



ClairCity: Citizen-led air pollution reduction in cities

D4.5 Stakeholder Dialogue Workshops Complete – First city (Bristol)

December 2018

Document Details

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Executive Summary

This report presents the summary of the Stakeholder Dialogue Workshop (SDW) undertaken in Bristol on 29th June 2018. The aim is to synthesise the evidence streams from the ClairCity process such as the Delphi, Mutual Learning Workshop and Game to allow city/region stakeholders to generate a number of potential scenarios for the city towards 2050.

The report describes the derivation of the policy measures used in the workshop, the participants and the activities that they undertook. Key activities involved defining the level of ambition of the citizen-led policy measures, identifying any constraints/enablers/examples from elsewhere, and indicating a timescale for implementation.

The results of the activities are presented in the Appendix and were summarised in the WP7 Scenario Report. Feedback on the workshop from the participants and facilitators as well as from observers from the partner cities/regions and WP6 and WP7 leads are also presented in the Appendix and recommendations made for the next SDW in Amsterdam in January 2019. Following the Amsterdam SDW the Guidelines will be finalised for the remaining cities/regions to adopt during February and March 2019.

1 Introduction

1.1 Objective of this report

The Stakeholder Dialogue Workshop (SDW) activity is part of WP4 - Citizens and Stakeholder Engagement, Task 4.1: Citizen Delphi Engagement.

The aim is to synthesise the evidence streams from the ClairCity process such as the Delphi, Mutual Learning Workshop and Game to allow city/region stakeholders to generate a number of potential scenarios for the city towards 2050.

Within the Grant Agreement: Description of Actions the SDW was described as follows:

Finally, each city will have a Stakeholder Dialogue Workshop to explore the variety of pathways chosen by the players and to examine and ‘crowd-source’ a publicly acceptable consensus of a low carbon, clean air pathway in the short-medium and long term to 2050. Workshop participants will undertake a more focused back-casting activity to identify specific emission constraints and other factors that influence the ‘collective’ future pathway.

This report presents the summary of the SDW undertaken in Bristol on 29th June 2018.

1.2 Where does the Stakeholder Dialogue Workshop sit in the wider ClairCity Project?

The SDW is part of Task 4.1: Citizen Delphi Engagement and brings the evidence streams from the Delphi (Task 4.1), the Skylines Game (Task 4.3) and the MLW (Task 4.4.1.) together with the Baseline policy report (WP6) to create the potential scenarios for the city/region. These potential scenarios will help to define the endpoints or future clean air, low carbon, healthy vision of the city/region and subsequently potential scenarios will be screened through our emissions model (WP5), integrated into a single optimum scenario and quantified for the final ClairCity Policy Package. Figure 1-1 illustrates where the SDW sits in the process.



Figure 1-1: Where does the Stakeholder Dialogue Workshop sit in the ClairCity process?

2 Selection of policy measures

Evidence generated by the Delphi, Mutual Learning Workshop process and Skylines Game was used to generate a 'SDW Policy Box' of citizen-led policy measures that have been identified as the key policies and/or policy areas that need to be considered in our SDW and our scenarios. The 'SDW Policy Box' was generated by UWE (Delphi / Game) with the support of REC (MLW) and in consultation with the city/city buddy partners. Details of how the 'SDW Policy Box' was derived are depicted in Box 2-1.

The evidence from the Baseline Policy Report process (WP6) formed part of the 'Business as Usual (BAU)' baseline which underpins all scenarios and incorporates EU sector roadmaps, national policies and local policies that are already implemented or in the pipeline.

How the 'SDW Policy Box' was created for Bristol

In the Skylines Game:

1. An idea is **presented** to the player and they either chose or reject
2. The **chosen** idea goes into the briefcase and is either stamped or ignored
3. The **stamped** idea becomes policy

To identify the most popular policies from the Game, therefore, we applied a simple equation: $(No. \text{ of times Chosen/Presented}) \times (No. \text{ of times Stamped/Chosen})$. Sorting the resulting list in descending order allowed us to identify the most popular policies. In Bristol, we selected $\geq 70\%$ ($n = 31$).

In the Delphi:

Question 10 in the Round 2 questionnaire identified which policies citizens think would be **Good/Bad/Neither good nor bad** for their city/region. To identify the most popular policies from the Delphi, therefore, we applied another simple equation: $(No. \text{ of times Good}) + (No. \text{ of times Neither good nor bad})$. Sorting the resulting list in descending order allowed us to identify the most popular policies. In Bristol, we selected ≥ 100 ($n = 15$).

In the MLW:

All of the policies suggested by the MLW participants were reviewed and those that represented clear policy actions were identified from the analysis of proposed policies and actions. In Bristol this resulted in $n = 38$.

Once selected policies had been identified from each of the Game, Delphi and MLW, these were listed in a spreadsheet and categorised by themes and sub-themes as per the Game Policy Library. Policies were iteratively reviewed by multiple researchers to identify where the similarities occurred between those arising from the different activities. A short-list of policies was then produced from the policies arising from two or more activities, comprising the 'SDW Policy Box'.

Box 2-1: Derivation of policy measures for the Stakeholder Dialogue Workshop from the Skylines Game, Delphi and Mutual Learning Workshop

Policies within ‘SDW Policy Box’ were colour coded to reflect their perceived importance to the SDW process. For example:

- Dark Blue Policies (Priority) included policies that had been identified in all three of the WP4 activities (e.g. the Delphi, MLW and Game) and therefore these policies had to be implemented in the SDW activities.
- Light Blue Policies (Discretionary) includes policies that had been identified in two of the three WP4 activities (e.g. identified in Delphi and Game but not MLW) and therefore were at the discretion of the workshop participants if they included them in their scenarios.
- Policies that arise from only one of the WP4 activities were not included in the ‘SDW Policy Box’.

