

Local Voices, Cleaner Air:

How cities can harness the power of
communities to drive ambitious clean air action



 **Breathe
Cities**

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Breathe Cities



at a glance

Breathe Cities is a global initiative supporting cities to clean the air and enhance public health. Delivered by **Bloomberg Philanthropies, Clean Air Fund** and **C40 Cities**, the initiative offers cities tools to take ambitious clean air action by expanding access to data and raising public awareness.

Launched in 2023 by Michael R. Bloomberg, the UN Secretary-General's Special Envoy on Climate Ambition and Solutions and founder of Bloomberg Philanthropies, and Sadiq Khan, Mayor of London and C40 Cities Co-Chair, Breathe Cities is accelerating action in 14 cities to improve the air 77 million people breathe.

To learn more, visit **Breathe Cities' website** or follow us on **Instagram** and **LinkedIn**.

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Foreword



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Clean air action is about improving people's lives. It means reducing exposure to harmful pollution in homes, streets, schools, and workplaces, enabling safer ways to move through the city, and creating public spaces where people can spend time without risk to their health. To achieve this, cities need policies that respond to people's needs, constraints, choices, and everyday realities.

This is why community engagement matters. In practice, it is one of the ways cities can ensure that clean air action reflects how people actually live. It helps connect technical evidence to lived experience, strengthens trust between institutions and communities, and creates the conditions for lasting change.

Through Breathe Cities, we have seen how engagement can support more ambitious and effective action. Cities have worked with residents, young people, health workers, carers, community organisations, researchers, academic institutions, and other partners to better understand challenges, test solutions, and support implementation. In many cases, engagement has also helped make air quality more visible, relevant, and actionable in people's daily lives.

This matters because clean air action often asks people to change how they move, heat their homes, access services, use public space, or participate in the urban economy. These changes can bring major benefits, but only if they are understood, trusted, and designed with the people they affect. Engagement helps cities recognise these realities early and build policies that are not only technically sound, but also fair, practical, and lasting.

People are not only affected by air quality policies; their participation is essential to making policies and programmes work. Communities bring knowledge, perspectives, and capacities that can strengthen action at every stage, from shaping priorities to supporting delivery and sustaining momentum over time.

Meaningful engagement also depends on the wider ecosystem around communities. Community organisations, non-governmental organisations, academic institutions, youth and parent groups, local leaders, trusted intermediaries, and other actors all play important roles in building trust, reaching vulnerable groups, translating evidence into action, encouraging positive behavioural change, and sustaining engagement over time.

This resource shows how cities are applying different forms of engagement in practice. It highlights the importance of making engagement accessible, relevant, transparent, and lasting; how engagement can unlock innovation and build stronger ecosystems; why quality of engagement often matters more than scale; and how multi-stakeholder partnerships can strengthen implementation and long-term impact.



Executive summary

In cities around the world, ambitious air quality action is possible when it reflects how people live, work, and move.

Community engagement makes this happen by bringing residents into the policies and programmes that affect their lives. It helps cities design and implement them more effectively and sustain action over time.

Through grassroots and city-driven community engagement, Breathe Cities is supporting cities around the world to put communities at the heart of air quality action.

This resource builds on these efforts, drawing together existing resources and experience. It provides practical guidance for policymakers and other institutions supporting cities and governments, while responding to common challenges cities face when embedding community engagement in their work.

When done well, engagement results in policies and programmes that respond to people's needs. It gives communities the data and information they need to make informed choices and shape action, builds trust and buy-in, improves how problems are understood, captures what can be missed by technical data, and connects clean air action to wider issues and opportunities that matter for sustained change.

While engagement must be tailored to each context, cities do not need to start from scratch. They can build on tested approaches that already work.





This resource is organised around **three core steps**:

1 Define who to engage

Cities need to identify affected groups, people with relevant lived experience, and those who can help make clean air action work in practice. This means considering whose health, livelihoods, mobility, care responsibilities, or daily routines are most connected to the issue, while recognising barriers to participation such as time, access, cost, language, information gaps, distrust, or past exclusion. It also means engaging those who stand to benefit and could become champions for air quality action.

