



## DELIVERABLE

# D6.1 Benefits and Impact Assessment Roadmap

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# Executive Summary

In this deliverable, a strategy is outlined on how the outputs of the project will be monitored and evaluated during the open and public rounds starting from small, dedicated user-groups to public testing.

To determine COMPAIR's impact and effectiveness, a comprehensive evaluation strategy is deployed for measuring the impact of the activities during the project's life cycle. This will be done by the evaluation of quantitative and qualitative Key Performance Indicators (KPIs).

The progress of the quantitative & qualitative KPIs during the project is respectively captured by manual counting and a general questionnaire.

# 1. Introduction

In this deliverable, a strategy is included as a way to determine whether:

(1) our environmental monitoring capacity has improved;

Under the environmental monitoring capacity is understood the capacity of using the different tools by the participants.

(2) whether we managed to involve and reach our target groups (citizens of all LSE groups, also the more vulnerable and lower LSE groups),

(3) whether participating citizens effectively change their behaviour to lower their environmental impact.

Some of the KPIs will be assessed at **project** level, others at **pilot** level or at both levels. The extent of the evaluation of KPIs is at the discretion of every Pilot and reflects the pilot lead's opinion on the need for evaluation.

These KPIs are reflecting the impact of the project. Citizens that are more knowledgeable about their direct environment and their impact on it, are considered a benefit, because they will be more inclined to adapt their behavior to the benefit of the climate and the local air quality.

First the document contains information about the quantitative KPIs (pilot, project & communication KPIs). Then it continues with a description of the qualitative KPIs (participation & behaviour change, inclusiveness, skills, trust, openness & communication). And at last the progress Table of the KPIs which gives a global view on the evaluation.

## 2. Evaluation-KPIs

To determine **COMPAIR's** impact and effectiveness - as outlined in and enhanced through the consolidated roadmap (D8.1) - the team will deploy a comprehensive evaluation strategy for measuring the impact of activities. This will include both quantitative and qualitative KPIs.

### 2.1 Quantitative KPIs

To capture the outputs and outcomes during the project's life cycle, several measurements and indicators have to be set for each of the key activities. The earlier in the project we start measuring, the less information will be lost and the more information we will capture. The tables below outline quantitative targets for tracking and measuring progress, as described in the Description of Action/project proposal.

#### 2.1.1 Project and Pilot KPIs

The following table contains the quantitative KPIs for pilots and the project as a whole. The project KPIs evaluate the global outcome of the project. The Pilot KPIs evaluate outcomes at pilot level. All quantitative KPIs must be evaluated by every pilot. It is divided into 5 parts- same structure as the project proposal.

Objectives	Target	Means of Verification	Project level	Pilot level
<b>Accelerate the use of Citizen Science (CS) to combat climate change and air pollution in EU cities</b>				
Pollutants in Augmented Reality (AR) app <sup>1</sup> - different particles visualized and explained	6	Number of particles (i.e pollutants) in the AR app (manual counting)	x	
Cities-AR app to convey air quality details	4	Number of cities (manual counting)	x	
Users of the AR app- 500 downloads on Google Play and App Store in total	500	Number of users - Interface in the AR app (e.g statistics from Google Play and App Store) (manual counting)	x	x
Policy measures targeted - relevant policy measures targeted by the project	10	Number of policy measures investigated (manual counting)		x
Ideathon events Focus on policy co-creation <ul style="list-style-type: none"> <li>• 1 White Paper delivered</li> <li>• 5 Research papers published</li> <li>• 3 Research organizations benefiting from COMPAIR input</li> </ul>	4/1/5/3	Number of ideathon events held Number of White Paper delivered Number of papers published Number of Research organisations using COMPAIR input for research (manual counting)	x	
<b>Enable Citizens with sensors and tools to obtain meaningful and useful data for problem solving</b>				
Network maps value created to link relevant groups	4	Number of identified relevant population groups - Output from workshops (manual counting)		x
Researchers to steer and support each group	2	Number of researchers per group (manual counting)	x	x
Quadruple Helix events during the project	16	Number of quadruple helix events held (manual counting)	x	x
DIY Sensor Citizen Science Lab established	1	The established of a Sensor Citizen Science Lab one for all the pilots (manual counting)	x	

