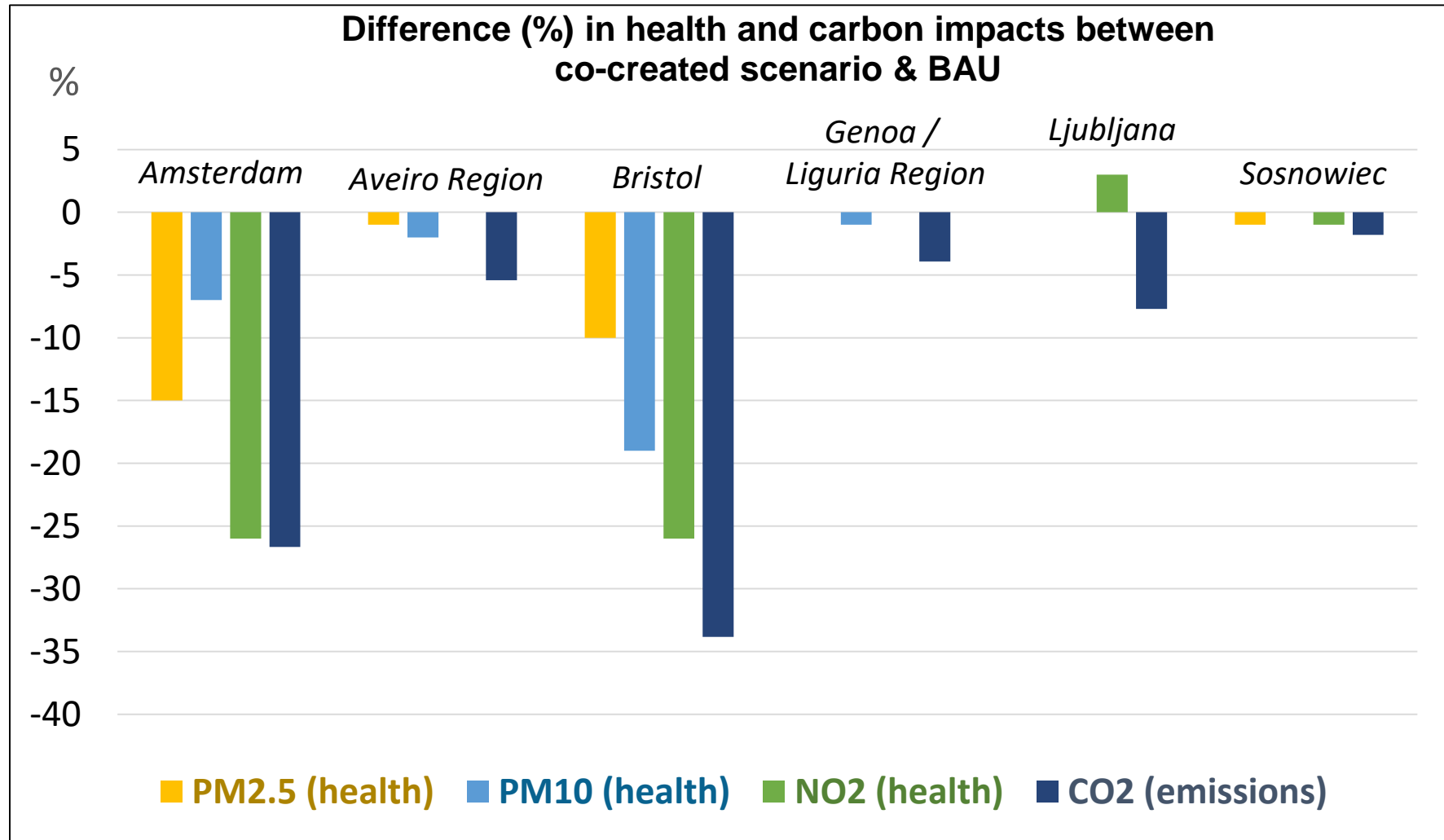
- Emissions
- Concentrations
- Health
- Costs

