



ClearCity - Citizen Led Air pollution Reduction in Cities

D4.2 Delphi Workshops Complete – First city

Date: August 2017



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D4.2 Delphi Workshops Complete – First city (Bristol) (August 2017) Task 4.1 (UWE, July 2017)

Summary

The activity belongs to the work package Citizens and Stakeholder Engagement.

The primary objective is to engage key stakeholders across all of our partner cities from different European regions to give them the platform to generate their vision for a low carbon, clean air futures.

Through a rapid DELPHI-like1 approach (Task 4.1), the aim is to engage key city stakeholders to provide blue-sky thinking on what a low carbon-clean air future for their city looks like. This engagement process (survey and workshops) will explore the future options for their city development and will use city stakeholders to create future scenario options to inform the Game (Task 4.2).

The results of the survey, existing tools and other creative engagement techniques will be utilised in a workshop to develop an open multi-stakeholder dialogue around the low carbon, clean air options and scenarios.

DELPHI Workshop: Explore participant's wider future vision for their city, life, health with clean air and low carbon future.

The UWE (WP4. 1 task lead) designed the Delphi Workshops; the content, methodology, structure, the potential stakeholders and timeframe. The Delphi workshop is implemented by the partners and cities/regions. The first city is Bristol. UWE used method propose in the Delphi Guideline (see in the Annex) and adopted to the local needs and conditions. The Delphi Workshop was combined with a workshop training for the partners and cities to learn about the method as observer of the Delphi Workshop.

ClairCity Bristol Delphi Workshop summary

Overall moderator: Jo Barnes (UWE Bristol)

Facilitators: Mark Leach, Andy Edwards (Bristol City Council), Corra Boushel, Emily

Prestwood, Ola Michalec (UWE), Irati Artola (Trinomics)

ClairCity Delphi Workshop Plan (2 hours)

Agenda

- Set up (15-30 mins before workshop)
- Introduction (5 mins)
- Activity 1 Health and air pollution awareness
 - Activity 1a: "What causes the most deaths?" (10 mins)
 - Activity 1b: "How is air pollution bad for me?" (15 mins)
- Comfort break (5-10 mins)
- Activity 2 Policy measures
 - Activity 2a: "What can be done?" (10 mins)
 - Activity 2b: "How would these policy measures affect how you live your life?" (20 mins)
 - Activity 2c: "Why would these policy measures affect how you live your life?" – Post-it note activity (20 mins)
 - Activity 2d: "How could these policies be made easier for you?" Post-it note activity (20 mins)
- Evaluation (5 mins)
- Close (5 mins)

Minutes of the workshop:

The <u>format of the workshop</u> has changed slightly from the version included in the Delphi Guidelines. This was to provide more of an educational element on the health effects of air pollution (Activity 2b) and to make the policy measures activities easier for the participants to undertake. Activity 2b matrix was therefore simplified to identify how easy the policy measures could be incorporated into citizen's lives, but without the temporal element as during internal testing this element had proved problematic to relate to individuals' lives. Activity 2c was also narrowed to the three most difficult policy measures identified under Activity 2b to ensure the task was not too onerous. Highlights of the workshop (St Martins and All Angels, Bishopston) In the evening, the city/region buddies observed the Bristol Delphi workshop at St Martins and All Angels, Bishopston to see how it worked in practice with a live audience. The workshop had been promoted with the assistance of the Bishopston Society and Sustainable Bishopston community groups, although only 8 of the 22 attendees were from these groups. Other participants had read about it in local media (Bishopston Matters and Bishopston Voice) or via word of mouth.

The attendees formed six tables of 3-4, each with a facilitator. Irati stood in as a facilitator on her table as there weren't enough Bristol-based facilitators as participants had opted to sit in smaller groups than anticipated. The city/region representatives either sat on a table and observed their engagement throughout the workshop, or moved about to observe how other tables were responding. The participants were all provided with Participant Information

Forms and required to complete Consent Forms prior to the start of the workshop.

Activity 1 – Health and air pollution awareness

Only one group correctly identified the order of mortality impacts (Activity 1a), although most discerned that air pollution must be high as it was an 'air quality event'. There was some discussion about how air pollution leads to deaths (feeding into Activity 1b) and how it can be attributed against other influencing factors.

Most groups associated lung conditions with air pollution, but fewer considered that heart or neurological disorders could be definitely linked, despite some medical knowledge in one group (Activity 1b).

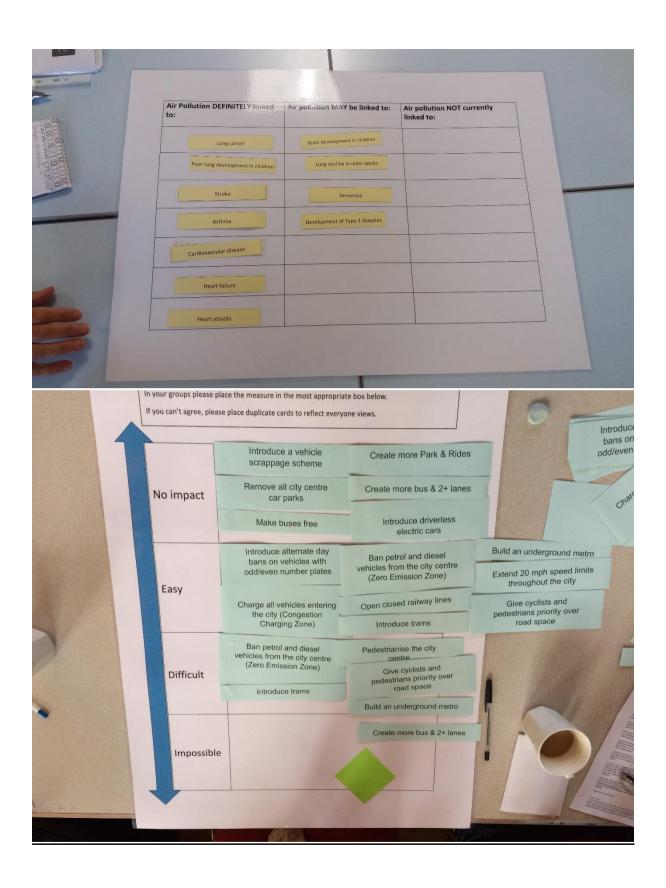
Activity 2 – Policy measures

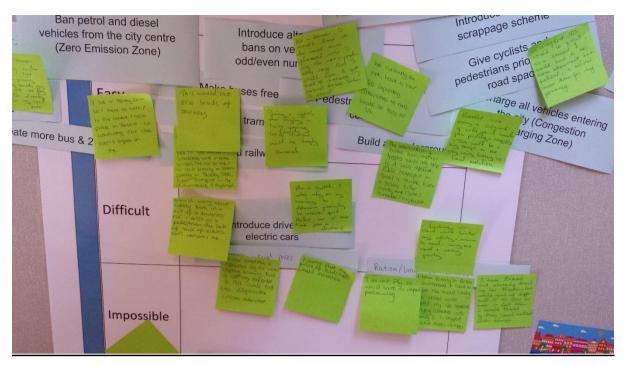
In Activity 2, most participants appeared to be able to separate out personal impacts from societal impacts, although in some cases the impact was less directly about how it would influence their travel choice, and more about the aesthetic impact of introducing an underground metro system (for example). Some participants also found it hard to think about timescales up to 2050 initially, but quickly realised that some of the measures that might be more challenging for the city to implement could be achieved over these timescales and so were able to then make an assessment of the personal impact. This integrated approach to inclusion of the 2050 timescale (as opposed to the originally planned matrix activity) proved to be a more satisfactory way of enabling citizens to think longer-term about policy measures.