2 Determine an engagement approach

Cities can draw on five forms of engagement for air quality action: **share** information, **gather** input, **co-shape** solutions, **partner** to deliver action, and **enable** community-led change. Each can be meaningful when used for the right purpose and context. Cities may use one form or combine several over time depending on the issue being addressed, the stage of the policy process, and the role communities can realistically play.

3 Put engagement into practice

Effective engagement requires more than inviting people to participate. Cities need to be clear about what communities can influence, connect air quality to people's experiences and concerns, build trust between institutions and communities, and align engagement with decision-making cycles. They also need to use resources well, coordinate across government departments and institutions, maintain engagement over time, and measure what the process is achieving so future engagement can be strengthened.

The resource is grounded in **eight case studies** from Breathe-supported cities: Bangkok, Bogotá, Jakarta, Johannesburg, London, Mexico City, Rio de Janeiro, and Sofia. These examples show how different forms of engagement are applied in practice, from anchoring policies in local realities, to building support for citywide action. Reference materials, resources, and concrete examples are included throughout the document to support implementation in different contexts.

Four key lessons stand out for cities undertaking engagement:

To be meaningful, engagement must be accessible, relevant, transparent, and lasting.

Engagement should reach the people most affected, while being clear about its purpose and why it matters to people's lives. It should also create channels for feedback, follow-up, and continued participation.

Innovation can be unlocked through engagement and vice versa.

Meaningful community engagement helps unlock local knowledge, challenge assumptions, uncover new solutions and, as a result, design better, more innovative policies. Equally, using innovative engagement formats, such as art, music, public space activation, community monitoring, and online town halls can help reach new audiences. These formats make air quality concerns more tangible and strengthen recognition of the issue, improving engagement and longer-term support for implementation.

Quality of engagement matters more than scale.

A small, well-designed process can improve policy and implementation and strengthen decision-making when it is inclusive, linked to real choices, and followed by action. What matters most is whether the right people are involved in ways that can meaningfully shape outcomes.

Engagement is stronger when it brings different stakeholders together.

Community organisations, intermediaries, researchers, academic institutions, youth groups, and other local actors can help cities build trust, reach vulnerable groups, strengthen implementation, and sustain engagement over time. These partnerships create the wider ecosystem needed to turn participation into practical and lasting clean air action.



Introduction

How community engagement drives ambitious air quality action

Air quality shapes daily life in cities, but its impacts are not evenly felt. Those most exposed often have the least access to information, healthcare, and other basic services. The way air quality policies are designed matters, as they affect people differently depending on circumstances like their livelihoods, where they live, and the choices available to them.

Breathe Cities has identified opportunities for city leadership to drive air quality action that benefits all residents, by making sure that those typically left out of decision-making are included. To do this, meaningful community engagement is essential.

When done well, engagement:

- **gives people data and information**, building an understanding of how air pollution affects their daily lives and health in order to make informed choices, shape solutions, and drive action
- **builds trust**, ensuring decision-making reflects people's needs and is more likely to have sustained support
- **leads to more effective policies and buy-in**, improving how problems and solutions are understood and implemented, while identifying barriers early so they can be addressed
- **bridges the gap between data and reality**, capturing how exposure, behaviour, and risk are shaped by daily routines and local conditions that can be missed by technical data
- **expands impact beyond air quality**, linking it to wider issues such as mobility, livelihoods, and access to services
- **connects communities to wider opportunities for sustained change**, including services and good, green jobs

What does meaningful engagement look like?

Cities can assess whether engagement is meaningful in a given context by considering the following:



Is it accessible?

The right communities are reached, barriers to participation are addressed, and people can take part voluntarily, safely, and respectfully.



Is it relevant?

Air quality is connected to people's daily lives, participants have the information they need, and the process is linked to issues where their input can lead to meaningful action.



Is it transparent?

The purpose is clear, so participants understand why they are being engaged and how their involvement will inform a policy, project, decision, or action.



Is it lasting?

Follow-up channels are clear, participants understand how their input was used, and relationships or structures are in place to continue engagement beyond a single activity.