Table 2-1 shows the priority and discretionary policy measures used in the Bristol SDW.

Theme	Sub-theme	Policy measure
Transport	Public transport	Make buses cleaner and greener
Transport	Public transport	Cheaper public transport (2028)
Transport	Active Travel	Create good alternatives to car use - walking & cycling infrastructure
Transport	Any Transport	Ban/phase out most polluting vehicles (not just charge more)
Transport	Public transport	Reducing vehicle road space - increase public transport space (2026)
Transport	Active Travel	Improve walking environment in Bristol
Transport	Any Transport	Charge older/more polluting vehicles entering the city
Transport	Any Transport	Promote electric vehicles (2031)
Transport	Information provision	Awareness raising to promote active and public transport
Transport	Other	Make it easier for employees to work from home
Energy	Energy efficiency	Make property developers consider air pollution & climate change
Energy	Switch energy	Build housing close to major employment zones
Land Use	Other	More local shops and facilities in neighbourhoods
Land Use	Other	Organisation to provide more flexible working hours for employees
Land Use	Other	Improve energy efficiency of housing (rented/existing/new)
Land Use	Other	Increase generation of solar & wind power
Other	Other	Spread economic opportunities across different areas of the city

Table 2-1: Policy measures used in the Bristol Stakeholder Dialogue Workshop

3 SDW Activities

3.1 Participants

The Delphi and the Game process was orientated towards 'citizen' engagement while the MLW and Policy process was more orientated towards key city 'stakeholder' engagement. The SDW predominantly utilises the experience and expertise of key city stakeholders to generate scenarios so participants with knowledge and expertise on various subject areas were recruited to attend. Invitations were targetted at MLW participants, academics and Bristol City Council policy officers and councillors. Sixteen participants registered to attend the Bristol SDW from a range of organisations and expertise (Appendix A). Three tables were used and participants were allocated a seating plan to ensure there was diversity of expertise at each table (e.g. transport, health, energy and air quality at a table). Each table was also allocated a facilitator to record and direct the activities on each table. Participants completed consent forms and evaluation forms before and after the workshop respectively.

As the first city to run the SDW, observers from the partner cities/regions attended as part of their training for running the workshop in their own areas. Leads from WP6 and WP7 also attended to facilitate development of the Scenarios Report and Policy Workshop. None of these observers engaged with the activities, either sitting as silent participants on one of the tables or observing the whole workshop from the sidelines.

3.2 Introduction to the workshop

The workshop in Bristol was held in City Hall and opened with a very brief introduction from the workshop coordinator explaining the purpose of the SDW and the agenda for the day (Box 3-1).

Agenda	
9.30-9.45	Coffee/tea
9.45-10.00	Introduction to Stakeholder Dialogue Workshop and presentations on current policy baselines
10.00-12.00	Stakeholder Dialogue Workshop (Activities 1, 2 & 3)
12.00-12.30	Round up of Stakeholder Dialogue Workshop
12.30	Close

Box 3-1: Agenda for the Bristol Stakeholder Dialogue Workshop

Three brief presentations were given by city policy experts participating in the workshop, drawing on the Baseline Policy Report to illustrate the current baseline and ambition for the city. These were brief but fact-heavy presentations that ensured that participants had a common understanding of the existing challenges that the city faces and solutions that are already in the pipeline (i.e. the BAU). Presentations were given on:

1. Air Quality in Bristol (Andy Edwards, BCC Air Quality)
2. Transport in Bristol (Jacob Pryor, BCC Transport)
3. Energy policy – delivering clean, affordable, secure energy in Bristol (Mark Letcher, BCC Sustainability)

Three activities were then introduced (indicative timings in brackets):

- Activity 1 How ambitious should we be for each policy? (30 mins)
- Activity 2: Identify the 'chain of actions' for a successful policy (45-60 mins)
- Activity 3: Backcasting: when should these policies be implemented/completed? (30 mins)

3.3 Activity 1 How ambitious should we be for each policy?

In this activity, the participants were asked to discuss the selected policies to determine what level of ambition they wanted to apply to each policy. The participants were asked to play the Priority (Dark Blue) Policies first and then as many of the Discretionary (Light Blue) Policies as they felt necessary. As part of this discussion, participants were asked to use their professional and expert judgement to holistically consider:

- the potential impact on air quality and public health.
- the potential impact on carbon emissions and environment.
- the potential cost implications of each policy.
- the potential citizen 'satisfaction' of each policy.

N.B. Political ambition was explicitly not included in the consideration as this was to be addressed in the subsequent Policy Workshop.

Facilitators recorded the key points of the discussions and the participants were asked to semi-quantitatively score each policy on a scale of 1-5, using sticky dots, to determine the level of ambition that should be applied to each policy. On a blue post-it note, attached to the policy, participants wrote what they meant by the level of ambition denoted, e.g. if the policy was *'More electric vehicles'*, the level of ambition could have been *'90% fleet to be electric'*.

3.4 Activity 2: Identify the 'chain of actions' for a successful policy

In this activity, the participants were requested to assess each policy option from Activity 1 to determine the enablers and constraints/unintended consequences that must be considered by the city to ensure a successful policy.