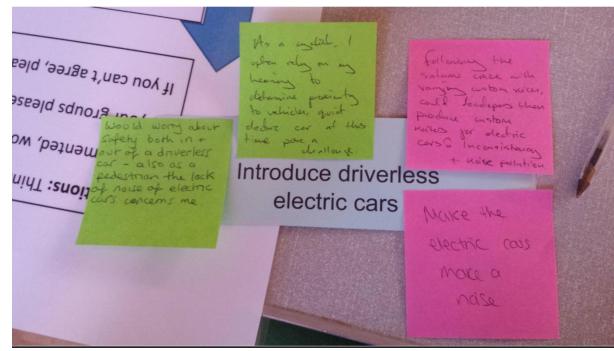
Participants found that, in general, policies restricting car travel would be easy to adapt to because of the good level of public transport and services (food, cultural etc) in their neighbourhood. It was also thought that these measures would be positive, leading to cleaner air, less traffic, less focus on cars and more focus on active travel (walking and cycling), and better safety, although not all participants were able to see the direct relation to reducing emissions. There was discussion on some tables in Activity 2b about whether 'No impact' was more or less positive than 'Easy', however Activity 2c which enabled them to explain their choices helped to ameliorate this concern. Some participants felt that certain measures required more detail, e.g. removing city centre car parking. In addition to the proposed measures, some groups created their own as they considered them to be more effective, although many of these were beyond the scope of the local authority, e.g. increase price of fuel for cars. At the end of the workshop participants were asked to complete Evaluation forms. In the feedback most people enjoyed the workshop or at least found it 'OK'. There was some interesting feedback on timing from one respondent (too much) and on the value of the workshop for the project, but on the whole the feedback was complimentary and people found it interesting. More than 90% of respondents considered they had come away from the workshop knowing more than they had about air pollution, health impacts and carbon emissions and half said that they would be changing their behaviour as a result of the workshop. This community cohort were fairly unrepresentative of Bristol as the participants were not diverse in terms of age (largely 51-65), qualifications (mainly (higher) degree/professional) or ethnicity (White), although gender was balanced (48%

Female). In addition, as a well-educated and largely retired group, many participants were already minimising transport emissions by reducing driving, and walking and cycling more, so the level of dissensus on some of the tables was relatively low. This may not be the case in workshops with other community cohorts, some of whom may find some of the proposed policy measures more difficult to accommodate into their lives. Indeed, within the Bishopston workshop it was identified that if the participants had not been responding from their own perspectives the results might be very different.













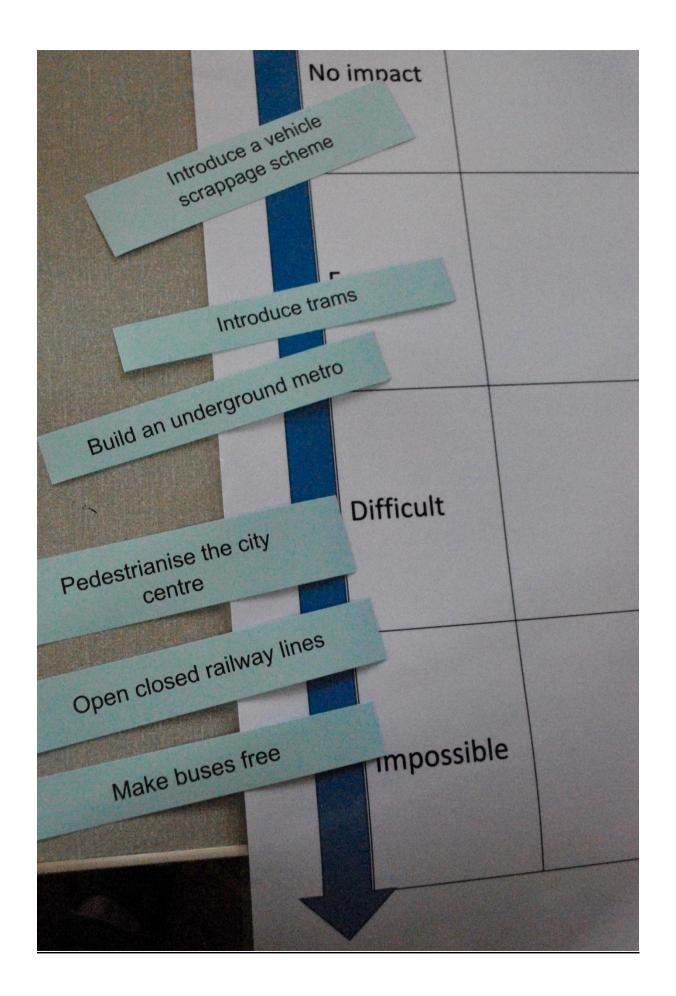


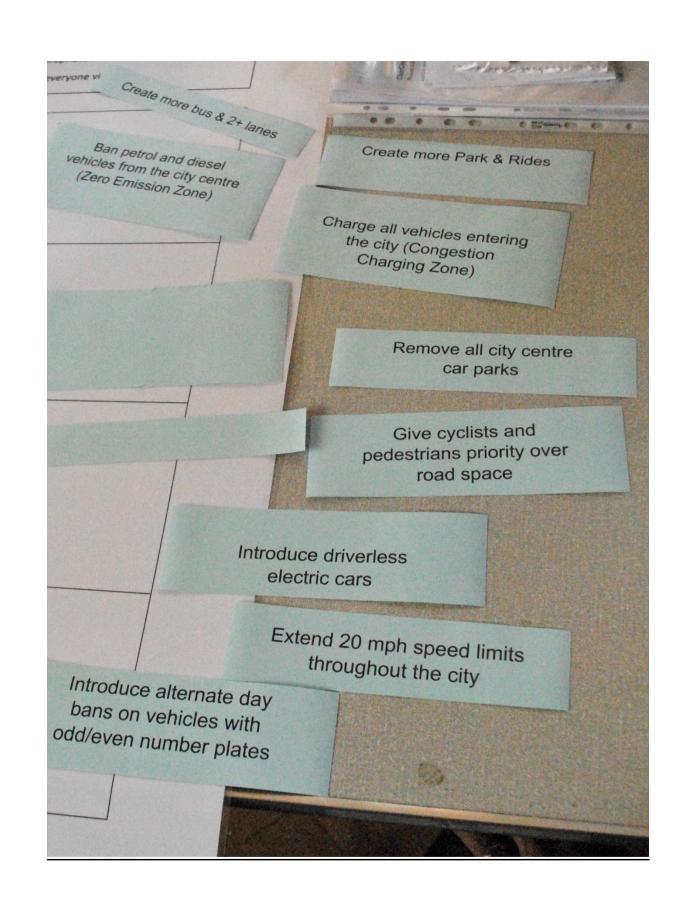


















Delphi workshop Training, Bristol, 10-11 July

Participants:

Jo Barnes; Corra Boushel; Emily Prestwood; Ola Michalec (UWE Bristol)

Andy Edwards; Mark Leach (Bristol City Council)

Eva Csobod; Gabor Heves (REC) Edyta Wykurz (Sosnowiec City Council) Myriam Lopes (University of Aveiro) Rita Vaccaro (Techne Consulting SRL)

Irati Artola (Trinomics)

Agenda:

- 1. ... The goal of the Delphi Workshop Training
- 2. ... The participants of the training
- 3. ... The agenda of the training and workshop
- 4. ... Summary of the training and workshop
 - a. Summary of the introduction and discussion of the Trial workshop
 - b. Debrief on Workshop observation: Lessons learned for the Delphi Training workshop

Discussion:

1. The goal of the Delphi Workshop Training

The goal of the Delphi Workshop Training was to familiarise the city/region buddles with the content and process of the workshop so that they will be able to implement it in their own city/regions.

2. The participants of the training

A participant list is provided. Participants consisted of the training/workshop coordinator (Jo Barnes), facilitators (Corra Boushel, Emily Prestwood, Ola Michalec, Andy Edwards and Mark Leach), and attendees from the city/regions (Eva Csobod, Gabor Heves, Edyta Wykurz, Myriam Lopes, Rita Vaccaro, Irati Artola).

3. The agenda of the training

12 00-13 00 Lunch

Day 1 - Monday 10th July

12.00 13.00	Larieri
13.00-13.30	Briefing on the training/workshop
13.30-15.30	Trial Delphi workshop (as participa

13.30-15.30 Trial Delphi workshop (as participants) 15.30-16.30 Discussion about the trial workshop

16.30-19.15 Free time (check in to hotels, find dinner)

19.15-21.30 Workshop observation, St Martins and All Angels, Bishopston

Day 2 - Tuesday 11th July

9.30-9.45 Meet in the ground floor foyer 9.45-10.30 Debrief on Workshop observation

4. Summary of the training and workshop

a. Summary of the introduction and discussion of the Trial workshop

After a preliminary briefing, the training was conducted as a trial with the city/region buddies as participants. This enabled them to be able to see from the citizens' perspective how the workshop operated while simultaneously learning about the workshop process. It also provided an opportunity to train the facilitators for the Bristol Delphi workshop. During the training the city/region representatives were able to express any initial concerns so that these could be addressed over the course of the training.

One of these concerns included the need to include carbon in the scope of the workshop. It was acknowledged that the workshop appears to be focused on local air pollution and health effects, but it is important to recognise that climate emissions are implicitly incorporated. Furthermore the policy measures included in the workshop were aimed at reducing both air quality and climate-related emissions. This issue is also addressed in the following 'debrief' section.

Other concerns were expressed about the potential difficulty in recruiting participants. Corra explained that while respondents to the earlier Delphi rounds had been invited to attend, in order to ensure an adequate number of participants the invitation had been broadened with invitations circulated through social media. As a route into the communities of Bristol it was also valuable to engage with community groups. In this case, Bishopston Society and Sustainable Bishopston community groups had helped to promote the workshop and identify venues.

b. Debrief on Workshop observation: Lessons learned for the Delphi workshop A debrief on the live workshop and the training took place in the morning of Day 2. All of the city/region representatives expressed more confidence in being able to implement the Delphi workshop in their own city/regions. Materials for the city/regions will need to be bespoke: i.e. the relative national mortality figures (Activity 1a), which city/region buddies will need to research. The health impacts from Activity 1b were derived from a review of international research so may be applicable already, although cities/regions may want to customise to their own areas if information is available. Policy measures will be derived through the Delphi process and so the list for the workshop will be arrived at through discussion with the respective cities/regions and the WP4.1 team.

Given the geographical breadth, there was some concern from Myriam about how running workshop(s) would work in the Aveiro region to ensure there was no perceived political bias. Myriam will follow this up with Enda, Eva and Jo to ensure a workable solution is found.

Rita also expressed some concern about the role of the buddies in transcribing and translating. Most city buddies have said that they are happy to translate from English to the native language (as per the agreed Delphi guidelines), but that Google and translation services may be required for translation of responses back to English. Where possible we will make use of city buddy or

UWE in-house language skills at to hone initial translations from city buddies, resorting to translation services in extremis as this budget is very limited and city buddies have sufficient person month allocation for Delphi. This issue will be discussed with city buddies on a case-by-case basis.

With regard to the scope of the workshop, there was a feeling that this could be broadened to include buildings and energy. The Bristol Delphi workshop had focused on traffic, as the main source of emissions, but it was acknowledged that in other cities/regions, e.g. Sosnowiec, it will be important to include other sources.

The representivity of the Bishopston workshop was questioned. Given the segregated demographic nature of Bristol it had been recognised that there may be a need to hold more than one Delphi workshop in order to purposively target harder to reach demographic groups. Two more workshops are already scheduled in South Bristol and a peripheral location for September to complement the findings of the Bishopston workshop. It is anticipated that the findings for these additional workshops will be able to feed into the Policy Database at in sufficient time to contribute to the Game prior to its launch in April 2018. Other cities/regions may also find the need to hold more than one workshop, however, this is not prescribed.

List of participants

Participant Sign-in Sheet 10 July 2017

PLEASE ADD YOUR NAME AND SIGNATURE BELOW:

	Name	Signature
1.	LUY FELTON	Laugak
2.	SOPHIE LAGGAN	sq to
3.	Jessica Bett	Jessia Bett
4.	Martin Gerrect	let V.
5.	GRAHAM VOUL	SENDS:
6.	MARTIN FOOD	un Ron
7.	JEREMIE JOANNES	10
8.	GAVIN SPITTLEHOUSE	All
9.	ALAN MORKIS	ASM
10.	JUNE KINGSCEY	5. Kindles
11.	JORGE SVED	Joje (d)
12.	, Padrie Walkde	Stoallo
13.	Jeremy Manson	Mark

V1. April 2017

This study was given ethics consent by the Faculty Research Ethics Committee of the University of the West of England, UK, on behalf of the EU Commission. researchethics@uwe.ac.uk.