<sup>1</sup> Augmented Reality app (AR), the DEVA app

Objectives	Target	Means of Verification	Project level	Pilot level
Sensor devices assembled by citizens	150	Number of sensors that are assembled successfully by citizens (manual counting)		x
Stakeholders involved in experiment co-design	50	Counting number of participating groups (policy makers, citizen organisations, ) cumulated for all pilots (manual counting)		x
Citizens involved in open and public experiments	300	Counting citizens that are involved, cumulated for all the pilots (manual counting)		x
10GB new air quality data collected by citizens	10	Volume of air quality data collected by citizens expressed in GB (manual counting)		x
Users of Dashboards (personal, neighbourhood, city)	1000	Number of users (login or google analytics data), that are using the dashboard Interface (manual counting)		x
<b>Broaden participation in CS through professional leadership, gamification and co-innovation</b>				
Pathways to behavioural change elaborated	5	Number of descriptions of (path)ways that are assumed to lead to behavioural change (manual counting)		x
People participate in <b>COMPAIR</b> data jam	100	Number of participants that joins the data jam (one data jam organised by the project) (manual counting)	x	
People participate in <b>COMPAIR</b> through gamification	100	Number of participants who participate in a gamification during a pilaf of <b>COMPAIR</b> (manual counting)		x
People participate in <b>COMPAIR</b> policy ideathons	100	Number of participants in a <b>COMPAIR</b> policy ideathon during the 4 that will be organised (manual counting)		x
Target 4 new city areas not covered by official measurements	4	Number of cities (manual counting)		x
Target 4 neighbourhoods that have problematic air quality	4	Number of neighbourhoods (manual counting)		x

Objectives	Target	Means of Verification	Project level	Pilot level
Minimum of 2 integration/calibrations per pilot city	2	Number of calibrations (manual counting)		x
Cities benefit from <b>COMPAIR</b> training	300	Number of representatives of cities during <b>COMPAIR</b> training (manual counting)		x
New cities learn about <b>COMPAIR</b>	50	Number of representatives of cities that learned about <b>COMPAIR</b> (manual counting)		x
Citizen Science (CS) case studies presented through storytelling	4	Number of cases of CS studies used in storytelling of games (manual counting)		x
People enrolled in <b>COMPAIR</b> training	100	Number of people (citizens and representatives of cities) enrolled/registered in <b>COMPAIR</b> training (manual counting)		x
<b>Development of new scientific knowledge and/or innovations with/by citizen scientists in the field of sustainable development and environmental protection.</b>				
Citizens involved in scientific experimentation from a data acquisition, data analysis or result creation viewpoint	600	Number of citizens involved (manual counting)		x
Co-creation workshops with citizen scientists	15	Number of workshops with citizen scientists (manual counting)		x
New environmental protection ideas relating to data from CS experiments during the project pilots	10	Number of environmental protection ideas resulting from CS experiment data (manual counting)	x	x
City policies affected with new environmental CS data	5	Number of policy domains (education, traffic, environment, urban planning, economy, ...) that are related to the captured environmental CS data and is affected (informed/monitored/adjusted/supported/changed/...) (manual counting)	x	x
Existing citizen science projects reviewed and built upon	15	Number of Citizen Science projects already in place before <b>COMPAIR</b> (manual counting)	x	



Objectives	Target	Means of Verification	Project level	Pilot level
Scientific publications written by the project on citizen science and citizen-driven, evidence-based policy making	6	Number of scientific publications in the making at the end of the project and published 5 years after the project (manual counting)	x	
<b>Evaluation evidence concerning the societal, democratic and economic costs and benefits of citizen science.</b>				
Develop metrics from MICS (Measuring Impact of Citizen Science) project	15	Number of MICS that are developed during the project (manual counting)	x	
Align with citizen science indicators from the official list for Monitoring the Evolution and Benefits of Responsible Research and Innovation (MORRI)	6	Assessment of the MORRI list during the project (see Annex 1)	x	
Include participants from lower-LSE and hard-to-reach groups	200	Number of participants (manual counting)		x
No. citizens in self-analysis mechanism for citizens against metrics	300	Number of citizens that perform a self-analysis in light of the other indicators mentioned in the table (manual counting)		x
No. of individual evaluation reports containing complete evidence for CS	4	Number of reports, one from every pilot providing evidence that CS proved useful in the pilot case (manual counting)		x
Create CS recommendations report towards scientific policy makers on the benefits and obstacles of citizen science, based on the project evidence	2	Recommendations will be differentiated to at least two different target groups (e.g. national level or local level) and hence lead to at least two reports (manual counting)	x	
No. of sustainable business models for technology-enabled CS replication	2	Number of outlines of business models (manual counting)	x	

## 2.1.2 Communication KPIs

See [D8.1](#) Roadmap with a methodology for achieving them.