Participants were asked to consider:

1. What 'enabling' policies must be implemented and when, to create an enabling chain of actions for each policy ambition to be achieved? For example, if the level of ambition is *'90% fleet to be electric'* then an 'enabling' policy might be *'A viable charging infrastructure'*. [green post-it notes]
2. What key 'constraints or unintended consequences' must be considered when considering each policy? For example, if the policy to be implemented is *'More electric vehicles'* then a 'constraint or unintended consequence' might be ensuring

that *'Active travel is not negatively impacted by placing charging points on footpaths / cycle paths'* or *'Ensure sufficient (renewable) energy available'*. [orange post-it notes]

3. If participants are aware of any examples of cities that have implemented similar policies, are there any success stories/lessons to be learned? For example, if the policy to be implemented is *'More electric vehicles'* then example of good practice might be *'Oslo City's approach of linking charging points with free parking'*. [pink post-it notes]

Each policy can generate more than one 'enabler/constraint'. All of this evidence was recorded using different coloured post-it notes and through the notes of the facilitator.

3.5 Activity 3: Backcasting: when should these policies be implemented/completed?

Again, focusing on Priority (Dark Blue) Policies first, the participants were asked to place the policies (together with their ambition, enablers and constraints) on the timeline. The placement of these policies signifies the date by which they would like to see that policy implemented and completed (rather than initiated). This was a negotiation between the participants using their collective expert judgement and was a dynamic process with participants able to move policies forward (earlier) or backwards (later) as discussions developed. Some of the policies arising from the MLW had dates already stated relating to the dates that MLW participants considered that these policies should be completed and these were used as a guide. The end result was a timeline of clear policy ambitions, together with their strategies for achievement.



Figure 3-1: Stakeholder Dialogue Workshop, Bristol – Table 1



Figure 3-2: Stakeholder Dialogue Workshop, Bristol – Table 2



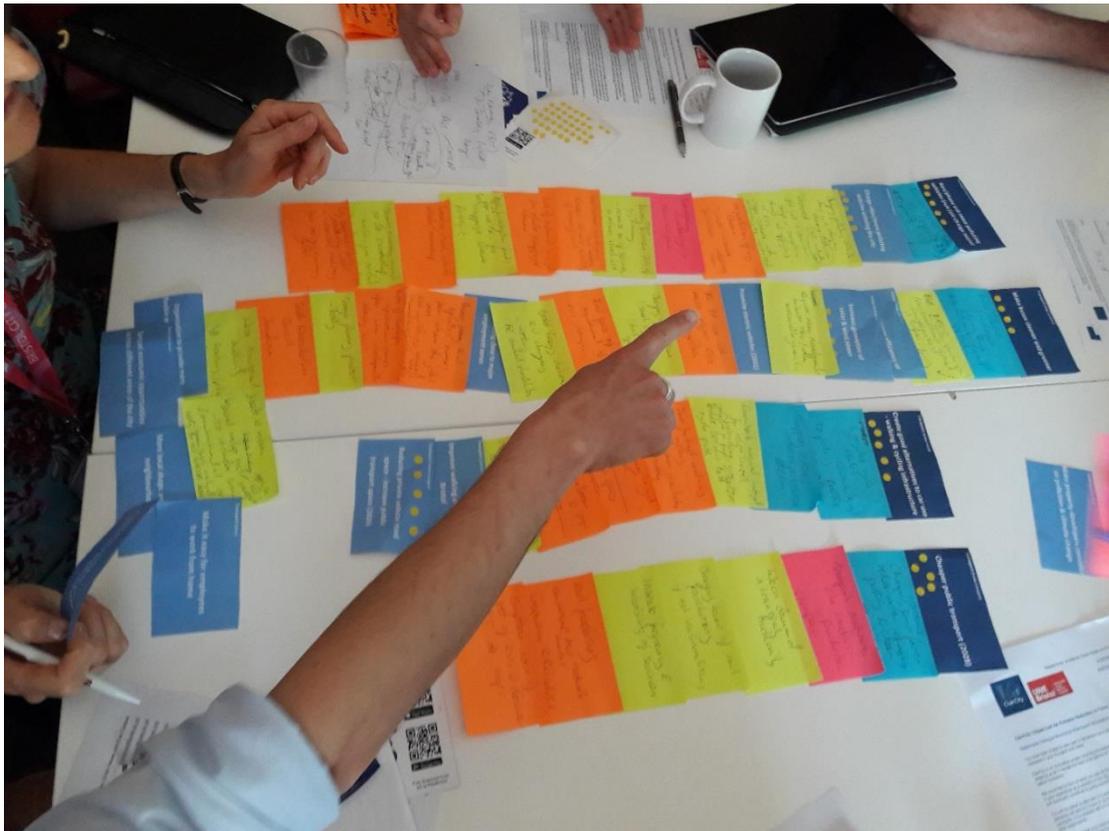
Figure 3-3: Stakeholder Dialogue Workshop, Bristol – Table 3

4 Results

The results from each table are presented in Appendix B and were developed into three separate scenarios under WP7. Photos capturing some of the outputs are presented below.

There were many interesting discussions had around each of the tables and although some tables appeared to be more progressive than others in terms of the number of discretionary policy measures included or the timing or ambition of policy measures, in the final summation there was not a great deal of difference between the results from each table.







5 Conclusions

Feedback was sought from the participants, the facilitators and the observers from each of the cities/regions. These evaluations are presented in Appendix C.

Key recommendations from the feedback are summarised below:

- Provide workshop briefing in advance.
- Take more time to explain the purpose of the activities.
- Provide more time for the activities (especially Activity 1).
- Provide clearer instructions on activities/make activities clearer.
- Discuss the policy measures and present on the screen.
- Consider alternatives to the dots to assess 'ambition'.
- Consider ways to improve quantification of policy measures.