Mutual

Policy Recommendation



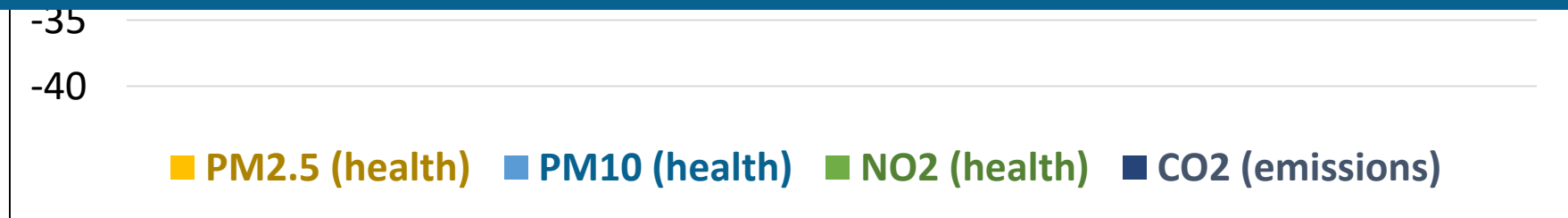
Main impacts of co-created scenarios



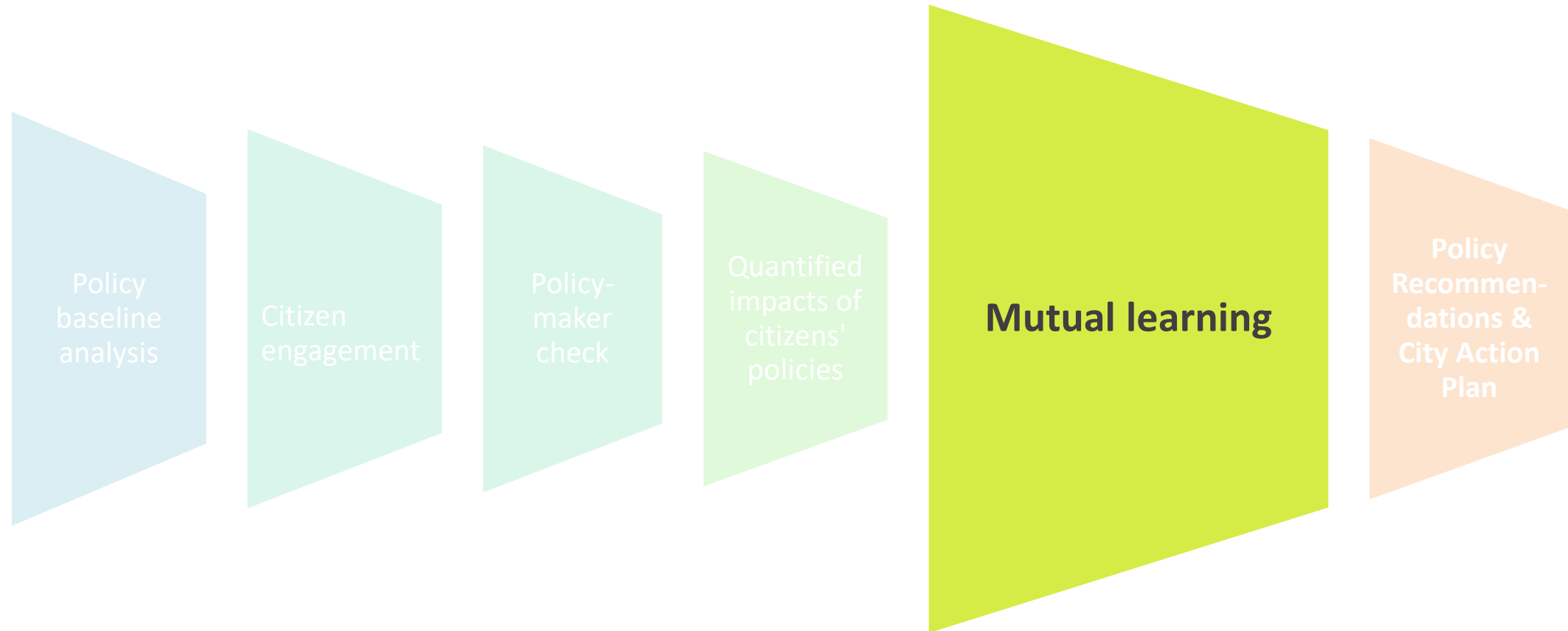
Main impacts of co-created scenarios



Citizens ambitions can increase the health & climate impacts of co-created scenarios



ClairCity: A new method for policy co-creation and citizen-inclusive policy making



Mutual learning – enabling factors



Mutual learning – enabling factors

Higher levels of intervention

Eliminate choice: regulate to eliminate choice entirely.

Restrict choice: regulate to restrict the options available to people.

Guide choice through disincentives: use financial or other disincentives to influence people to not pursue certain activities.