The content that will be developed in this project will be translated and available in all pilot region languages (translated by pilot leads). Also in English, to ensure to reach out to lower LSE- and vulnerable groups.

In the table below Y1, Y2 and Y3 list the indicator number to be met at the end of year 1, year 2 and year 3. The numbers are not cumulative.

Activity	Description	KPI
<b>Website</b>	To achieve a number of visits all partners must help promote the project through their own networks. All communication material must contain the URL and links to the project website should be included on social media tweets. Regular news posting on the website and sharing via different channels will amplify impact.	Y1: 250 visitors Y2: 500 visitors Y3: 1000 visitors (unique visitors)
<b>Social Media</b>	Regular posting of original content, plus following and retweeting and engaging with the content of non-followers will encourage new followers.	Y3: Twitter followers: 800
<b>Newsletters*</b>	Newsletters will be planned for when major results are achieved (in regular intervals). The newsletter will be sent to those signed up on the website and via Partner networks.	Y1: 2 newsletters Y2: 4 newsletters Y3: 6 newsletters
<b>Press Releases*</b>	As with the Newsletters, Press Releases will be created when major results are released and disseminated through project and partner media channels.	Y1: 1 PR Y2: 3 PR Y3: 5 PR
<b>Collaborations/ Clustering</b>	Collaborating with other projects, networks and organisations sharing knowledge and promoting <b>COMPAIR</b> findings through these clusters.	Y1: 5 projects Y2: 10 projects Y3: 20 projects
<b>Brochures*</b>	Brochures will be updated throughout the project based on project phase, results and audience needs at that time.	By the end of Y3, 3 brochure designs
<b>Roll-Up Banners*</b>	To maximise presence at all events mobile roll-up banners will be designed to reflect the current project stage.	By the end of Y3, 3 banners
<b>Publications</b>	Publications include a mix of Open Access papers and conference publications, weighted towards the second half of the project when more results are available.	Y1: 5 Y2: 10 Y3: 20
<b>Posters*</b>	Posters provide easy-to-understand graphical summaries of results at conferences or indeed pilot events.	By the end of Y3, 4 postcard designs
<b>Demo Videos*</b>	Videos help convey complex messages through product walkthroughs and testimonials from end users and beneficiaries.	Y1: 2 videos Y2: 4 videos Y3: 6 videos
<b>Events*</b>	Being present at key industry events, giving presentations and manning stands enables direct contact with stakeholders and ability to build a trusted two-way relationship with them.	Y1: 10 events Y2: 20 events Y3: 30 events
<b>Sustainability*</b>	Review of the closest competitors and their business models plus understanding of market direction and user needs will help position <b>COMPAIR</b> as an attractive package for technical solution adoption.	Consideration of 10 other initiatives' sustainability models

\*Under direct control of the project, where other indicators are dependent on update of audience, stakeholder engagement...

## 2.2 Qualitative Impact Targets

While quantitative targets are important, they are not enough to understand whether the project conforms to the desired standard. For that reason, qualitative feedback is needed to paint a more complete picture.

The conceptual framework consists of 5 domains (participation & behavior, inclusiveness, skills, trust, openness & communication) to evaluate the qualitative impact of **COMPAIR**, synthesizing all non-quantitative impact statements in the Description of Work.

A [general questionnaire](#) will be used to collect feedback from citizens and provide qualitative data on our impact in each of these 5 domains. The questions can be adjusted to the local pilot case (annex 3).