Subsequent to the Policy Workshop in Bristol in November 2018 and in advance of the next Stakeholder Dialogue Workshop in Amsterdam in January 2019, WP4, WP5, WP6 and WP7 have been in discussion about how to develop and improve the SDW to generate more quantifiable scenarios that feed into a revised Policy Workshop. The approach adopted for the Amsterdam SDW will be evaluated and written up into guidance by the end of January 2019 for the remaining cities/regions to follow.

Appendix A: Bristol Stakeholder Dialogue Workshop participants/seating plan

Table	First Name	Surname	Field	Job Title	Company
1	Christina	Biggs	Transport Air quality	Director (member-elected)	Bristol Green Capital Partnership
1	Martin	Fodor	Individual Local authority	Cllr	BCC
1	Duncan	Laxen	Air quality	Air Quality Consultant	Prof. Duncan Laxen
1	Sam	Willitts	Health	Energy and Sustainability Manager	University Hospitals Bristol NHS Foundation Trust
1	Ges	Rosenberg	Engineering/ sustainability	Research Fellow in Engineering Systems & Design	University of Bristol
2	Jo	chesterman	Individual	Volunteer	St George Breathing Better
2	Lauren	Curl	Transport Air quality Local authority	Community Engagement Officer	Bristol City Council
2	Alan	Morris	Community group	Chair, Bristol Walking Alliance	Alan Morris
2	Jacob	Pryor	Transport	Principal Transport Planner	Bristol City Council
2	Steve	Ransom	Local authority Energy	Energy & Environmental Programme Manager	Bristol City Council

2	Sion	Williams	Transport Air quality Energy Community group NGO	Regional Campaigner, South West England	Friends of the Earth
3	steve	crawshaw	Air quality	project manager	Bristol City Council
3	Adrian	Davis	Public health	Public Health Evidence and Effectiveness Adviser	Bristol City Council
3	Amy	Harvey	Local authority	project manager - sustainability	Bristol City Council
3	Stuart	Phelps	Air quality Community group	Core Member	RADE
3	Katie	Reeve	Individual NGO	Volunteer	Bristol Women's Voice

Appendix B – Tables of results

Table 1

Policy	Priority/ discretionary	Year	Ambition Star	Ambition description	Enablers/policy	Constraints	City Examples
Ban/phase out most polluting vehicles (not just charge more)	Priority	2030 (Target year for clean transport in Bristol - all other transport policies feed in to this).	5	Total ban of polluting vehicles from Bristol/Greater Bristol (Diesel and IC) Taper from clean air zone, to congestion charge, to total ban increasing vehicles included in ban up to 2030 - Euro 5 to Euro 6 to Evs.	Clean delivery services - increase no of services to reduce private car use (2025) Not just a clean air charge - congestions charge - not applying to Evs. Taper scheme with lots of forewarning of increase in ban/charging (2023) Create sharing economy around car use & ownership - building on car clubs - + local leadership and funding for whole city/area scheme (2021) Apply for mitigation funds from WECA for local scrappage scheme (2020) Start charging most polluting vehicles (2020) (Older vehicles not euro 5)	Small businesses/car drivers low income - concern about equality of banning cars Inequalities of any scheme - businesses and delivery drivers Financing - sunk cost of vehicle ownership Lack of national budget for vehicle scrappage scheme Big companies will potentially invest in increasing clean delivery services but not gig economy (e.g. deliveroo)	Nottingham work place charging levy linked to congestion charging?
Make buses cleaner and greener	Priority	2023 (Year of clean)	4	Buses electric, hydrogen or biofuel	Low emissions grant for bus services increased to higher		

Policy	Priority/ discretionary	Year	Ambition Star	Ambition description	Enablers/policy	Constraints	City Examples
		travel Bristol)			level than bus service operator grant.		
Build housing close to major employment zones	Discretionary				Stronger planning power locally	South Gloucestershire Council - boundaries Planning that separates homes from where jobs are. Not building mixed use developments. Power of developers/volume house builders - infrastructure development comes after development built.	
Charge older/more polluting vehicles entering the city	Discretionary	2020	5	Enabler for Ban/phase out most polluting vehicles			Birmingham car charge in a clean air zone
Promote electric vehicles	Discretionary	2030			Develop charging infrastructure using street lighting (don't sell off) Bristol energy deliver EV charging system and control local distribution.	AQ - still a PM issue with breaks and tyre wear on Evs plus increase in congestion Road space requirement of ev charging infrastructure	

Policy	Priority/ discretionary	Year	Ambition Star	Ambition description	Enablers/policy	Constraints	City Examples
Cheaper public transport	Priority	2023 (Year of clean travel Bristol)	5	Cheaper/affordable bus fares relative to car ownership and clean air/congestion charging costs	Increase frequency & reliability of services(2023) Changing terms of rail franchising (if not nationalised) (2020) WECA demand a transport authority (2019) WECA Transport Authority created (2020) Reopen rail freight lines for passenger services. Review Social Value Act so it includes environmental and health costs and is applied to all WECA decisions. (2019)	Rail franchising system Commerce bus network model Unreliable and infrequent services stop people switching. Congestion an issue even if lots of evs & cleaner PT - people don't use service & can't reduce price Network rail business case Cost/benefit appraisal system does not allow for non-financial costs such as on health/environment	Transport authority - like London , Manchester and others