14.	NICK PLANT	Medi Van
15.	SIMON RANDOLPH	S. RIMIL
16.	GARVAN DONNELLY	Gavar Donnelly
17.	MARGARET BOUSHEL	Vagaer Boushel
18.	Hosde Auch. Auser	Ansh Cilm
19.	Eathra city.	trus
20.	Mother Walker	5
21.	kung floodly ?	Jenny Hoadley
22.	SUE TATLOR	S Laylor
23.		*
24.	MARK LONGEN	All
25.	Myriam Lopes	Mynd
26.	Ola Muhala	V The second sec
27.	Emily Prestwood	Masood
28.	Gábor Heves	Mus Gebor
29.	Eva Csobod	En Carled
30.	EDYM LYKLER	Mylllur
31.	IRATI ARTOLA	Gati Outle
32.	JO BARNES	H-
33.	DITA VACOMOTEL	Rte leeros
34.	CORRA BOUSHEL	CE COLL

observers

V1. April 2017
This study was given ethics consent by the Faculty Research Ethics Committee of the University of the West of England, UK, on behalf of the EU Commission. researchethics@uwe.ac.uk.



ClairCity

Delphi Workshop Training

11 July 2017

Participant sign-in sheet

11. JOBARNES

Name:

I. Eva Csobod

2. Gábor Heves

3. Emily Prest wood

4. Cla Michaela

5. MARK Leach

6. IRATÍ ARTOLA

7. EDYTA WYKURZ

8. Myziam Lopes

9. RITA VACCARD

10. CORRA BONSHEL

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Delphi Guideline

ClairCity - Citizen Led Air pollution Reduction in Cities

WP4.1 - Citizen Delphi Engagement D4.1: Delphi Design

Date: (21st April 2017, UWE, draft)

Author: Jo Barnes, UWE

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WP4.1 - Citizen Delphi Engagement

Detailed guideline for the case study cities/regions

(7th April 2017, UWE, draft)

This activity is part of WP4 - Citizens and Stakeholder Engagement, Task 4.1 – Citizen Delphi Engagement.

These guidelines are aimed at the city partners (Bristol City Council, GGD Amsterdam, City of Ljubljana, City of Sosnowiec, Comunidade Intermunicipal da Região de Aveiro (CIRA), Regione Liguria) and the city buddies (UWE, Trinomics, REC, University of Aveiro, Techne). As guidelines it is recognised that, while the core approach will remain constant, there will be inherent flexibility in the process between cities/regions. To discuss any proposed alterations for your city/region, please contact Jo Barnes at UWE (jo.barnes@uwe.ac.uk).

What is the aim of the Citizen Delphi Engagement?

The aim of the Citizen Delphi Engagement is for city citizens to consider their own lives, behaviours, activities and practices; to explore future options for their city/region up to 2050; consider the acceptability of existing policy measures and to create future scenario options to inform the Game (Task 4.2), Quantification WP5, Policy WP6 and Scenarios WP7.

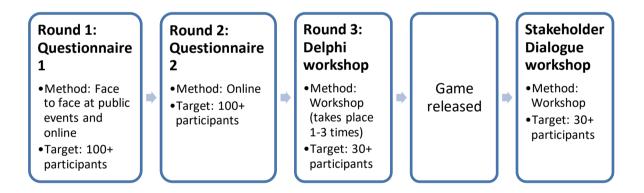


Figure 1: Citizen Delphi Engagement process

What is Delphi?

Delphi is a method for solving complex problems by asking for people's (usually experts') opinions. The process happens in several stages or rounds. In the first round people are all asked to provide their view on a range of open questions. The organisers look at the range of responses and identify common themes. In the second round the same people (ideally) are presented with statements linked to the round 1 themes and are asked to give further opinions. Again, the organisers identify common themes from these responses and give them back to the respondents for comment.

The aim is to draw on a wide range of opinions to eventually arrive at a consensus leading to one solution, or alternatively a 'dissensus' that leads to multiple solutions with a number

of competing views. It's different to usual consultation approaches as respondents are not presented with a preconceived idea at the outset, and it helps to ensure that everyone's opinion is included.

Who should participate?

In our Delphi, we are not focusing on the traditional 'experts', rather, we are asking ordinary citizens as representative experts on their own lives, futures and city.

In each city/region, we expect 100-500 respondents for each of the first two rounds. The same people can answer both rounds, but it is also acceptable if different people answer each round. These are minimum target numbers, but more participants are welcome. We need 30-60 participants in both the Delphi Workshop and Stakeholder Dialogue Workshop. To reach these numbers, WP2 guidelines will support the city buddy and the city partner to find methods of reaching citizens e.g. online publicity, advertising at relevant social groups or events.

Participants should be an approximately representative sample of the city/region population – this should cover age, gender, ethnicity, highest qualification attained, or whatever important demographics are appropriate for your city/region. Example demographic questions specific to Bristol are provided in the Round 1 Questionnaires at the end of this report, however these can be changed for each city as required. The city buddy and the city partner should consider representivity when they plan where and how to promote the Round 1 public engagement activities, advertise the Round 2 online questionnaire, and who to invite to the Round 3 Delphi workshop.

What is the timeframe?

It is proposed that the Round 1: Public Engagement and Questionnaire 1 should be staggered across all cities/regions from May 2017 to November 2017, with the remaining rounds staggered across the next two years. The Mutual Learning Workshop (WP4.4.1) will happen shortly after the Round 3 workshop. The Stakeholder Dialogue Workshop happens after the Game has been launched and played in your city/region. Table 1 shows the key completion dates for each of the cities/regions. Preparation for Round 1 can start as soon as possible, but further training and explanation on public engagement and the Delphi will be presented at the meeting on 22nd May 2017 in Hungary. City partners and city buddies will also be invited to attend training for the Delphi Round 3 workshop in early July 2017. City partners and city buddies will be given the flexibility to slightly adjust the activities timeframe to fit their context best through negotiation with the WP4.1 team, ensuring consistency with the other scheduled WP activities.

Table 1: Key WP 4.1 completion dates for each city/region (draft) – Mutual Learning Workshop dates for information

City	Preparation	Round 1 start date	Round 2	Round 3 Delphi workshop	Mutual Learning Workshop	Stakeholder Dialogue workshop
Bristol	March-April 2017 (M11- 12)	May 2017 (M13)	June 2017 (M14)	July 2017 (M15)	July 2017	July 2018 (M27)
Amsterdam	May-June 2017 (M11- 13)	June 2017 (M14)	Sept 2017 (M18)	Oct 2017 (M19)	Oct 2017 (M19)	Jan 2019 (M33)
Ljubljana	May-Aug 2017 (M11- 16)	Sept 2017 (M17)	Nov 2017 (M19)	Dec 2017 (M20)	Jan 2018 (M21)	Feb 2019 (M34)

Sosnowiec	May-Aug 2017 (M11- 16)	Sept 2017 (M17)	Dec 2017 (M20)	Jan 2018 (M21)	Feb 2018 (M22)	Mar 2019 (M35)
Aveiro	May-Oct 2017 (M11- 18)	Nov 2017 (M19)	Jan 2018 (M21)	Feb 2018 (M22)	March 2018 (M23)	April 2019 (M36)
Liguria	May-Sept 2017 (M11- 17)	Oct 2017 (M18)	Feb 2018 (M22)	March 2018 (M23)	April 2018 (M24)	May 2019 (M37)

What is the process?