Guide choice through incentives: use financial and other incentives to guide people to pursue certain activities.

Guide choice through changing the default: make 'healthier' choices the default option people,

Enable choice: enable people to change their behaviours.

Provide information: inform and educate people.

Do nothing or simply monitor the current situation.

Linia	Przebieg	Czas
51	Liota Akademii	3min
520	Liota Akademii	04:11min
575	Wesoła Kozłowa	05:09
110	Liota Akademii	05:20min
6/74	Usługa Transportu Publicznego	
	Jakosc powierza zbac musiada pozni	

Mutual learning – enabling factors

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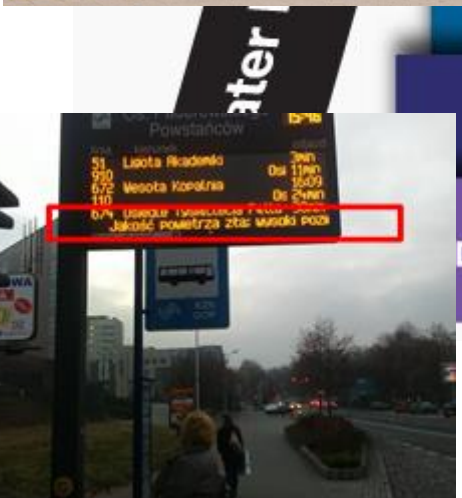
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920		04:11min
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110		05:21min
674	Usługi Transportowe Poczta Polska	



Mutual learning – enabling factors



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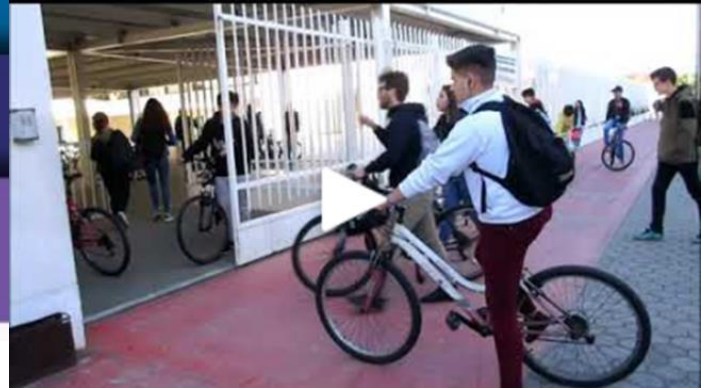
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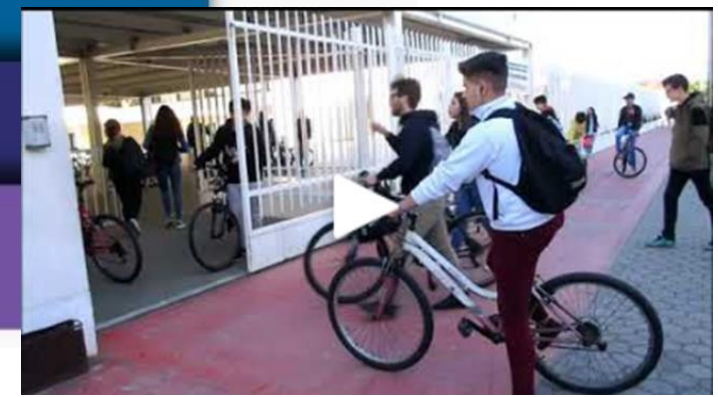
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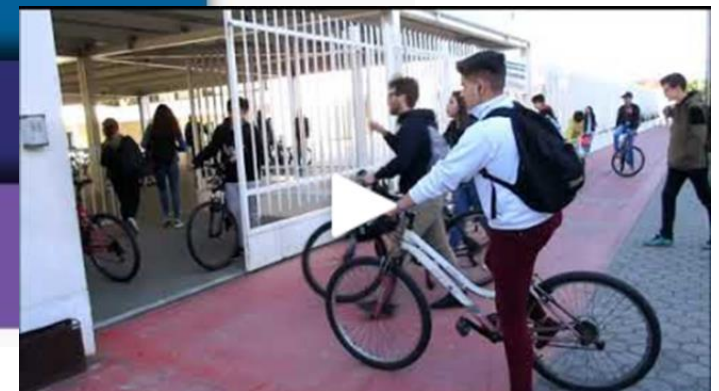
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ClairCity: A new method for policy co-creation and citizen-inclusive policy making