Policy	Priority/ discretionary	Year	Ambition Star	Ambition description	Enablers/policy	Constraints	City Examples
Create good alternatives to car use - walking & cycling infrastructure	Priority	2030 (Inline with phased in total ban on polluting vehicles)	5	Create segregated cycle routes e.g. Gloucester road with no parking allowed Create segregated walking routes Increase pedestrian access to shopping centres Double Bristol - Bath cycle path	Create safer cycling environment through lane segregation, reduced parking and public awareness campaigns Guaranteed annual budget for active travel infrastructure that is relative to funds given to road space and public transport (2020) Strategic review of road travel space in Bristol to increase space for cycling (2019) - examine parking, and use of smaller roads as designated cycle route as part of phased ban on polluting vehicles.	Money for cycling is only available if linked to work journeys Reducing road space could increase congestion Space conflict between walking/cycling, public transport and parking Complaints when you take car space away Bristol Streets Zero budget for walking and cycling	
Increase generation of solar & wind power	Discretionary	Year not discussed	5		Require new developments to have solar/other renewable generation		
Awareness raising to promote active travel and public transport	Discretionary	Up to 2023 as part of Year of clean travel Bristol and up to 2030 for total ban.		Enabler for Ban/phase out most polluting vehicles			

Table 2

Policy	Priority/ discretionary	Date achieve by	Ambition	Ambition	Enablers	Constraints	Examples	Extra notes
Make buses cleaner and greener	Priority	2023	5 stars	Not diesel.	Evidence based decision	Current technology is an issue		20% of fleet is currently green. Why only include buses in this policy? Cleaner does not mean more carbon efficient. All electric - depends on where electricity comes from
				Electric if possible and biomethane.	Energy sources - need infrastructure to charge / biomethane / hydrogen	Cost of alternatives		
				Evidence led approach in terms of technology being used to make cleaner/greener	Develop biogas supply in the city. Work out where waste goes.			
					Bristol Waste to develop biogas supply with BCC			
Create good alternatives to car use	Priority	2025	5 star	People must feel safe	Tackle fear of risk	Lack of political support	Rotterdam good example of information provision	Pavement shared use is an issue. Why not take from roads. Cant be done without taking road space. Doesn't fit without taking road space. Currently 20% commute by bicycle.
				Be like Copenhagen and Amsterdam	Showcase scheme - suggestion of St George Street	Funding issue	Copenhagen and Amsterdam for walking and cycling	
				But better than Amsterdam for walking	Showing decision makers that the public supports this	Perceived lack of space for infrastructure		

Policy	Priority/ discretionary	Date achieve by	Ambition	Ambition	Enablers	Constraints	Examples	Extra notes
				More space so it feels safe and welcoming	Walking buses			
				80% trips sustainable transport	Start with promoting change in habits now especially linked to schools			
					Create inclusivity in cycling			
					Need consistent funding not ad-hoc grants			
					Cost benefit analysis to reflect real cost of cars			
					Re-allocation to active travel for cycling and walking			
					Crossing priority for cycling and walking			
Ban/phase out most polluting vehicles	Priority	2023	5 star	Based on real world emissions - should include diesel cars	How to enforce - sticker systems, ANPR, database of real world emissions	Equity - those that cannot afford an alternative	Athens - unintended consequence of alternate number plates	More money for people who cannot afford clean vehicles. Impact on people with polluting vehicles. Low impact - suffer from AQ and no car

Policy	Priority/ discretionary	Date achieve by	Ambition	Ambition	Enablers	Constraints	Examples	Extra notes
				Account for number of people transported by buses	Realistic real world emission test in needed		London - ANPR enforcement of ban	others are low income but do drive. Scrappage scheme as an option but replaces cars with more cars. Need alternatives to car use
				Start - right to clean air and move on from there	Tighter ongoing emission tests for vehicles			
				Area of city with defined boundary	Bigger fines for cheating emissions			
				Phased approach	Legal constraints need to be resolved			
				Ban diesel vehicles including cars and buses	Need a Traffic Regulation Order - needs consultation			
				Shoot for clean air / moon	Bylaw - national enabler			
					How - Implement as a CAZ and could be extended based on CAZ area framework			
					National - Change process to support local authorities to do this.			
					Fines for motor industry			

Policy	Priority/ discretionary	Date achieve by	Ambition	Ambition	Enablers	Constraints	Examples	Extra notes
					towards helping those who cannot afford change			
Cheaper public transport	Priority	2020	3 star	Free for school kids - under 18	Fines for motor industry	Cost of implementation	Manchester public transport system	Need integrated public transport system. More attractive bus offer needed - time comfort etc. Money is the main issue for public transport. Build employment zone for people. Close links between new housing and employment zone. More focus on development by transport links.
				More attractive than the unsustainable alternatives	Mean tested public transport?	Quality of service could be compromised if popular		
				Free on bad air days sooner than 2028	Generation of fines from car ban			
					Need control of bus companies - public ownership. Franchise			
					Government to make fuel cheaper for buses			
					Driverless buses?			
					Integration of the transport system			
					Disabled access			
					Make more space - reallocation from cars			

Policy	Priority/ discretionary	Date achieve by	Ambition	Ambition	Enablers	Constraints	Examples	Extra notes
Reduce private vehicle road space - increase public transport space	Discretionary	2025	5 star	Keep road space for essential user groups only	Bold decision making	Road space limited		Light Blue Policy - Public realm must also be included in the reduced private vehicles space. Avoid suburban sprawl.
				Deliveries included	Need public support	Streets are narrow		
					Public awareness	Chicken and Egg - need space for alternatives but need alternatives first		
					Cost of impacts accounted for holistically e.g. health dividend	Infrastructure leads to current car dependency		
					Enable local living versus car dependant communities e.g. being proposed in Joint Spatial Plan	Business perception		