- The questionnaire can be adjusted, depending on the needs of each pilot
  - Time: before, during and/or after pilot. Additionally a follow-up questionnaire could be done to assess sustainability of the change (e.g. 6 months later).
  - Tools: e.g. [google form](#), focus groups, paper, interview, quiz, [co-evaluation](#) etc
  - Response rate: we're aiming for 60% of the participants in the CS project to participate in the survey. This target value stimulates each pilot to actively promote the surveys and other methods of input when they are well below this target. However ultimately not attaining this value does not indicate failure of the entire pilot as high participation in questionnaires is not the main goal. Rather proving the applicability of citizen science data and demonstrating good participation (in line with earlier indicators) are the benchmarks for evaluating pilot success.
  - Domains: participation & behaviour change, inclusiveness, skills, trust, openness & communication

### 2.2.1 Participation & behaviour

**COMPAIR** increases public awareness about the importance of the environment and Citizen Science (CS). It brings communities together to work towards shared environmental goals. CS participants will be engaged in problem solving on a local level, and this not just as an afterthought, but as active contributors to the process. It stimulates citizen motivation by showing that their actions and results do matter. Participant motivation is widely noted as an important pathway to behavioural change. Group dynamics and peer-to-peer learning are another important pathway to behavioural change. Feedback from social peers can act as a strong motivator for participants. New behaviour can gradually establish itself as a social norm, helping to speed up its adoption by even more people.

Targets for Participation & behaviour:

- >70% participants report that they are happy with the researcher support provided

- >70% citizens report positive changes in behaviour

## 2.2.2 Inclusiveness

**COMPAIR** will ensure all-round inclusiveness and gender-neutral language in its work. Special tactics will be used for the involvement of women, youth and hard-to-reach groups (e.g. vulnerable people of lower LSE groups), to encourage them to participate in CS, as they are normally poorly represented. Safe training spaces will be established, based on culture and circumstance.

Indicator for Inclusiveness:

- % from lower LSE groups of the total amount of participants in workshops, aiming to be representative for that pilot region
- % from lower LSE groups of the total amount of participants hosting a sensor, aiming to be representative for that pilot region

## 2.2.3 Skills

**COMPAIR** will bolster the skills and science literacy of citizen science participants through training, easy-to-use tools and data visualizations. It will guide the participants into citizen science ecosystems (national and EU-wide). **COMPAIR** makes it easier for everyone to participate in improving air quality and helping to meet Green Deal targets, while instantly informing them about changes that must happen to make the environment more livable in the future.

Indicators for Skills:

- >70% of users report being satisfied with **COMPAIR** tools
- >70% of participants able to extract actual actionable intelligence

Furthermore we will monitor this domain through the following metrics without a predefined target other than positive evolution:

- Online analytics measure the length of the sessions on the **COMPAIR** dashboard, the number of certificates given and the number of Massive Open Online Courses (MOOCs) completed.
- the participants have learned skills for using the tools during the citizen science project that they can use in the future

## 2.2.4 Trust

**COMPAIR** will increase trust in the quality of citizen science data in 3 fundamental ways. The data will be made more accessible and usable by improving its publication and availability [1]. The data quality itself will be improved by utilizing expert calibration algorithms for automated quality assessment and validation, which will also improve the accuracy of the sensors [2]. The flexibility of the API will be broadened and made more tailored for policy use [3]. Community leaders will be engaged to help with the trust through

outreach. As a result, CS data can be trusted for use in official decision making, education and monitoring situations.

Indicators for Trust:

- Looking at the use of the **COMPAIR** data by policy makers or statistical offices.

## 2.2.5 Openness & cooperation

**COMPAIR** adopts a quadruple helix approach for participation and result generation. It brings people together in design thinking workshops so all views are represented and builds upon existing best practices and engagement through CS labs. It is a collaborative platform for idea generation, knowledge sharing, data collection and brokerage between all quadruple helix stakeholders. Working together will enable each stakeholder to better value and recognise the contributions of each other, improve its social capacity and generate a greater appreciation of the challenges caused by poor air quality. Lessons learned from **COMPAIR** will be captured and shared by the Consortium, through existing CS platforms (e.g. EU-citizen.science currently managed by the European Citizen Science Association) and other partner networks (e.g. Open & Agile Smart Cities) in order to maximize impact. Resulting data should be able to be used on a European, national as well as city level and will be included in the EU's Open Data Platform,

Importantly, **COMPAIR** will help sustain impact from technology-enabled Citizen Science by contributing to the MORRi indicators (annex 1) and will also impact UN Sustainable Development Goals (SDGs) (annex 2).

