

ClairCity disseminates

Our future with clean air



Newsletter 8: May 2020

www.claircity.eu





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Project consortium

- Trinomics B.V. (Project Coordinator, Netherlands)
- University of the West of England, Bristol (Technical Lead, UK)
- PBL Netherlands Environmental Assessment Agency (Netherlands)
- Statistics Netherlands CBS (Netherlands)
- Technical University of Denmark (Denmark)
- Norwegian Institute for Air Research (Norway)
- TECHNE Consulting (Italy)
- Transport & Mobility Leuven (Belgium)
- University of Aveiro (Portugal)
- Municipality of Amsterdam (Netherlands)
- Bristol City Council (UK)
- Intermunicipal Community of Aveiro Region (Portugal)
- Liguria Region (Italy)
- Municipality of Ljubljana (Slovenia)
- Sosnowiec City Council (Poland)

Welcome to ClairCity

The Covid-19 pandemic has changed our world in a matter of months. Yet through the cracks there have appeared some fertile shoots of a clean air future that may, or may not, be here to stay. Air pollution levels are at their lowest since the 1990s, walking and cycling is at an all time high, the pedestrianisation and expansion of cycling infrastructure is a political priority, and for many working from home is the new normal.

The entire ClairCity team have moved to homeworking during this time, and our end-of-project conference was cancelled back in March. It has meant we have had to come up with alternative digital solutions to dissemination, and have taken this time to reflect deeply on how we maintain momentum during times of intense disruption and sensitivity. I am sure these words resonate with a lot of our readers!

As a result, within you will find news of a range of materials that we hope will leave a clean air legacy for years to come, and are suitable for our online audience. Read on to find out what these are and how you can make use of them. Most importantly: sign up to our upcoming webinar series, the details of which are on page 6.

If you have any questions or comments, don't hesitate to get in touch.

Sophie Laggan, Communications Officer

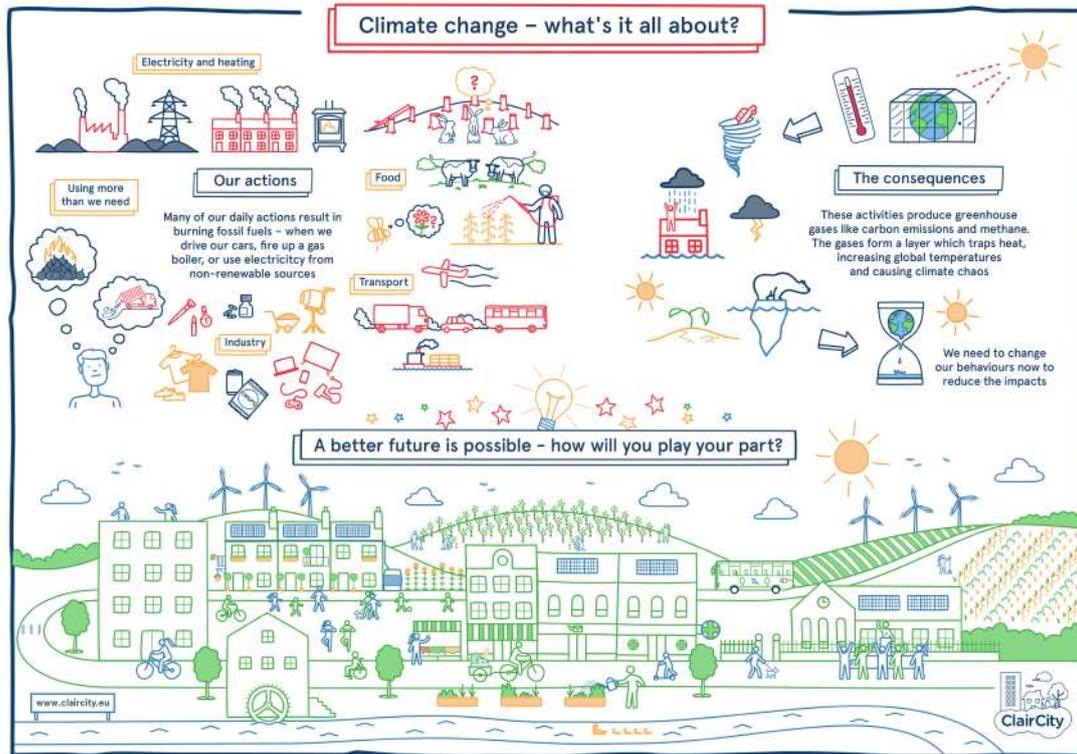
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New graphics!