Table 3

Policy	Priority/discretionary	Year	Ambition Star	Ambition description	Enablers/policy	Constraints	City Examples
Ban/phase out most polluting vehicles (not just charge more)	Priority	2018	5	Ban all diesel cars and trains, but phase out diesel buses more gradually	Workplace travel plan	People buy new cars - doesn't encourage active travel	Nottingham - Parking schemes for employers
					Workplace parking scheme (employer pays council for spaces) (to trigger Workplace Travel Plans)		
					More funding		
					Mobility credit (free travel vouchers, provide e-bikes)		
Cheaper public transport	Priority	2018	4.5	First mile - Bristol will have a policy that will give people free/cheap transport to the bus station	Subsidise routes for bus	Money - can't subsidise	Sheffield - 2pence policy
				Bus fares - low flat fare (£1-2)	Working with NGO to get people to use technologies (e.g. apps like uber)	Shrinking role of local authorities	Edinburgh - city owned service
					Invest in social marketing strategy		Chapel/Hill - Park and Ride (free bus if pay for parking)
					Stronger role for regional authorities such as the Metro Mayor		

Policy	Priority/discretionary	Year	Ambition Star	Ambition description	Enablers/policy	Constraints	City Examples
Create good alternatives to car use - walking & cycling infrastructure	Priority	2025	5	Local Emission Mobility as a Service (MaaS) (Car club)	Reallocate road space	Money	TFL - Segregated routes to attract non-car use
				Segregated subjectively safe cycle path	Voucher system to use car sharing	Opposition to road space reallocation	
				Safe walking environment (by extending 20 mph speed limits across the city)	More education to encourage alternatives to cars - bike training	Timing of provision	
					Street scapes to make streets more open	Lack of trust	
					Law enforcement for safety		
					More information / social marketing		
					People-centred approach within organisations		
					Better road surfacing		
					Awareness raising to promote active and public transport (policy)		
Make bus cleaner and greener	Priority	2027	4	Electric hybrid/Hydrogen fleet	Statutory regulation needs to change	No control over buses (1985)	

Policy	Priority/discretionary	Year	Ambition Star	Ambition description	Enablers/policy	Constraints	City Examples
				Enforce green wave traffic lights (SCOOT) across Bristol	LGA or core cities to LA to lobby the central government to change regulation	Money	
Improve energy efficiency of housing (rented/existing/new)	Discretionary	2018	5	Ban all new developments from solid fuel	Using the Local Plan		
Charge older/more polluting vehicles entering the city	Discretionary	2020	0				
Reducing private vehicle road space - increase public transport space	Discretionary	2025	5		Create more shared/flexible transport - should happen gradually to counter opposition	People will feel like they don't have privacy - inequality effects	
					More local shops and facilities in neighbourhoods (policy)	More men cycle than women so gender inequality in the policy - need more safety to increase confidence of women cyclists	
Promote electric vehicles	Discretionary	2025	0				
Increased generation of solar and wind power	Discretionary	2026	4	Storage	Strict regulation of noise	Space constraints	
					Promote community ownership	Legislation about location	Denmark community owned wind farms

Policy	Priority/discretionary	Year	Ambition Star	Ambition description	Enablers/policy	Constraints	City Examples
					Build integrated PVs in new developments	Community consent	
					Discourage/ban wood burners	Limited wind resources around Bristol	
					Campaigns to make biomass burning stoves not acceptable	Regulatory gap on solid fuel burning	
					Compulsory checks for solid fuel burning		
					Phase out solid wood burning		
Make property developers consider air pollution and climate change	Discretionary	2030	5		Change new developments (focus on these)	Land - price and availability	
					Flexible employers - work with trade unions and legislation	Lack sharing responsibility	
					Move non-polluting industry closer to where people live		
					Change the Planning Policy Guidance to not provide car parking for employers		
					Financial disincentives		

Policy	Priority/discretionary	Year	Ambition Star	Ambition description	Enablers/policy	Constraints	City Examples	
					Extend public transport in poorer areas			
					Make it easy for employees to work from home (policy)			
					Build housing close to major employment zones			
					Promote hi-tech jobs in poorer areas			
					Build capacity for energy storage in new developments			
Spread economic opportunities across different areas of the city	Discretionary	2030	5	People living closer to their employment reduces travel (pollution) and opens employment opportunities to more people e.g. with caring responsibilities		Locked in in a long commuting		
							Densification	
							Areas are left empty during non-office hours (near poorer areas - women safety issues)	
Improve walking environment in Bristol	Discretionary	2035						

Appendix C – Feedback

Bristol SDW Feedback

Key recommendations

- Provide workshop briefing in advance.
- Take more time to explain the purpose of the activities.
- Provide more time for the activities (especially Activity 1).
- Provide clearer instructions on activities/make activities clearer.
- Discuss the policy measures and present on the screen.
- Consider alternatives to the stars/dots to assess 'ambition'.
- Consider ways to improve quantification of policy measures.

Partners

Edyta (Sosnowiec City):

- training was essential.
- Contrary to discussion at the training workshop, participants were able to interpret 'ambition' quite easily.
- Confident that participants in Sosnowiec will engage well.
- Is it possible to hide the 'optional' measures initially?