The Citizen Delphi Engagement will use three rounds: a broad-spectrum public engagement (including an online questionnaire), an online-only questionnaire and a Delphi Workshop followed by the Stakeholder Dialogue Workshop following the WP4.2 Game (Figure 1). Materials for each round will be available through the Sharepoint and links to the Round 1 and Round 2 online questionnaires will be available through the ClairCity website (www.claircity.eu). UWE will liaise with each city/region to arrange for materials to be provided in the local language. In each round, participants will be asked for their email address (if they consent) so that they can be contacted and invited to the next round. Home postcodes will also be requested so we can filter responses by those that live in or close to the city/region. Ethical approval has been received from the Research Ethics Committee of the Faculty of Environment and Technology, University of the West of England.

Round 1: Public Engagement and Questionnaire 1 – The first round is intended to determine, in broad terms, citizens' main day-to-day activities, their concerns and their views about how these may change over the next 35 years (to 2050). The questions to be posed are listed below:

posed are listed below.							
Rou	Round 1 Questions						
1	What do you like about your city/region now?						
2	What do you dislike about your city/region						
3	How would you like to see your city/region	n improve over the next 35 years?					
	ClairCity Fact Example – "Part of our resea	rch is about air pollution. Did you know					
	that road traffic/home heating is the bigge	est source of air pollution in your					
	city/region?" Yes./ No						
	(Please note – this fact will be city specific	and we can use the WP6 Baseline Policy					
	Reports to support the fact. Also the subse	equent questions will be city specific – we					
	have provided two examples related to tra	vel and home heating).					
	Travel Questions	Home Heating Questions					
3	How do you currently travel for:	How do you normally heat your home?					
	 work/business commuting 						
	 shopping 						
	leisure						
	other activity						
5	How would you like to travel in the	How would you like to be able to heat					
	future (2050) for:	your home in future (2050)?					
	 work/business commuting 						
	shopping						
	 leisure 						
	 other activity 						

Ī	6	If you want to change, what are the	If you want to change, what are the	
		reasons why you can't currently travel	reasons why you can't currently heat	
		that way?	your home that way?	
Ī	7	If you don't want to change, can you say why not?		

In Question 1 and 2, the aim is for the responses to not be shaped by the air quality/climate change/health agenda of the ClairCity project as it is anticipated that this may narrow the type of respondent and responses at the outset. Following these more open questions about their city/region currently and how they would like it to improve in the future, a 'ClairCity Fact' is provided highlighting the main source of pollution in the city/region, i.e. traffic/home heating/other (provided by the city council and WP6 Baseline Policy Report). Questions 3 and 4 then ask about activity-based travel and home heating practices (assuming these are the dominant issues for that city/region) now and how they would like to be able to do these in the future, while Questions 5 and 6 start to identify reasons why citizens are not currently able to change their practices, or why they do not want to change. In order to try to ensure that the respondents are representative of the wider city population, these public engagement activities should aim to specifically target typically under-represented groups as well as 'easy-to-reach' participants. City buddies will need to employ a wide range of methods and media, e.g. attending public events and engaging with community organisations to complete the questionnaire face-to-face or to enable selfcompletion of the questionnaire by citizens. City buddies and city partners will also need to use their networks and city networks to send the online version of the questionnaire, e.g. using social media (Twitter/Facebook), emails and traditional media (newspapers, local TV/radio, posters).

Interviewers will be given a response template to make it easier and quicker to record responses (see the example at the end of this report). This will also facilitate coding. City buddies will need to transcribe the Round 1 participants' responses into a spreadsheet (a template will be provided) and send to UWE for coding and analysis. If city buddies are able to translate the responses into English as they transcribe that would be preferable; if not we will use Google Translate, where possible, and translation services where Google Translate is not sufficient. It is recognised that Google Translate may not be appropriate for all languages. In these cases city partners and translation services will be used. (Completed questionnaires in the original language should be retained for reference and copies sent to UWE for reporting.) UWE will then use the translated Round 1 responses to identify themes and generate the Round 2 online questionnaire. Round 1 online questionnaire results will be collected by UWE directly from the survey system. UWE will share and discuss the Round 1 results with each city buddy and city partner before proceeding to Round 2 to ensure that the local context is fully understood.

Round 2: Questionnaire 2 – The second round asks respondents to reflect on themes arising from Round 1 through participating in an online only questionnaire. This round is about beginning to shape consensus/dissensus around common theme(s). It enables respondents to think about the themes highlighted by respondents in Round 1. There are two parts to Questionnaire 2:

- Part 1 follows on from the activity-based travel/home heating/other city specific questions from Round 1;
- Part 2 asks respondents to state whether they agree or disagree with a set of ambitious policy measures that would affect their day-to-day activities.

Questions are mainly closed (multiple choice). Participants' responses will be automatically sent to UWE for coding and analysis via the online survey system from which UWE will

generate the Delphi Workshop materials. Responses will be translated from the original language to English using Google Translate or translation services where appropriate.

Example themes for Round 2 may include:

Part 1: Home /Transport/Other city specific

Home occupancy, Online shopping, Home heating, Renewable energy generation.

Travel for commuting/shopping/leisure/other: Mode, Frequency, Duration, Satisfaction, Preferred choice, Reasons for not choosing.

Responses from Round 1 Q4-7 will inform the response options for Questionnaire 2 Part 1.

Part 2: Policy measures

5-point Likert ranking of 'strongly disagree' to 'strongly agree' for ambitious policies, e.g. ban all vehicles from the city centre, ban use of unregulated fuels for home heating, etc.

Responses from Round 1 Q2, WP6 and wider research around ambitious policy measures implemented and proposed in other countries will inform the policy measure options in Questionnaire 2 Part 2.

UWE will share and discuss the Round 2 results with each city buddy and city partner before proceeding to the Delphi Workshop to ensure that the local context is fully understood. *Round 3: Delphi Workshop* – In the third round, a representative sub-group of Round 2 participants will be invited to attend one or more 2-3-hour Delphi workshop(s). At the workshop, participants will be presented with information about air quality, climate change and health. They will also be presented with the responses to the Round 2 questionnaire and asked to consider how the ambitious policy measures would affect their lives if implemented, and how their implementation could be facilitated. Two events (e.g. one evening, one weekend) may be necessary if demand is high or to ensure the demographics of each city/region are represented. It is anticipated that the workshop will be facilitated by the city buddy. Information to run the activities will be provided by UWE in communication with the city buddies to ensure they are relevant and city-specific. The workshop outcomes will be recorded by the city buddy using a reporting pro forma template provided by UWE to ensure consistency in the evidence captured. Participants should be encouraged to complete evaluations about the Delphi Workshop (provided by WP2).