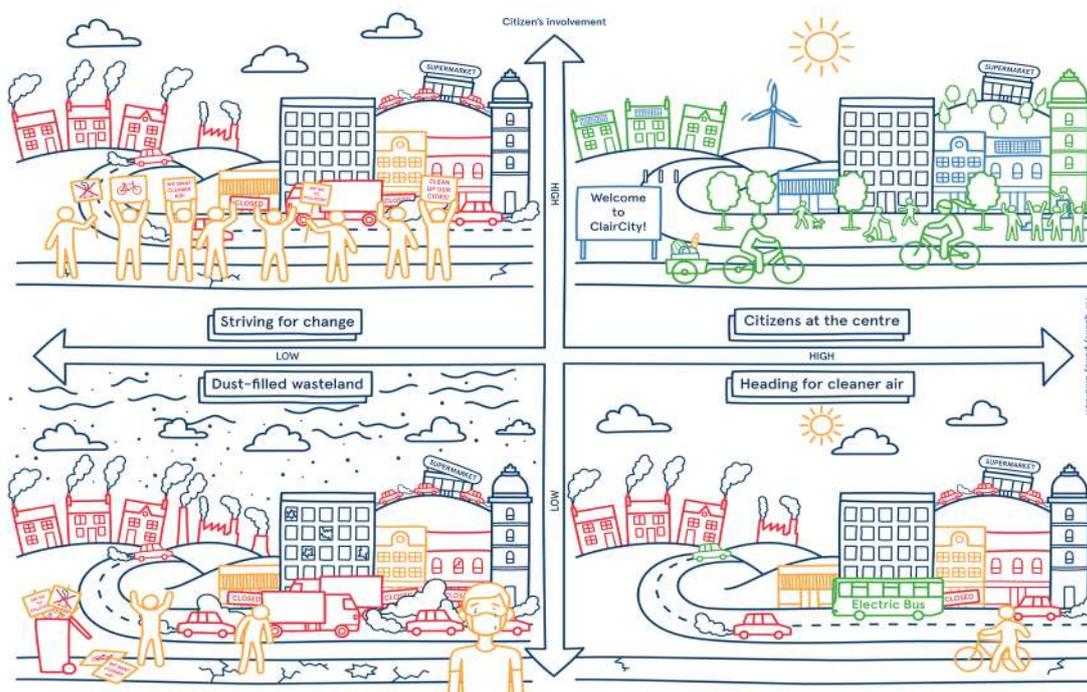
Our friends Point Creative - a digital graphics company based in Bristol, UK - have produced these stunning infographics for the project.

Based on conversations with the cities, it became apparent we needed a simple graphic to explain climate change to a school-age audience (like the air pollution graphic we produced a few years ago), as well as a visual to explore the future scenarios for clean air and climate

change based on the degree of citizen involvement and policy ambition. While our graphs do a great job of exploring these possible future for a more technical audience, the graphics will help more visual learners to understand.

So far these graphics have been translated into Portuguese and have been shared by our colleague Vera Rodrigues from the University of Aveiro, in a webinar about climate change with Portuguese pupils.

All graphics are available for download from our [website](http://www.claircity.eu).



Conference update

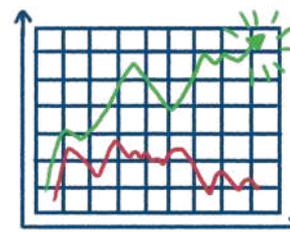
It was with a heavy heart that we had to cancel our conference in Brussels back in March. A lot of work went into the preparations for this event and many were looking forward to hearing our findings and celebrating in our successes.

The team had secured a venue, confirmed speakers, arranged accommodation and travel, prepared communications materials, written presentations and promoted widely. Yet all was not lost. Out of the ashes comes our online webinar series and the hope of a belated celebration after the end of the project and after lockdown restrictions have eased.

We would like to take this opportunity to thank everyone who was involved during this process, and hope you can find some solace in the upcoming webinar series!



Air quality news



Earlier this month the American Geophysical Union's journal Geophysical Research Letters published two papers that take a look at the effect of lockdowns on air quality - and the results may not be what one might expect.

One of the studies supports claims that levels of nitrogen dioxide and particulate matter pollution over China, Western Europe, and the United States have fallen dramatically due to lockdown measures. However, the other shows levels of surface ozone in China have increased.

The first paper drew on satellite measurement and found that while results varied, most of the coronavirus epicentres they measured showed reductions. For example, NO₂ levels were down by 40% over urban areas in China, 20% over Belgium and Germany, and 19–40% in different areas of the U.S. There was no decrease in Iran however, and this is believed to be due to a less stringent lockdown.

Experts have not observed reductions of such magnitude since satellite-based air quality monitoring began in the 1990s, according to Stavrou.

The second paper focused on northern China, measuring the levels of nitrogen dioxide, particulate matter, and surface ozone after the lockdown began on January 23, 2020. This time the authors reported a 60% reduction in NO₂ and a 35% reduction in particulate matter. So far so good. However, secondary pollutant surface ozone increased by 150–200%.