Eva (Regional Environmental Center):

- It is complicated, but everyone was very engaged.
- Needs good preparation.
- Need intro policy presentation.
- Would be good to present the policy measures on the screen.
- Need to show it as part of building on previous activities (i.e. Delphi, MLW, Game)

Stephan (Trinomics):

- Intro policy presentations should be kept short – give them 3 mins as it will turn into 5 mins.
- Need active facilitation. Suggest facilitator keeps hold of the pen.
- Would be good to have scribes as well as facilitators.

Myriam (University of Aveiro):

- In Bristol invitees were targeted, but it may be difficult for other cities to get experts.
- Need time to share between tables and walk around.

Rita (Liguria Region):

- It was all clear.
- Interested to see what policy measures come up in Genoa.

Svein (NILU):

- Dots (used to indicate ambition level) facilitated discussion.
- Very time consuming, but after flowed well.
- Challenge to turn into scenarios.

Ellie (UWE):

- Good mix of people on each table.

Enda (UWE):

- Need to put the 'what next' first to see context.

Kris (WP5) (TM Leuven):

- Add numbers associated with the measures as much as possible (e.g. progressive banning of polluting cars – what age?, euro-standard?...). The more tangible and specific the measures are defined in the SDW, the better for us to estimate the impact of the measure. Some examples:
 - Modal shift: “triple the number of school-commuting trips by bike at the expense of cars by 2030”
 - Pricing: “Set a congestion charge for cars of 0.15€/km starting 2020”
 - Domestic energy use: “replace half of all wood burning by gas by 2030”

Facilitators

- Dots confusing – thought it was ranking. Too much discussion about meaning of dots. Hard to focus participants on the ambition post-its.
- Tendency to want to add policies – hard to make clear.
- Agendas being pushed.
- Better briefing for the workshop – maybe to see the policies in advance.
- Wanted to have all the policies. Time restrictions limited the number of optional policies.
- Have timeline paper on the table first.
- Comfort break?
- Simplified initial stage. What do the dots mean? Defined dots/post-it stages.
- Hard to get people to be specific.
- Facilitators to write post-its, or scribes.
- Interrelated policies.
- More structured set of questions. How do you build a policy on that / frame work?
- Facilitators need to prompt/push to challenge.
- Introductions round table.
- Name/expertise badges. Icebreaker.
- More organised signing-in.
- Allocate longer for policy briefings.
- Facilitators/scribes to capture other points.
- Enablers/constraints worked well.