There are two key activities, each with sub-activities:

- Activity 1 Health and air pollution awareness
 - o 1a: "What causes the most deaths?"
 - o 1b: "How bad is my city/region's emissions?"
- Activity 2 Policy measures
 - o 2a: "What can be done?"
 - 2b: "How would these policy measures affect how you live your life?" (Matrix activity)
 - 2c: "Why would these policies affect how you live your life?" Post-it note activity
 - o 2d: "How could these policies be made easier for you?" Post-it note activity

Activity 1 – Health and air pollution awareness

Activity 1a: "What causes the most deaths?"

Ranking comparison between Smoking/Obesity/Alcoholism/RTAs/Air Pollution photos. Pose the question and get tables to suggest rankings, and then go into Activity 1b.

Activity 1b: "How bad is my air pollution?"

Present and discuss national air pollution & health stats (provided by cities/regions).

Return to Activity 1a to see whether they would change their minds and to reveal the answers. *National mortality stats obtained from Eurostat/WHO.*

Activity 2 – Policy measures

Activity 2a: "What can be done?"

Tables are presented with (\sim 10) numbered cards relating to policy measures that are derived from Round 2 Part 2 (i.e. R1 Q2, WP6 and other global examples). Different coloured cards should be used for travel, home heating, and other city specific measures. Participants should be asked to think about what these policy measures would mean for their lives. Blank cards would be available for any additional thoughts from participants.

<u>Activity 2b:</u> "How would these policy measures affect how you live your life?" (Matrix activity)

Each table should be asked to place the policy measure cards onto the matrix according to how easy/difficult they would be for them to adapt to in their lives. On that basis, would they like them implemented now/soon/later/never? Try to get consensus on each table and then compare and discuss. Duplicate policy cards could be made available to the facilitator for use if there are unresolvable differences of opinion for a particular policy measure on a table.

Table 2: Matrix for Activity 2b

		"When would I be able to adopt this policy measure into my life?"			
		NOW (2017-2025)	SOON (2026-2035)	LATER (2036-2050)	NEVER
"Would this policy measure be easy/difficult to adapt to in my life?"	EASY				
	DIFFICULT				

<u>Activity 2c</u>: "Why would these policy measures affect how you live your life?" – Post-it note activity

Get tables to discuss policies and complete post-it notes individually stating "why" they would find each policy measure easy or difficult. Number the policy measure according to the card number. Try to get them as individuals to explain the reasons behind the ease or difficulty, e.g. "Banning diesels would be impossible for me, because I have a van." Vs "I'm a self-employed painter and decorator and I need my diesel van to work".

Activity 2d: "How could these policies be made easier for you?" — Post-it note activity Get tables to discuss how these policies could be made easier for them. Get them to think about who could make it easier (e.g. local council, citizens, national government, businesses, employers, communities, schools...) as well as how. E.g. "if the government had a scrappage scheme I might be able to trade in my dirty diesel for a clean new EV van." On the same post-it note, get them to state how and who could make the policy measure easier for them to incorporate in their lives. Get them to affix the post-it notes to the policy measures on the matrix.

The information from the surveys and Delphi workshop will be given to the Game (Task 4.2) as citizen-led future options and choices that are specific for their city by providing weighting policy options. Participants from the Delphi workshop will be encouraged to play the Game prior to the Stakeholder Dialogue Workshop. Through playing the Game, players will generate a range of policy scenarios. See WP 4.2 Guidance on the Game. Stakeholder Dialogue Workshop: Participants from the Delphi workshop and spokespersons from the Mutual Learning workshop will be invited to 'ground truth' the policy scenarios generated by the Game (i.e. provide local context to the policy scenarios). This means examining the range of policy scenarios and checking that they match with the ambitions from the Delphi and are viable according to policy makers. UWE will provide comprehensive guidance, instructions and activities to make sure that this workshop balances the opinions of all participants. (This guidance cannot be provided at this time as it will be developed in parallel with the Game development to ensure that it corresponds with the Game outputs.) Participants should be encouraged to complete evaluations (provided by WP2).

What are the resources?

You will need to be aware of the available person months and resources allocated to you as a city/region and buddy for Delphi (refer to the budget) and allocate to activities accordingly. All cities/regions have approximately 3.5 person months shared between the city/region and the buddy (with the majority allocated to the buddy), except Aveiro, which has 1.8 person months. It may be helpful for you to know that UWE as Bristol's buddy partner is planning to divide our time across the three Rounds and Stakeholder Dialogue Workshop as follows (this split is an approximation and is just for guidance; for the cities this will need to include administration time, e.g. transcribing and sending responses):

Round 1 (including preparation): 40-50%
Round 2: 10%
Round 3: 20-30%
Stakeholder Dialogue Workshop: 10%

Checklist

Please refer to the timeline table (Table 1).

	erer to the timeline table (Table 1).	./
Prepa	ITALION	V
1.	Identify the important demographics for your city/region that you think are relevant to capture in the Delphi. This will ensure the Delphi respondents are representative of your city/region. Provide the statistics on these demographics for your city/region to Jo Barnes (jo.barnes@uwe.ac.uk) as soon as possible.	
2.	Start to identify suitable communications channels e.g. networks, groups, events, social media platforms etc. to contact citizens in your city/region population in order to reach a representative sample of the city.	
3.	Use WP2 guidelines to develop suitable messages for promoting the Delphi and ClairCity, and confirm your communication channels. You will need to use messages on social media (e.g. Facebook, Twitter, etc) and traditional media (newspapers, local TV/radio, posters) to share the link to the online questionnaires.	
Roun	d 1 – Public engagement	
1.	Plan and undertake public engagement through online platforms, information at events, local media promotions etc. and send out a link to the online questionnaire.	
2.	Monitor the demographics of public engagement respondents.	
3.	Be prepared to target underrepresented demographic groups. Consider which groups are likely to be underrepresented, and plan where they could be found (e.g. shopping areas more used by poorer communities or ethnic minorities; events attended by older people).	
4.	Send public engagement responses to UWE for analysis. (Online questionnaire results will be sent to UWE automatically.)	
Roun	d 2 – Online questionnaire	
1.	Undertake your communications to promote the online questionnaire through online platforms, information at events, local media promotions etc.	
2.	UWE will monitor the demographics of respondents to the online questionnaire, but be prepared to target underrepresented demographic groups by conducting face-to-face questionnaires if this is needed during your Round 2 process.	
3.	Develop a summary sheet (in local language) with UWE to send out to workshop participants before workshop.	