Main lessons for other cities

The ClairCity method helps to



Main lessons for other cities

The ClairCity method helps to

1. **Improve policy design:** Tailor policies to specific behavioural practices and identify barriers and enabling factors for change



Main lessons for other cities

The ClairCity method helps to

1. **Improve policy design:** Tailor policies to specific behavioural practices and identify barriers and enabling factors for change
2. **Foster dialogue with citizens:** Identify gaps between planned policies and citizens' willingness to change behaviours



Main lessons for other cities

The ClairCity method helps to

1. **Improve policy design:** Tailor policies to specific behavioural practices and identify barriers and enabling factors for change
2. **Foster dialogue with citizens:** Identify gaps between planned policies and citizens' willingness to change behaviours
3. **Create supported and implementable policies:** Provide ideas and a reality check for ambitious policy making





ClairCity contributes to successful and ambitious air quality and carbon policy making in cities together with citizens

Resources

Phase 3: Quantified Policy Package & Knowledge Exchange

We collated the evidence and lessons learned from Phase 1 and Phase 2 to create a quantified, bespoke, citizen-led and citizen-inclusive policy packet for each city. This entailed we:

- Knowledge exchange:** Gathered transferable lessons and steps for better practice based on the experiences of the ClairCity project; and made the lessons learnt known to other stakeholders.
- Impact Assessment:** Rapidly quantified the effects of the final UPS.
- Policy package:** Summarised the findings and delivered the political possibilities and effects of these possibilities to each city.

The result...

- 776,252 Twitter Impressions
- 85,478 policies selected on ClairCity Skyline
- 2,287 online citizens surveys completed
- 1,000s of young people engaged
- 23,354 website visitors

For a future with clean air

FOR PARTNER CITIES:

SENIĆEVIC, LACHINA PERICH, LJUBLJANA, BRISTOL, AMSTERDAM, AVEIRO REGION

FORWARD BY EUROPEAN COMMISSION

EUROPEAN UNION
HORIZON 2020

The ClairCity Methodology

For citizen inclusive decision-making

Get in touch if this would work well for your city!
claircity.eu
claircity@uwe.ac.uk

The ClairCity Bristol Action Plan
For citizen-inclusive air quality and carbon policies

Our future with clean air
www.claircity.eu

The ClairCity Amsterdam Action Plan
For citizen-inclusive air quality and carbon policies

Our future with clean air
www.claircity.eu

The ClairCity Aveiro Region Action Plan
For citizen-inclusive air quality and carbon policies