Define who to engage

Identify the community

A starting point will often be to **identify the community impacted by the issue or policy**. People are affected by air quality in different ways, so a ‘community’ can take different forms, including:

- **shared interest groups** (e.g. parents concerned about air quality around schools)
- **geographic groups** (e.g. residents in a neighbourhood or near a pollution source)
- **social or demographic groups** (e.g. commuters, carers, youth, elders)
- **organised groups** (e.g. associations, non-governmental organisations)
- **livelihood or sector groups** (e.g. drivers, waste workers, health professionals)

Ask yourself:

- Who is most affected by the issue or policy, and how?
- Who needs to change or adapt their daily behaviour for this policy to work?
- Who has knowledge or lived experience that could improve the policy?
- Who influences whether it will work in practice?
- Which groups are least visible or unlikely to be included?

Check who is missing

People can be excluded unintentionally. Barriers can have practical causes, but they often stem from deeper structural factors, including distrust in institutions, past experiences where participation did not lead to change, exclusion from formal networks, or a belief that participation will not influence the outcome.

While some barriers are more clearly practical, such as time constraints, others have more systemic causes. For example, financial barriers may arise from the income levels and economic circumstances of a particular community.

Addressing barriers is therefore not only about getting people into the room, but recognising why they have been absent in the first place.

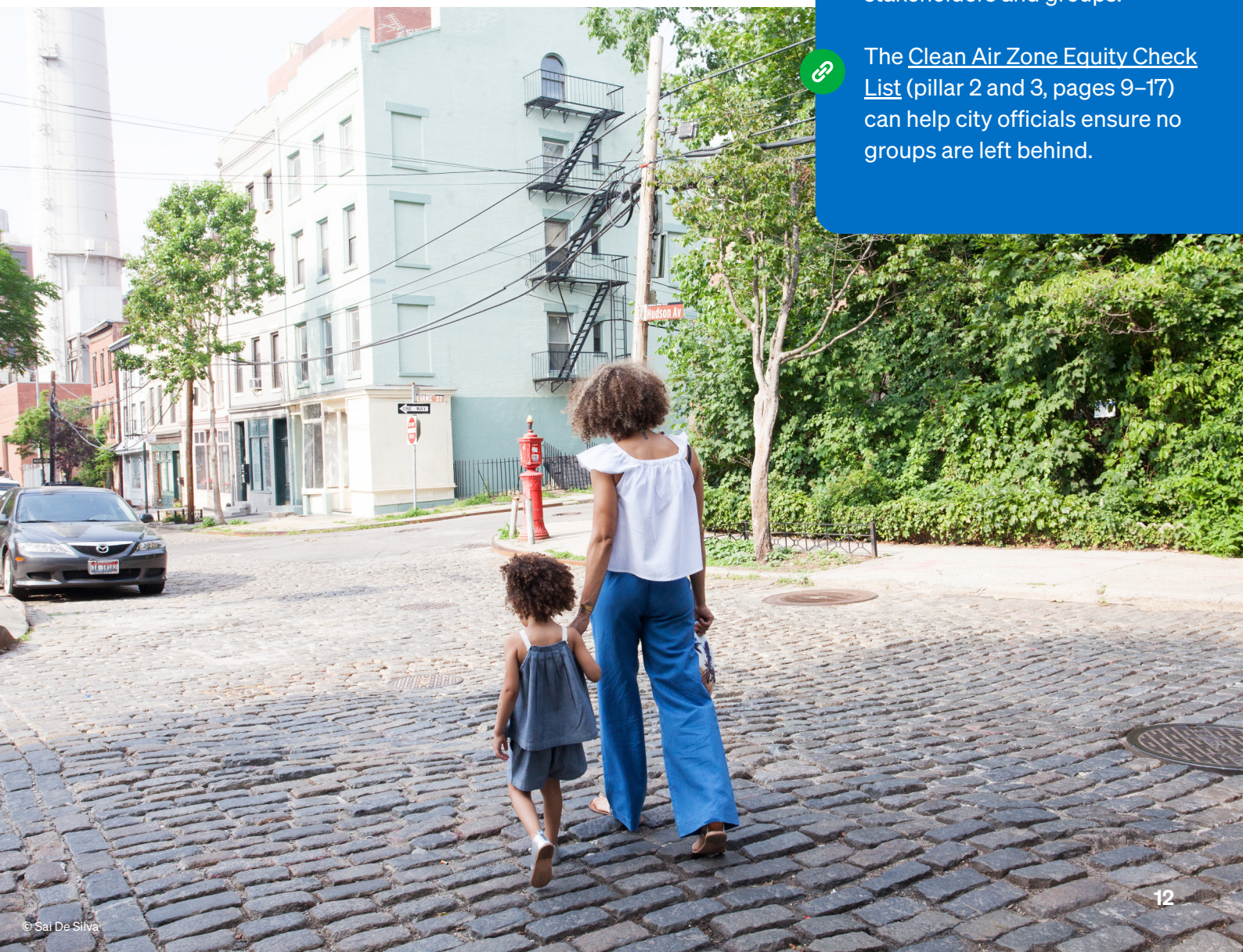
Additional resources to help identify communities and stakeholders:



The Mapping and Analysing chapter (section 3, page 35) of the [Inclusive Community Engagement Playbook](#) offers a range of tools to help cities identify and prioritise key stakeholders and groups.



The [Clean Air Zone Equity Check List](#) (pillar 2 and 3, pages 9–17) can help city officials ensure no groups are left behind.



Common **barriers** include:

- **time constraints** (e.g. meetings during working hours, long processes)
- **access challenges** (e.g. transport, distance, inaccessible venues)
- **care responsibilities** (e.g. childcare, caregiving duties)
- **language and literacy barriers** (e.g. limited comprehension, digital access)
- **financial barriers** (e.g. transport costs, lost income)
- **information gaps** (e.g. lack of awareness of opportunities)
- **incomplete stakeholder information** (e.g. outdated databases)
- **perceived lack of relevance** (e.g. competing priorities mean air quality is not seen as important)
- **poor fit between facilitator and community** (e.g. the person inviting participation is not trusted, relatable, or appropriate for the group)
- **participation fatigue** (e.g. people are repeatedly asked to join consultations and may lack the time, energy, or trust to participate again)

Ask yourself:



Who is missing from engagement processes? Why?



What barriers exist in the process? What barriers do you foresee being an issue?



What has worked and not worked in your previous engagement efforts?



What prevents some groups from participating?



Are current approaches unintentionally excluding people?



Typically affected communities to consider across air quality policy areas

Policy area		Community		Why it matters
Air quality monitoring (including low-cost sensors)	>	Residents in areas not covered by monitoring infrastructure, including historically underserved neighbourhoods, informal settlements, or areas near pollution sources (e.g. roads, industry, or waste sites). Schools, youth groups, and community organisations.	>	They may be exposed to pollution but have limited avenues to obtain better air quality data. When engaged, residents can also generate wider awareness within the community, collect information, and support collective action.
Clean air zones and transport planning	>	Daily commuters, last-mile delivery workers (often migrants), residents (including parents, children, youth), businesses in key areas, street vendors, carers, and disabled people.	>	People's livelihoods, access needs, and daily movement patterns may all be affected in different ways. Their feedback can help improve the policy, build support, and create local champions.
Energy and buildings (including cleaner alternatives for heating)	>	Low-income households, women, elderly, disabled people, carers, street vendors, public, and other transport operators (e.g. taxi and bus drivers), fuel suppliers, and retailers. People living near industrial sites, workers, local businesses, trade associations, and environmental and public health groups.	>	They may be most affected by changes in energy costs, access to fuel, and the practicalities of switching to cleaner alternatives. They are directly impacted by pollution hotspots, health concerns, operational realities, and may require practical ways to reduce emissions without creating unintended harms.
Waste	>	Waste workers, residents of informal settlements, and low-income households.	>	They may face the highest exposure to pollution, while having the least control over the waste systems, housing conditions, or services that drive waste burning.



Determine an engagement approach

This section helps cities shape their engagement approach. The first part outlines the forms of engagement to advance air quality action. The second part shows how to choose an approach based on the issue, gap, or challenge at hand.