Rouni	d 3 – Delphi workshop	
1.	Identify a demographically representative sample of Round 2 participants and invite them to the Delphi workshop.	
	and invice them to the beigin workshop.	
2.	Send out summary briefing sheet.	
3.	Host and co-facilitate the Delphi workshop. Estimate 30-60 attendees for each 2-3 hour event.	
4.	Send the results from the Delphi workshop to UWE for analysis to input into the Game (Task 4.2) for your city.	
5.	Encourage Delphi workshop participants to play the Game (when it is launched).	
Stake	holder dialogue workshop	
1.	Invite Delphi participants and Mutual Learning workshop spokespersons to the Stakeholder Dialogue workshop.	
2.	Host and co-facilitate the Stakeholder Dialogue workshop. Again, estimate 30-60 attendees for each half-day event.	
	Summarise the outcomes of the Stakeholder Dialogue workshop to input into the City Policy Package (Task 7.2).	
Evalu	ation	
1.	Encourage participants in all rounds to undertake a Delphi evaluation survey provided by WP2 (in local language).	



ClairCity: Citizen-Led Air Pollution Reduction in Cities

Delphi Round 1 Questionnaire – Online/self-completion version

ClairCity is a large Europe-wide project to involve citizens in how their cities will develop in the future. This survey is part of our activities to listen to local people. There is space at the end of this questionnaire for you to leave your details if you would like to participate in a second online survey, and if you like, we will invite you to workshop over the next few months.

This survey is to find out what you think about your city and how you would like to see it improve in the future. We also ask about how you travel around the city, how you heat your home, if and how you would like to change these and the reasons why this may be challenging. This questionnaire will take about 5-10 minutes to complete.

Your answers will not be identifiable to you and will be grouped thematically with other respondents. ClairCity will treat your information in accordance with the terms and conditions of the 1995 EU Data Protection Directive. Overall outcomes from the research will be published in reports to the European Commission, on our website www.claircity.eu, and through wider media.

It is up to you to decide whether or not to take part. If you do decide to take part, please proceed and complete the questionnaire. This study was given ethics consent by the Research Ethics Committee of the Faculty of Environment and Technology, University of the West of England, UK researchethics@uwe.ac.uk. ClairCity Project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 689289.

	Questions about your city – now and in the future		
1			
	Likes:	Dislikes:	
2	How would you like to see your city/i years?	region improve over the next 35	



Cla	nirCity Fact	
	Example – "Part of our research is about air pollution. Did you know that road traffic/home heating is the biggest source of air pollution in your city/region?" Please circle: Yes / No	
Rep	ease note — this fact will be city specific and we can use the WP6 Baseline Policy ports to support the fact. Also the subsequent questions will be city specific — we have avided two examples related to travel and home heating).	ı
	e next few questions are about your travel/home heating. estions about your travel in the city — now and in the future	
3	How do you currently travel for:	
	work/study commuting	
	• shopping	
	• leisure	
	other activity (please specify)	
4	How would you like to travel in the future (2050) for:	

	work/study commuting	
	ale a protection	
	• shopping	
	leisure	
	other activity (please specify)	
_	Tf vov worth to show as what are t	ha waa aana uubuu waa aana/ha ayyeenblu beesyal
5	that way?	he reasons why you can't currently travel
6	If you don't want to change, can	you say why not?
O 114	estions about your home heating —	now and in the future
7	How do you normally heat your h	

8	How would you like t	o be able to heat y	our home in futu	ire (2050)?
9	If you want to change		asons why you ca	n't currently heat
	your home that way?			
10	If you don't want to	change, please car	you say why no	t?
Man	y thanks for taking pai	rt in this questionr	naire. Finally, we	just have a few
ques	tions about you to ens			
	region. estions about you			
11	Gender (please circle	e)		
	Male	Female	Other	Prefer not to say

Age (please circle)

	16-24	25-36	37-50	51-65	65+	Prefer not to say	
13	Ethnicity (p	lease tick)					
	Asian or Asian British (Indian, Pakistani, Bangladeshi, Other Asian Background)					ground)	
	Black or Black	Rritish (Carib	bean, African,	Other Black Ba	ckground)		
	Mixed Backgr	Mixed (White & Black Caribbean, White & Black African, White & Asian, Other Mixed Background)					
	Chinese						
	White (British	, Irish, Any Ot	her White Back	kground)			
	Prefer not to	say					
	Other (please	e specify)					
14	Highest qua	lification att	ained (please	e tick)			
	Professional qualification (e.g. Chartered)						
	Higher degree (e.g. PhD, MSc)						
	Degree (e.g. BSc, BA)						
	Secondary sc	hool/Further e	ducation qualif	ications (e.g. 0	CSE, O level, A	A level)	
	Vocational qualification (e.g. City & Guilds, NVQ)						
	No qualification	ons					
	Prefer not to	say					
15	Home posto	ode:				•	
	If you would like to be involved in an online questionnaire and/or a workshop in the next few months please leave your details below:						
Nan	ne						
Ema	nil						
Pho	ne						





Delphi Round 1 Questionnaire - Interviewers' version

Hi, my name is (*interviewer state your name*) and I would like to invite you to take part in a short, 5-10 minute interview as a citizen of Bristol. Can I just check, do you live, work or study in or around Bristol?

Interviewer – please circle appropriate response.

Live	Work	Study
_	=	/

If yes, And can I check if you are 16 or over?

If yes to both questions, proceed with the interview. If not, .Ok, thank you for your time.

Firstly, just to introduce the project and let you know what I will be asking about: ClairCity is a large Europe-wide project to involve citizens in how their cities will develop in the future. This survey is part of our activities to listen to local people. There is space at the end of this questionnaire for you to leave your details if you would like to participate in a second online survey, and if you like, we will invite you to workshop over the next few months.

This survey is to find out what you think about your city and how you would like to see it improve in the future. We also ask about how you travel around the city, how you heat your home, if and how you would like to change these and the reasons why this may be challenging. This questionnaire will take about 5-10 minutes to complete.

Your answers will not be identifiable to you and will be grouped thematically with other respondents. ClairCity will treat your information in accordance with the terms and conditions of the 1995 EU Data Protection Directive. Overall outcomes from the research will be published in reports to the European Commission, on our website www.claircity.eu, and through wider media.

It is up to you to decide whether or not to take part. Can I check if you are still happy to proceed with the interview?

If yes, proceed with the interview. If not, .Ok, thank you for your time.

This study was given ethics consent by the Research Ethics Committee of the Faculty of Environment and Technology, University of the West of England, UK researchethics@uwe.ac.uk. ClairCity Project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 689289.