Our future with clean air
www.claircity.eu

www.claircity.eu/take-action/policy-makers/

Thank you for your attention



Citizens at
the Centre

For full reports:
<http://www.claircity.eu/reports/>

www.claircity.eu



Impacts of ClairCity on Bristol

Andy Edwards, Bristol City Council



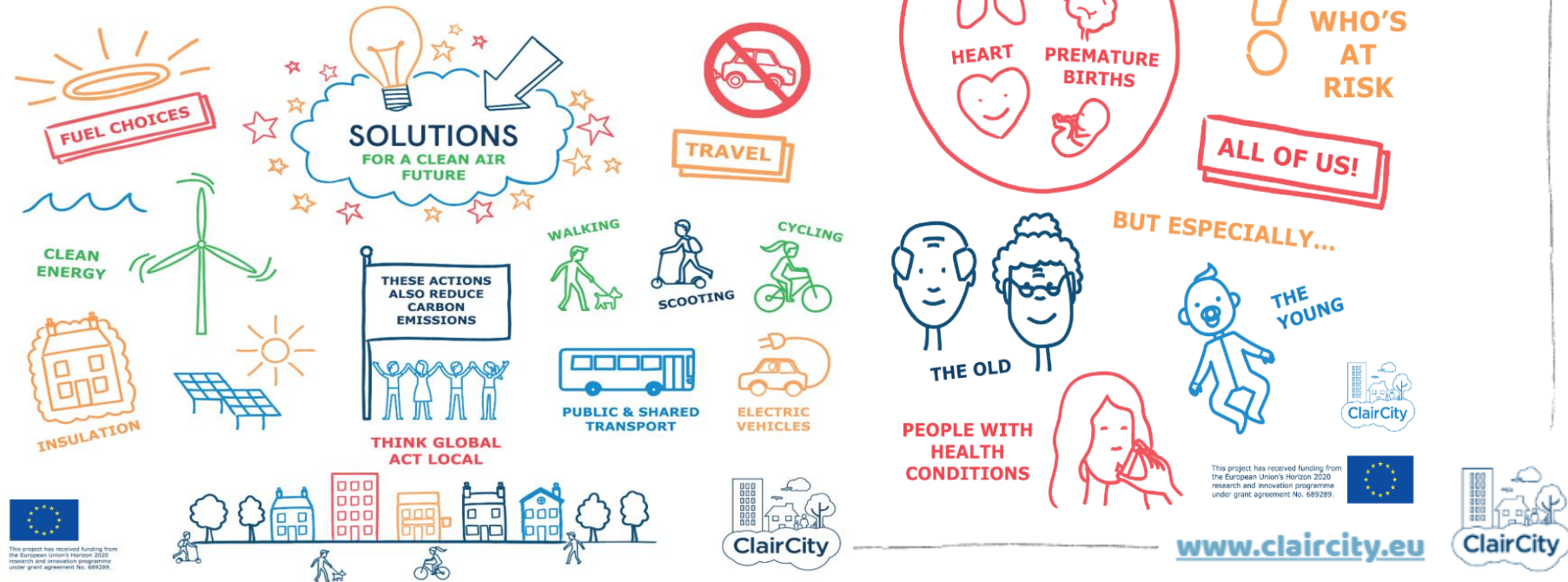
Citizens at
the Centre

www.claircity.eu



Engagement and Understanding

- Interesting and innovative engagement methodology
- Public, policy makers and city leaders

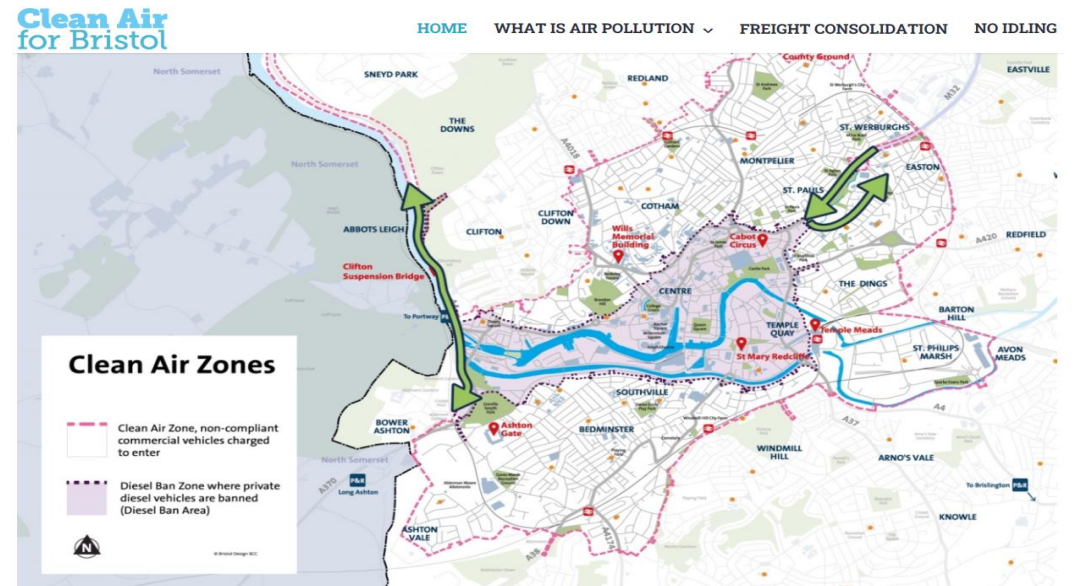


Influence of the Project

- Brings together citizen led policy ideas with policy makers, politicians and city leaders
- Links pollution and carbon emissions to behavior
- Supports policy development – policy package, press releases



Tackling congestion and making Bristol a better place for all. A vision up to 2036.