Surface ozone can cause "severe health problems, including pulmonary and cardiac diseases," state the authors. A variety of household cleaning products and paints, and industrial sources release volatile organic compounds. And it is these compounds, when mixed with NO₂, that produce surface ozone. Sunlight and higher temperatures create the perfect conditions for this reaction to take place, so the change in seasons may have gone some way to amplifying this situation.

Lockdown has offered scientists unprecedented insight into the impact of emission regulations - a silver lining during this tragic situation. Indeed, our modellers throughout Europe have been doing their own investigations and are in the process of writing papers on these emerging dynamics. We will update you when we have further details.

Coming soon: ClairCity webinars



ClairCity are proud to present our webinar series, taking place next month. A selection of the team and our partners will speak on topics ranging from citizen engagement, to modelling and citizen-inclusive city decision making relating to air quality and climate change. Expect lively discussions, with several opportunities to ask questions, and takeaway top tips and resources to benefit you and your work.

Please share the programme (above) and follow update on social media.

Webinar 1: Engagement

Learn from the experiences of 6 cities and regions across Europe. In total, 8302 citizens from all walks of life took part in varied engagement activities. The aim was to make our cities healthier places to live by influencing decision making processes on reducing air pollution and carbon emissions.

Hear from science communicators, game developers and engagement practitioners, and engage in discussion about the types of tools that work for different audiences, from mobile games to schools activities, the challenges and rewards of working with different cultures, and the steps that can be taken to keep the momentum going during times of disruption. In addition, the citizen-led scenario would lead to substantially lower carbon emissions than business as usual, in particular after 2035. It would also, contrary to current plans, lead to near-zero carbon emissions in 2050.

WEBINAR 1: THURSDAY 11TH JUNE, 11:00-12:20 CET

Engaging citizens with air quality and climate change

Dr Margarida Sardo and Dr Laura Fogg-Rogers (UWE Bristol), Andy King (PlayWest), Eva Csobod and Péter Szuppinger (REC)

WEBINAR 2: THURSDAY 18TH JUNE, 14:00-15:20 CET

Citizens at the centre: adding people's behaviour in the emissions, air quality, health modelling chain

Kris Vanherle (TMEuven), Vera Rodrigues (University of Aveiro), Angreine Kewo (Technical University of Denmark), Enda Hayes (UWE Bristol)

WEBINAR 3: THURSDAY 25TH JUNE, 15:00-16:30 CET

Lessons from putting citizens at the centre for air pollution and carbon emissions reduction in cities

Stephan Slingerard, Hans Bolscher and Irati Artola (Trinomics), Enda Hayes (UWE Bristol), Andrew Edwards (Bristol City Council), Svein Knudsen (NILU)

Webinar 2: Policy

The webinar will dive into the methodological approach of our innovative modelling, which aimed to include citizens' behaviour in the classical modelling approach.

In this one-hour interactive session, hear the international team of modellers highlight examples of how they dealt with this, and listen to them present key elements of the modelling on transport and residential energy use. Then gain case specific insights as they elaborate on a few key findings from the cities that were part of the ClairCity project.

Webinar 3: Policy

This session will focus on the ClairCity results of making policies together with citizens. The main policy lessons achieved across our six cities will be discussed in the context of citizen involvement. The speakers will reflect with attendees about the opportunities and costs for policymaking and policy implementation following greater citizen participation. Finally, the session will discuss what policy lessons the ClairCity method can offer to other middle-sized cities aiming at ambitious and citizen-inclusive air quality and carbon policies.

You will be joined by representatives from science, policy and local government, and we may have some special speakers to announce nearer the time.

Head to our dedicated [Eventbrite page](#) to sign up to the webinar(s) that appeal to you most.

Bristol's citizens influence local decision making

Back in January, the Bristol team presented the findings from their local ClairCity action plan to Bristol's Climate Change Advisory Committee. Read on to hear what happened

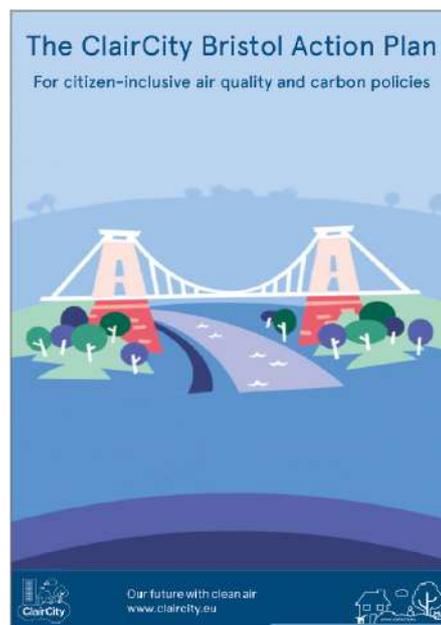
The findings for Bristol

On Thursday 9th January, Professor Enda Hayes (Project Director) and Dr Laura Fogg-Rogers (Communications Manager) presented the findings from the ClairCity policy package to a room full of local leaders in urban sustainability. These leaders represented the following organisations: Bristol Green Capital Partnership, Bristol University, UWE-Bristol, The Centre for Sustainable Energy, Arup and Bristol City Council.