Indicators for Openness & cooperation:

- Count the number of moments of knowledge sharing with other organizations, initiatives, etc
- We will look at the number of 3rd party use of our API's
- Assessment on involvement, contribution and ease of access

## 2.3 Critical implementation Risks

The impact evaluation process will contribute to risk identification and assessment. Hence we include this section on critical implementation risks. To maximize our impact, we will update the [Risk register](#) to manage our risks.

# 3. Evaluation Strategy

In order to measure and evaluate the success of the different processes within **COMPAIR**, we (WP6 leader initiates and triggers other WP leaders) do a self-reflection every **6 months** (see [Progress Tabel KPI's](#)).

Flemish Environment Agency (VMM) will trigger the work package leaders to evaluate the quantitative KPIs (i.e. adding values in the KPI table every period - every period a new Excel file), as well as the qualitative aspect based on 4 fixed questions.

1. What have you done in the past 6 months?
2. Which external feedback or results reflect the positive & negative impact you've had?
3. Describe how you will contribute to the Morri and SDG goals (see annex 1 & 2).
4. Were there missed opportunities? Could you have done something different / better?  
Could the project have done something different/better?

Any insights gathered through the questionnaire, interview, co-evaluation sessions etc. for monitoring the 5 qualitative domains, will be reported as part of the answers to these 4 questions. The specific results will be provided as addenda.

The quantitative KPIs relating to communication will be monitored and followed up by 21C and wil, the work package leader for communication, dissemination and replication.

## 4. Conclusion

This deliverable will be a “living document” because the progress will be evaluated every 6 months. Because of this, it can be checked in time why certain KPIs are not achieved or are delayed. Given certain indicators are at risk of not being met, this will be escalated to the management call/project management team in order to define actions on how to get things back on track.

This roadmap will be used to elaborate the monitoring and evaluation reports of the behavioural and environmental changes of citizens, “Pathways to Behavioural Change” (D6.2) and “Pathways to Citizen-driven Environmental Impact” (D6.3).

## 5. Annex

### Annex 1

MORRi Indicator	COMPAIR Contribution
SLS 4 - Citizen Science activities in RPOs	COMPAIR will publish a number of scientific papers, with at least one towards policy makers with the lessons learned, and one regarding how Citizen Science projects can influence the scientific agenda. Citizen scientists will be co-authors.
PE1 - Models of public involvement in Science & Technology decision making	COMPAIR will evaluate the degree to which CS Labs, design thinking, and technology involve citizens, especially LSE groups, in active citizen science actions as well as in policy decisions.
PE2 - Policy-oriented engagement with science	COMPAIR will co-create policy-related dashboards and use an existing City Digital Twin solution (cf. DUET project) in close cooperation with scientists. The dashboards itself will be open to the public so that also amateur scientists and involved citizens can be involved.
PE3 - Citizen preferences for active participation in S&T decision making	COMPAIR will invite citizens to be actively involved. The involvement will be monitored, and strategies will be tested to keep citizens on board. Especially new insights will become available about the involvement and degree of long-term participation of LSE and disadvantaged groups.
PE10 - National Infrastructure for involvement in R&I	COMPAIR will increase the number of citizens, societal actors and policy makers involved in research and innovation. Our methods for stakeholder mapping, engagement and retention will be shared as best practice locally and nationally.

### Annex 2

SDG	COMPAIR Contribution	Specific SDG indicator
<b>Goal 3:</b> Good Health and Wellbeing	<ul style="list-style-type: none"> <li>Helps reduce the number of deaths and illnesses from hazardous chemicals and air</li> <li>Creates better awareness of air pollution levels and personal impact via the AR app, dashboards, and dynamic exposure measurements</li> </ul>	3.9
<b>Goal 4:</b> Quality education	<ul style="list-style-type: none"> <li>Supplements and reinforces the traditional science curriculum with hands on activity</li> <li>Uses professional scientists to facilitate the work of the citizen scientists</li> <li>Increases the skill level of citizen scientists through our Citizen Science Lab</li> </ul>	4.4, 4.7