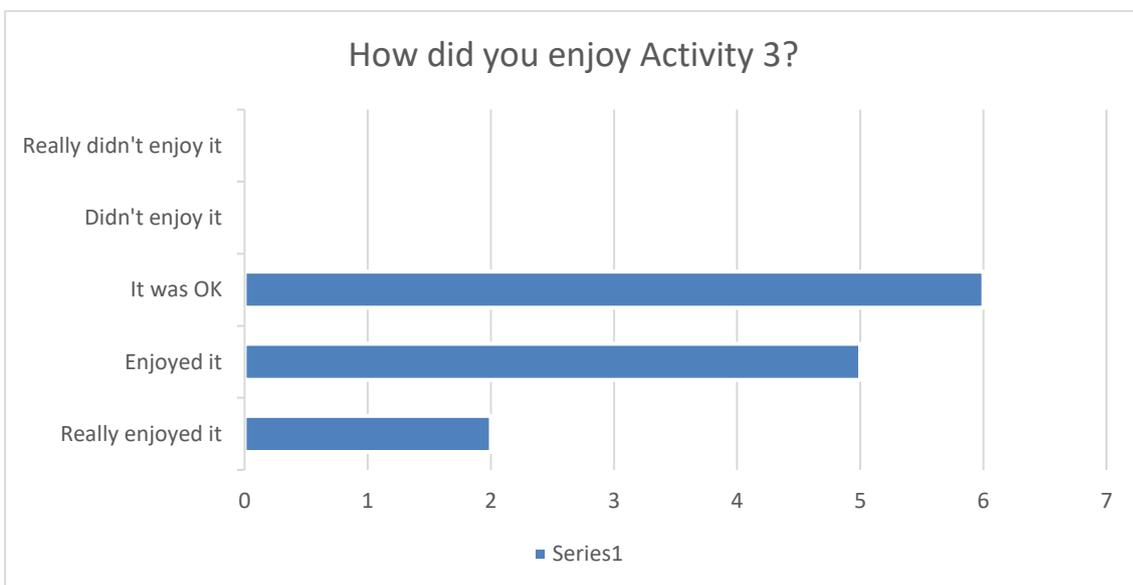
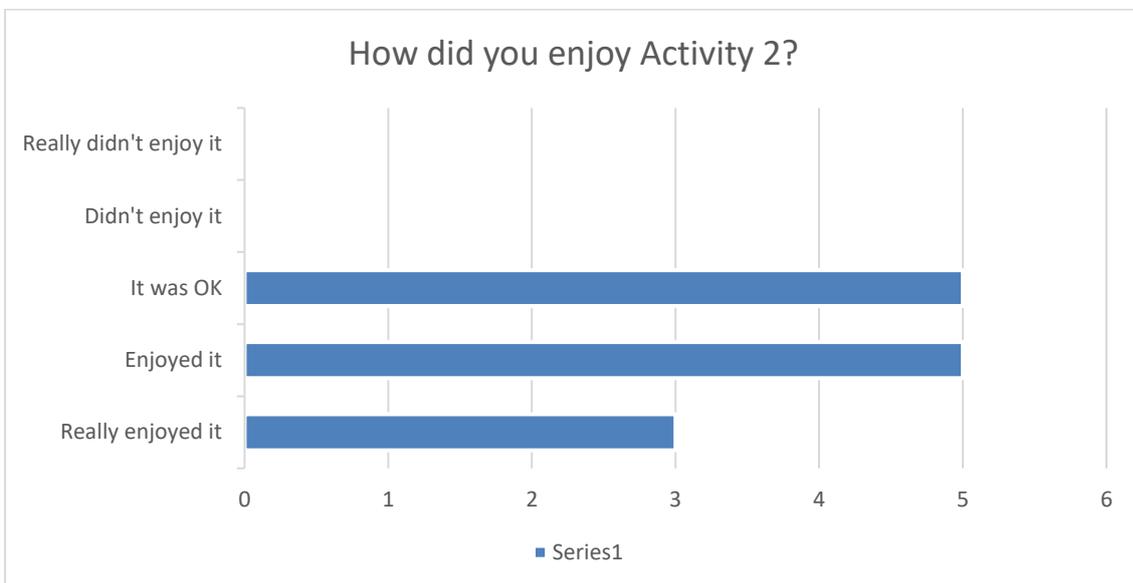
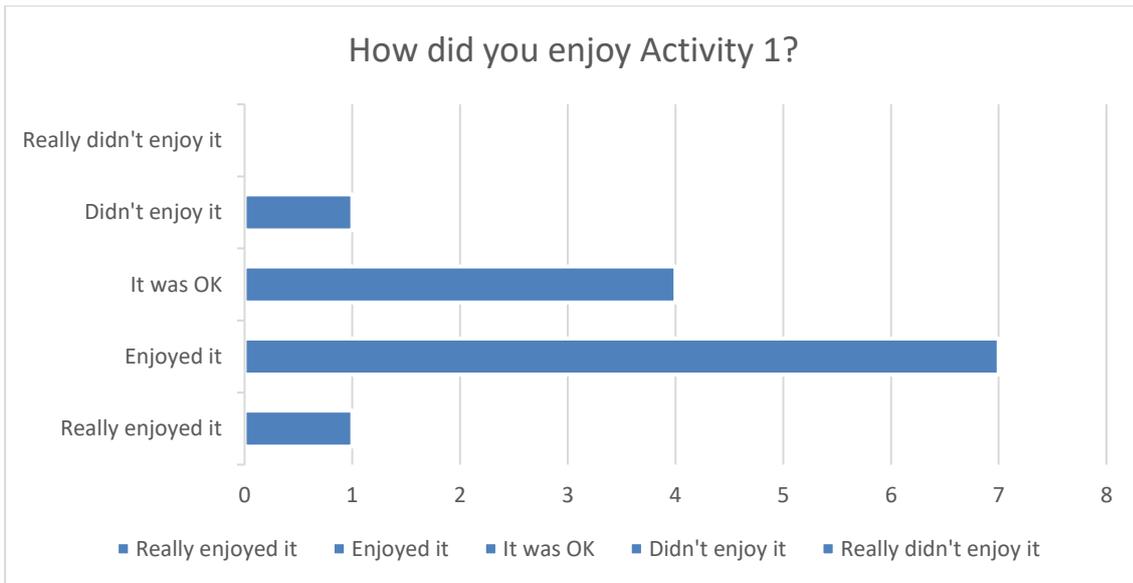
- Flipping constraints to enablers worked well.
- Maybe keep examples separate.
- Ask facilitators to write up results.

Participants



Other comments

- How did you decide who to invite? Didn't realise how seriously you are taking our output for such a short workshop.
- Took a while for the "ambition" versus the "realistic/current constraints" to get resolved. Could have explained the brief more clearly.
- Suggest use Nuffield Ladder of Interventions when working with policy matters - will send some slides.
- Very thought-provoking and lots of interactive discussions. Opening mini-presentations were helpful to set the scene.
- Good range of stakeholders, interests and views.
- I would have found it helpful to see the policies in advance to think about them.
- Longer would have allowed fuller discussion of options.
- Good mix of people.



Could you say why?

- Activity 1: Felt constrained by the choices on the table (and stuff not on the table) - like specifics on rail travel - MetroWest Phase 1, 2, 3. Activity 2: Worried that we had missed stuff out.
- As we got into the goals and problem-solving I think we started coming up with really pertinent solutions/constraint ideas.
- Subjectivity quite ++ and workshop fatigue.
- Good discussion, ambitious group. Excellent facilitator!
- Good energy discussion throughout and kept to task/time by excellent facilitation.
- Good interaction on my table.
- In Time - very much quick ideas throughout, driven by interests of the individual - some limited depth. Activity 1 was least clear.
- Felt more time needed for 1.
- Difficult to rank policies 1-5 without cost data available, so not sure how meaningful the rankings are. Good to have more detailed discussion in Activity 2.
- Setting dates to do things was better as felt actually possible, but had to go through rest to get there.
- Done it many times before.

How could it be improved?

- Very homogenous choice of "experts" - no race diversity in the room! Make clear from the start how the data is used so we are more specific in our recommendations - aware that we are the only "experts" in this exercise.
- Not use post-its but cards or "tiles" we could rearrange more easily.
- Best practice elsewhere beyond the UK.
- Presentations needed more time.
- Opening presentations could have been longer as each presenters seemed frustrated by short time allowed. This could have added an extra 1/2 an hour onto the meeting which would have been ok with me.
- Can't think of anything.
- Inputs from community workshops more transparent. More time (x2).
- Provide qualitative info about each policy, e.g. AQ impact, env impact, cost, public satisfaction, etc. so these could be factored into the scoring.
- Control of dominant voices.