After a short introduction to the project, Professor Hayes detailed the findings from ClairCity. "Citizens' measures could substantially improve the health of the city and its people," he said. "For example, it is estimated that the number of premature deaths would be reduced by about 50% in the [citizen-led] scenario compared to business as usual.

In addition, the citizen-led scenario would lead to substantially lower carbon emissions than business as usual, in particular after 2035. It would also, contrary to current plans, lead to near-zero carbon emissions in 2050.

Professor Hayes also explained that many people would change their behaviours if they could, however barriers to sustainable transport modes persisted, such as infrequent and expensive public transport and poor cycling and walking infrastructure. These barriers were ultimately reflected in the policies citizens put forward, and the top five are listed below.



The brief presented to the Climate Change Committee

Influencing influencers

The findings were warmly received by the Committee, who have been influencing the city's Zero Carbon and Clean Air Action Plans for a number of years. The Committee advised the team share these findings with local councillors and local Members of Parliament (MPs) to influence their work in the lead up to the local elections due to take place in the summer of 2020. In total, 70 Councillors and MPs were contacted, with several directly thanking the team for their efforts.

Six weeks after the email was sent, the UK went into lockdown and election preparations ground to a halt. Shortly after, the decision was taken to postpone elections to 2021.

The city team were quick to change their approach to dissemination following this announcement and work began in earnest to develop online resources that could be shared instead. Read more about these on page 3.

Through crisis comes opportunity

In preparation for the ease of lockdown restrictions, Bristol City Council took the bold decision to fast-track plans to transform local travel. The plans include pedestrianising some of the city centre and upgrading sustainable transport infrastructure. The impact of these changes will be felt for years to come and go a long way to securing a clean air future for Bristol. Often gone unsaid but no less important, behind these decisions were the influence of multiple organisations and citizens.

Bristol's top five
Citizen-led clean air policies

1. Ban/phase out polluting vehicles
2. Make buses greener and cleaner
3. Make public transport more affordable
4. Create alternatives to car use through better walking and cycling infrastructure
5. Reduce vehicle road space and increase public transport space



Bristol's Top 5 citizen-led clean air policies

Being resourceful

Dissemination of ClairCity's research findings and engagement activities began in earnest at the start of 2020. With six months remaining to the project, the Communications Team were keen to spend this time developing resources that could be shared for years to come, keeping alive the message of ClairCity and supporting all of the partners and citizens working towards the same goals.

As a result, a series of digital resources have been produced. So far we have finalised a methodology trifold leaflet, which outlines the ClairCity process and how it can be of benefit to other cities and regions, a visual evaluation report and two resource packs for our target audiences.

What to expect

The [visual evaluation report](#) highlights the achievements of ClairCity through some eye-catching graphics and statistics. There are success stories from our partners contained within and some top tips for future science communicators that will help them when employing the engagement tools used during ClairCity.

The first pack we finalised was for [Community Activators](#) - local people that want to, or are already, making a change to their cities and regions for cleaner air. There is a handy decision tree to navigate the pack, allowing novices and experts alike to get the most from the resources within. You can expect advice on reaching at-risk communities, tips on setting up a local campaign group, and a guide on what engagement techniques are useful, and when, for more effective communication.

The second pack is specifically for [educators](#) - teachers, homeschoolers, parents during COVID19... anyone working with children and young people. In total, there are seven lesson plans and three 'wet play' activities for kids to get involved with. You will also find inspiration from some school success stories in Aveiro and Bristol, and some printable graphics for children to discuss with classmates, or to pin on their fridge.

So far, Aveiro has translated the Community Activator pack into Portuguese and the Educator pack has been shared hundreds of times. The Educator Pack is online on the Bristol Learning City website, and it along with all the resources produced so far are on the ClairCity website.

For high resolution versions of any of these materials, or to put forward ideas for other digital resources we can produce for you or your city, please contact [Sophie Laggan](#).



ClairCity Methodology trifold



Community Activator pack



Educator pack with schools lessons



Visual evaluation report



in numbers

818,736



Citizens involved across
6 cities and regions

4,887 in Delphi process

>1,000 children

82 policy makers

65 older people filmed

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

Social influence

770,253  Twitter impressions

33,678  Website visitors

5,801  YouTube Video views

1,418  Facebook Followers

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