<p><b>Goal 5:</b> Gender equality</p>	<ul style="list-style-type: none"> <li>• Ensures representative participation of (local) population in citizen science activities, in particular the dynamic exposure pilot</li> <li>• Ensures women are represented both as researchers and as citizen scientists</li> </ul>	<p>5.5</p>
<p><b>Goal 8:</b> Decent work &amp; growth</p>	<ul style="list-style-type: none"> <li>• Open citizens up to the potential of a future science-related career</li> <li>• Provides new open data sources that can be leveraged for/by innovative start-ups</li> </ul>	<p>8.3</p>
<p><b>Goal 10:</b> Reduced Inequalities</p>	<ul style="list-style-type: none"> <li>• Ensures lower LSE groups also have access to the same opportunities and knowledge</li> <li>• Data visual dashboards ensures everyone can easily analyse data</li> </ul>	<p>10.2</p>
<p><b>Goal 11:</b> Sustainable cities &amp; communities</p>	<ul style="list-style-type: none"> <li>• Enriches existing city data sources that are currently being used for decision making</li> <li>• Enables anyone to leverage CS Lab &amp; Dashboard for CS experiments for policy</li> <li>• Leverages business model opportunities for the long-term implementation of CS</li> </ul>	<p>11.3, 11.6</p>
<p><b>Goal 17:</b> Partnerships for the goals</p>	<ul style="list-style-type: none"> <li>• Positions CS as a resource for high quality research that supports the SDGs</li> <li>• Raises awareness amongst citizens and communities of the SDGs</li> </ul>	<p>17.1, 17.2</p>



## Annex 3

### Standard survey

Trust		Options				
<b>1</b>	<b>Questions to policy makers or statistical offices</b>					
	Would you use COMPAIR data for decision making?	<i>Completely agree</i>	<i>Mostly agree</i>	<i>Neutral</i>	<i>Mostly disagree</i>	<i>Completely disagree</i>
	Do you think this data can provide useful insights?	<i>Completely agree</i>	<i>Mostly agree</i>	<i>Neutral</i>	<i>Mostly disagree</i>	<i>Completely disagree</i>
	Do you think citizens are able to collect reliable data?	<i>Completely agree</i>	<i>Mostly agree</i>	<i>Neutral</i>	<i>Mostly disagree</i>	<i>Completely disagree</i>
	How do you think citizen science processes can be improved? Did you gather any insights?	<i>Open answer</i>				
	How do you think citizen science can be positive for your city?	<i>Open answer</i>				

Identification						
<b>1</b>	<b>Regular questions</b>					
	gender					
<b>2</b>	<b>Possible questions to capture the socio-economic status of the participants</b>					
	Home language					
	The mother's highest level of education					
	Receive a school allowance					
<b>3</b>	<b>Possible questions at the end of the questionnaire</b>					
	Would you like to make a recommendation for improvement or just provide personal feedback on the experience, please put it in the box below.					