Thank you for your attention

Andy Edwards – Bristol City Council



Citizens at
the Centre

www.claircity.eu

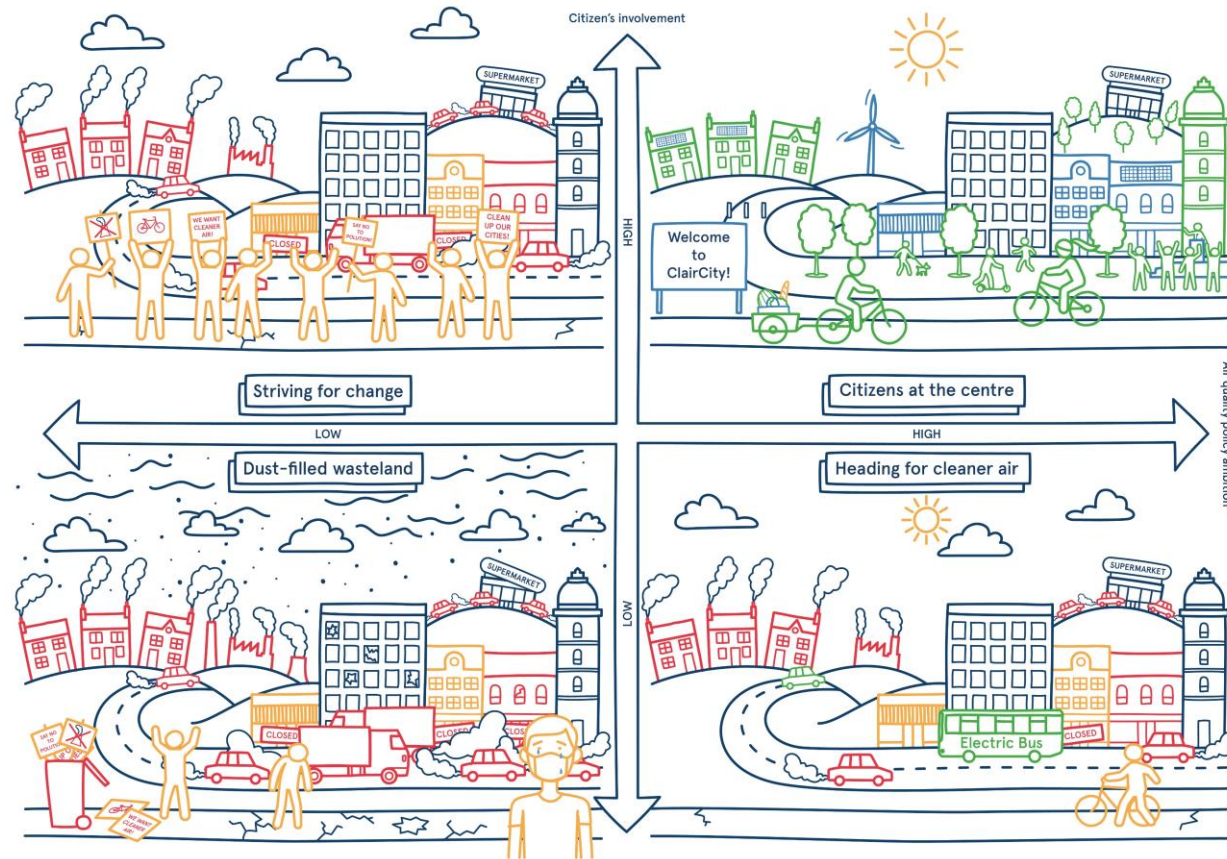


Q&A

Presentations and the recording will be made available after the Webinar

ClairCity is committed to the principles of Open Access. All relevant data and methodologies will be available in the coming week on our ClairCity community page on Zenodo.

What future do you want to help create?



Before you go:

Sign up to our upcoming webinar

16th July: community activation on clean air and climate change
*Search 'ClairCity' on Eventbrite

Check your inbox: we will email all resources discussed in due course.

Follow us on social @ClairCity
We will announce our E-learning resources, developed from these webinars, on there soon.



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NOT EVERY CITY IS THE SAME...

OUR PARTNER CITIES AND REGIONS REPRESENT VARIETY.

ClairCity

1. Trinomics B.V. (Project Coordinator - Netherlands)
2. University of the West of England, Bristol (Technical Lead - UK)
3. PBL Netherlands Environmental Assessment Agency (NL)
4. Statistics Netherlands CBS (Netherlands)
5. Technical University of Denmark (Denmark)
6. Norwegian Institute for Air Research (Norway)
7. REC Regional Environmental Centre (Hungary)
8. TECHNE Consulting (Italy)
9. Transport & Mobility Leuven (Belgium)
10. University of Aveiro (Portugal)
- 11. Municipality of Amsterdam (Netherlands)**
- 12. Bristol City Council (UK)**
- 13. Intermunicipal Community of Aveiro Region (Portugal)**
- 14. Liguria Region (Italy)**
- 15. Municipality of Ljubljana (Slovenia)**
- 16. Sosnowiec City Council (Poland)**