Que	estions about your city — now and i	n the future		
1	What do you like/dislike about yo			
	Likes:	Dislikes:		
2	How would you like to see your c	ity/region improve over the next 35		
	years?			
Cla	irCity Fact			
Cia	ClairCity Fact			
L 6	Example – "Part of our research is about air pollution. Did you know that road			
traffic/home heating is the biggest source of air pollution in your city/region?" <i>Interviewer</i> please circle: Yes / No				
	,	•		
-		and we can use the WP6 Baseline Policy		
-	Reports to support the fact. Also the subsequent questions will be city specific – we have			
-	vided two examples related to travel an			
	next few questions are about your trav			
Que	Questions about your travel in the city – now and in the future			

3	How do you currently travel for:	Interviewer – don't read options, circle response/ provide additional info below
	work/study commuting	Car/ Car share/ Bus/ Train/ Bicycle/ Walk
	• shopping	Car/ Car share/ Bus/ Train/ Bicycle/ Walk
	• leisure	Car/ Car share/ Bus/ Train/ Bicycle/ Walk
	other activity (please specify)	Car/ Car share/ Bus/ Train/ Bicycle/ Walk
4	How would you like to travel in the future (2050) for:	Interviewer – don't read options, circle response/ provide additional info below
	work/study commuting	Car/ Car share/ Bus/ Train/ Bicycle/ Walk
	• shopping	Car/ Car share/ Bus/ Train/ Bicycle/ Walk
	• leisure	Car/ Car share/ Bus/ Train/ Bicycle/ Walk
	other activity (please specify)	Car/ Car share/ Bus/ Train/ Bicycle/ Walk
5	If you want to change, what are that way?	the reasons why you can't currently travel
	Interviewer – don't read options, circl below	le response/ provide additional information

	Cost/ Comfort/ Timing/ Distance/ Convenience/ Fitness or health/ No choice/ No
	alternative/ Road safety/ Weather
6	
	If you don't want to change, can you say why not?
Oue	estions about your home heating — now and in the future
7	
	How do you normally heat your home?
	Interviewer – don't read options, circle response/ provide additional information
	below
	Gas/ Electric/ Wood burner/ Coal/ District heating/ Heat pump/ Geo-thermal/ Solar-
	thermal
8	How would you like to be able to heat your home in future (2050)?
8	How would you like to be able to heat your home in future (2050)?
8	How would you like to be able to heat your home in future (2050)? Interviewer – don't read options, circle response/ provide additional information below

	Gas/ Electric/ Wood burner/ Coal/ District heating/ Heat pump/ Geo-thermal/ Solar-thermal
9	If you want to change, what are the reasons why you can't currently heat your home that way?
	Interviewer – don't read options, circle response/ provide additional information below
	Not homeowner/ No alternative/ Cost
10	If you don't want to change, please can you say why not?

Many thanks for taking part in this interview. Finally, we just have a few questions about you to ensure our survey represents the citizens of this city/region.

Interviewer – please turn over for demographic questions. You may get the respondents to

self-complete this section if they prefer.

Questions about you											
11	Gender (please circle)										
	Male	Male		Female	Other		Prefer not to say		say		
12	Age (please	Age (please circle)									
	16-24	25-36	,	37-50	51-65	6	5+	Prefer	not		
							to sa		ay		
13	Ethnicity (p		<u>, </u>								
		Asian or Asian British (Indian, Pakistani, Bangladeshi, Other Asian Background)									
		Black or Black British (Caribbean, African, Other Black Background)									
	•	xed (White & Black Caribbean, White & Black African, White & Asian, Other									
		lixed Background)									
		Chinese									
		hite (British, Irish, Any Other White Background)									
		efer not to say									
	Other (please			:	11-1-1						
14		ighest qualification attained (please tick)									
		ofessional qualification (e.g. Chartered)									
		ligher degree (e.g. PhD, MSc)									
		Degree (e.g. BSc, BA)									
	-	econdary school/Further education qualifications (e.g. GCSE, O level, A level)									
		ocational qualification (e.g. City & Guilds, NVQ)									
		o qualifications refer not to say									
15	Home posto										
	ou would like		, olvo	d in an onlin	o guestionna	iro an	d/ora	worksh	on		
	ne next few r						u/OI a	WUIKSII	op		
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-Led Air Pollution Reduction in Cities

Delphi Workshop Participant Information Sheet

You have been invited to take part in this project as a citizen, as we are interested in your thoughts and views.

ClairCity is an innovative project involving thousands of people in cities across Europe, enabling us all to decide the best local options for a healthier future with clean air and lower carbon emissions.

We would like to find out what you see as the barriers and solutions to a future with clean air in your experience as a resident of this city. This will inform the development of the project and eventually contribute to policy solutions.

You will be asked to take part in a workshop about your experience and opinions. The workshop will take 2-3 hours to complete and notes or audio recordings will be made on your comments. Your answers will not be identifiable to you and will be grouped thematically with other respondents.

ClairCity will treat your information in accordance with the terms and conditions of the 1995 EU Data Protection Directive. Overall outcomes from the research will be published in reports to the European Commission, on our website www.claircity.eu, and through wider media.

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and asked to sign a consent form regarding the use of the information that you provide. If you decide to take part you are still free to withdraw up until attending the workshop. Data collected during the workshop will be anonymised and, as it can no longer be personally attributable, cannot be subsequently withdrawn from the research.

This study was given ethics consent by the Research Ethics Committee of the Faculty of Environment and Technology, University of the West of England, UK researchethics@uwe.ac.uk. ClairCity Project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 689289.

Thank you for your time.

Researchers: Jo Barnes, Enda Hayes and Eva Csobod





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n-Led Air Pollution Reduction in Cities

Delphi Workshop Consent Form

I have read the information on the	Participant Information Sheet and consent to taking	
part in the ClairCity project.	,	
. , , ,	in a group and notes or audio recordings will be	
•	d then grouped with other participants, so my	
	v from the study until I attend the workshop. Data be anonymised and cannot be removed.	
Name		
City		
Signature of Participant		
Date		



ClairCity: Citizen-Led Air Pollution Reduction in Cities

Delphi Round 3 Workshop Checklist

Before the Workshop:

- Identify a demographically representative sample of Round 2 participants and invite them to the Delphi workshop.
- Book a venue and organise food/refreshments for the workshop
- Send out summary briefing sheet/Participant Information Sheet
- Bring post-it notes and pens for Activity 2c/d
- Bring spare blank cards for Activity 2a
- Print:
 - Activity 1a/c photos/images & national mortality statistics
 - Activity 1b national air pollution and health statistics
 - Activity 2a policy measure cards on coloured card including duplicates
 - Activity 2b matrix on A1 paper
 - Participant Information Sheets and Notices
 - Consent Forms
 - Participant evaluation questionnaires
 - Event Observation Form
 - Workshop script

During the Workshop:

- 1) Put up a notice saying what you are doing (the Participant Notices) and have nearby the Participant Information Sheets in case anyone wants to take one away.
- 2) Ask participants to complete and sign Consent Forms.
- 3) Observe the Workshop and fill in the Observation Form with your notes. The facilitators can also help with this.
- 4) Record the Workshop and outputs of the activities 2b/c/d using a digital camera/ camera phone.
- 5) Ask participants to complete Evaluation forms after the Workshop.

After the Workshop:

1) Transcribe the activity 2b/c/d responses and send to UWE with digital photos of the Workshop and outputs