Participation & behaviour		Options					
<b>1</b>	<b>Why did you participate in COMPAIR?</b>						
	I find it interesting to take part in a scientific study	Agree	Somewhat agree	Neutral	Somewhat disagree	Disagree	
	I'm curious about the air quality in my neighborhood, on my way to school/work, ...	Agree	Somewhat agree	Neutral	Somewhat disagree	Disagree	
	I want to learn more about the causes of, and solutions to, air pollution	Agree	Somewhat agree	Neutral	Somewhat disagree	Disagree	
	I want to make other people aware of the importance of air quality	Agree	Somewhat agree	Neutral	Somewhat disagree	Disagree	
	I assume that this project can help me to take action to improve air quality in my neighborhood	Agree	Somewhat agree	Neutral	Somewhat disagree	Disagree	
	I am concerned about the air quality for my (grand)children	Agree	Somewhat agree	Neutral	Somewhat disagree	Disagree	
	I like the idea of being part of community projects that foster sustainable neighbourhoods	Agree	Somewhat agree	Neutral	Somewhat disagree	Disagree	
<b>2</b>	<b>Are you going to share the knowledge or experience you've gained within COMPAIR with others?</b>	Agree	Neutral	Disagree			
<b>3</b>	<b>Have you adjusted your behaviour compared to before your participation in COMPAIR?</b>						
	Do you take air quality into account when choosing a route to work / school?	Agree	Somewhat agree	Neutral	Somewhat disagree	Disagree	
	Do you take the bike more often – now that you are more aware about AQ?	Agree	Somewhat agree	Neutral	Somewhat disagree	Disagree	
	Have you reduced the use of your car – now that you are more aware about AQ?	Agree	Somewhat agree	Neutral	Somewhat disagree	Disagree	
<b>4</b>	<b>Did COMPAIR fulfill your expectations?</b>	I had no expectations	Not fulfilled	To a limited extent	Half fulfilled	Largely fulfilled	Completely fulfilled
<b>5</b>	<b>Did the project inform you adequately about the air quality in your neighborhood?</b>	Completely agree	Mostly agree	Neutral	Mostly disagree	Completely disagree	
<b>6</b>	<b>Did the project inform you adequately about the air quality on your way to school / work?</b>	Mostly agree	Neutral	Mostly disagree	Completely disagree		
<b>7</b>	<b>Did you change your mobility due to COMPAIR?</b>						
	Car driving	Done more	Done as much as before	Done less	Do not	Don't know	
	Riding my bike	Done more	Done as much as before	Done less	Do not	Don't know	
	Walking	Done more	Done as much as before	Done less	Do not	Don't know	
	Using public transport	Done more	Done as much as before	Done less	Do not	Don't know	
	Flying	Done more	Done as much as before	Done less	Do not	Don't know	
	Opting for healthier cycling and walking routes	Done more	Done as much as before	Done less	Do not	Don't know	
<b>8</b>	<b>Did you discuss air quality in the last 12 months?</b>						
	Addressing AQ issues at my work environment	Done more	Done as much as before	Done less	Do not	Don't know	
	Addressing AQ issues in my immediate vicinity	Done more	Done as much as before	Done less	Do not	Don't know	
	Addressing AQ issues related to AQ at public services or politicians	Done more	Done as much as before	Done less	Do not	Don't know	
	Addressing AQ issues in the school of my (grand)children or in the neighborhood	Done more	Done as much as before	Done less	Do not	Don't know	
	Inform other people about AQ problems and possible solutions	Done more	Done as much as before	Done less	Do not	Don't know	
<b>9</b>	<b>Did you change your behaviour at home due to COMPAIR?</b>	Yes	No, but planning on doing in the near future	No	Not yet		
<b>10</b>	<b>Do you plan on relocating because of COMPAIR?</b>						
	Looked for another school with better air quality	Yes	No, but planning on doing in the near future	No			
	Looked for another working place with better air quality	Yes	No, but planning on doing in the near future	No			
	Looked for another place to live with better air quality	Yes	No, but planning on doing in the near future	No			
<b>11</b>	<b>Did you talk about COMPAIR?</b>						
	With friends	Yes	No				
	With family	Yes	No				
	With neighbors	Yes	No				
	With colleagues at work	Yes	No				
	During social activities	Yes	No				
	At the children's school	Yes	No				
	Other	Yes	No				

Skills		Options				
1	Did you get enough guidance during the experiment?	<i>Completely agree</i>	<i>Mostly agree</i>	<i>Neutral</i>	<i>Mostly disagree</i>	<i>Completely disagree</i>
2	Are you satisfied with the tools provided to you in the project (dashboard, app, ...)?	<i>Completely agree</i>	<i>Mostly agree</i>	<i>Neutral</i>	<i>Mostly disagree</i>	<i>Completely disagree</i>
3	Did you understand what was shown on the dashboard?	<i>Completely agree</i>	<i>Mostly agree</i>	<i>Neutral</i>	<i>Mostly disagree</i>	<i>Completely disagree</i>
4	Did you understand what was shown in the APP?	<i>Completely agree</i>	<i>Mostly agree</i>	<i>Neutral</i>	<i>Mostly disagree</i>	<i>Completely disagree</i>
5	Do you feel like you've learned something new thanks to this project?	<i>Completely agree</i>	<i>Mostly agree</i>	<i>Neutral</i>	<i>Mostly disagree</i>	<i>Completely disagree</i>
6	Do you feel more capable to understand AQ problems?	<i>Completely agree</i>	<i>Mostly agree</i>	<i>Neutral</i>	<i>Mostly disagree</i>	<i>Completely disagree</i>
7	Do you feel more capable to tackle AQ problems?	<i>Completely agree</i>	<i>Mostly agree</i>	<i>Neutral</i>	<i>Mostly disagree</i>	<i>Completely disagree</i>
8	Have you been able to use data or insights gathered in the experiment	<i>Completely agree</i>	<i>Mostly agree</i>	<i>Neutral</i>	<i>Mostly disagree</i>	<i>Completely disagree</i>

Openness & Cooperation		Options				
1	Were you sufficiently involved in the different steps of the experiment?	<i>Completely agree</i>	<i>Mostly agree</i>	<i>Neutral</i>	<i>Mostly disagree</i>	<i>Completely disagree</i>
2	Did you feel your contribution was appreciated enough?	<i>Completely agree</i>	<i>Mostly agree</i>	<i>Neutral</i>	<i>Mostly disagree</i>	<i>Completely disagree</i>
3	Can you easily get access to the COMPAIR data?	<i>Completely agree</i>	<i>Mostly agree</i>	<i>Neutral</i>	<i>Mostly disagree</i>	<i>Completely disagree</i>

Inclusiveness	Options				
<b>1 Inclusiveness general</b>					
I had a good feeling about participating	Completely agree	Mostly agree	Neutral	Mostly disagree	Completely disagree
I felt accepted amongst other participants	Completely agree	Mostly agree	Neutral	Mostly disagree	Completely disagree
I felt out of place amongst the participants	Completely agree	Mostly agree	Neutral	Mostly disagree	Completely disagree
<b>2 Representation</b>					
I felt that the foreknowledge of the other participants	was a lot more extensive than mine	was a little more extensive than mine	was the same as mine	was a little less extensive than mine	was a lot less extensive as mine
To participate in this experiment I felt that I was	a lot more skilled than the other participants	little more skilled than the other participants	was equally skilled as the other participants	was a little less skilled than the other participants	was a lot less skilled than the other participants
Incorporating the results in everyday life is due to financial reasons for me	very easy	easy	not easy, not difficult	difficult	very difficult
Incorporating the results in everyday life is due to timemanagement reasons for me	very easy	easy	not easy, not difficult	difficult	very difficult
I feel skilled to incorporate the results in my everyday life	Completely agree	Mostly agree	Neutral	Mostly disagree	Completely disagree
<b>3 language intelligibility</b>					
During the recruitment phase	Completely agree	Mostly agree	Neutral	Mostly disagree	Completely disagree
During the experiment	Completely agree	Mostly agree	Neutral	Mostly disagree	Completely disagree
Of the conclusion sharing afterwards	Completely agree	Mostly agree	Neutral	Mostly disagree	Completely disagree
Overall understanding communications during the entire project was	very difficult	difficult	Neutral	easy	very easy
During the recruitment phase understanding communications was	very difficult	difficult	Neutral	easy	very easy
During the experiment phase understanding the communication was	very difficult	difficult	Neutral	easy	very easy
During the conclusion sharing afterwards the communication was	very difficult	difficult	Neutral	easy	very easy
The communication during the recruitment phase was in the right format (brochure, presentation, conversation, ...)	Completely agree	Mostly agree	Neutral	Mostly disagree	Completely disagree
The communication during the experiment phase was in the right format (brochure, presentation, conversation, ...)	Completely agree	Mostly agree	Neutral	Mostly disagree	Completely disagree
The communication during the conclusion sharing was in the right format (brochure, presentation, conversation, ...)	Completely agree	Mostly agree	Neutral	Mostly disagree	Completely disagree
During the recruitment phase the communication contained difficult words or words that were new to me	Completely agree	Mostly agree	Neutral	Mostly disagree	Completely disagree
During the experiment phase the communication contained difficult words or words that were new to me	Completely agree	Mostly agree	Neutral	Mostly disagree	Completely disagree
During the conclusion sharing the communication contained difficult words or words that are new to me	Completely agree	Mostly agree	Neutral	Mostly disagree	Completely disagree
Difficult words or words that were new to me were explained clearly in the communication	Completely agree	Mostly agree	Neutral	Mostly disagree	Completely disagree
Questions were answered in a comprehensive manner	Completely agree	Mostly agree	Neutral	Mostly disagree	Completely disagree