Forms of engagement for air quality action

 The five practical forms of engagement for air quality action are:



Each form of engagement can be meaningful when it is used for the right purpose and aligned to the context.

They draw on established public participation knowledge and practice, including the International Association for Public Participation's Spectrum of Public Participation, while also building on the experience of cities supported by the Breathe Cities initiative.

Forms of engagement can be used at different points across policy stages depending on the issue, from early planning to implementation and evaluation. Many air quality initiatives require multiple forms of engagement at different stages.

For example, raising awareness may start early and continue during implementation to support behaviour change. Gathering input is often linked to design, but is also important later to identify barriers and adjust actions. Building trust and working with communities to shape solutions can happen at any stage, and often needs to continue as policies are refined and programmes are implemented in practice.





An overview of five forms of engagement for air quality action

Form		What it involves		Example
Share information	>	Make information on air quality (its impacts and actions people can take), clear and accessible, or provide mechanisms for accessing information.	>	Public awareness campaign
Gather input	>	Create adequate spaces to receive community feedback on air quality issues, policies, or interventions to inform decisions.	>	Survey
Co-shape solutions	>	Bring communities into the process to shape air quality actions, ensuring their input influences decisions and reflects local realities.	>	Workshop to co-design a policy
Partner to deliver action	>	Work in partnership with communities and stakeholders to co-design and deliver air quality actions, sharing responsibility, resources, and decision-making.	>	Ongoing working group
Enable community-led change	>	Support communities to lead air quality actions or decisions themselves, through data, funding, or enabling structures.	>	Community-led monitoring and action



Share information

- Cities share information about air quality: what it is, why it matters, and what people can do.
- This helps raise awareness, supports better decisions, and builds understanding of how air pollution affects daily life.
- It can also lay the foundation for other forms of engagement.



CASE STUDY

Rio de Janeiro: creative approaches to share information with communities

Rio used an immersive street festival in the city centre to showcase its proposed Low-Emission District, known locally as the DBE, which would pedestrianise local areas to clean the air and create greener, vibrant public spaces. The festival made the proposed changes more tangible by showing how daily life for people in the area could improve.

This case shows how creative public experiences can make technical air quality policies more relatable, helping build awareness, public support and momentum for implementation.



The community

Rio wanted to engage residents, workers, and visitors who use the city centre. Recognising the DBE's wider relevance, communications were therefore designed to reach a citywide audience.

The gap

There was a need to raise public awareness of what the DBE would deliver, how it would reduce air pollution, and how it could improve people's everyday experience in the area.

Form of engagement

Timed ahead of an important international climate event, Rio worked with Breathe Cities to host the **Festival Respira Rio** in November 2025.

Rather than relying on standalone messaging, the festival embedded information in a public experience, by:

- **temporarily closing a major street** in the downtown financial district and transforming it into a public space for cultural activities, cycling, health services, and around 60 local businesses
- **setting up temporary installations** and painted surfaces to show how future street designs could support walking, cycling, and gathering in an area usually dominated by traffic
- **using the event to promote its first online Municipal Air Quality Public Survey** through QR codes on banners; the survey gathers residents' perceptions of air quality issues and policies

Around 2,000 people attended, with coverage from major outlets such as TV Globo, helping reach a wider audience. The activity represented a significant step towards building support for the DBE and creating the foundation to implement the policy.



Typical methods to share information on air quality

Method		What it involves		Reference materials and applied examples
Open data and accessible information	>	Scientific and other robust information presented in user-friendly formats to make air quality data easier to understand and use.	>	• Breathe Cities report: Strength in Numbers: How Cities are Innovating through Data to Unlock Ambitious Clean Air Action • Breathe Accra air pollution by location • C40 Air Quality Data Explorer • Clean Air Fund Facts and Stats on Air Pollution • IQAir dashboard: World Air Quality • OpenAQ's Air Quality Index Hub
Public awareness and education	>	Efforts to build understanding of air quality issues among residents, including youth-focused approaches, often linked to health, environment, and behaviour change.	>	• BreatheLife: Stories and Updates • C40 guide: How to Use Campaigns and Marketing to Encourage Sustainable Transport Choices on Campaigns in Transport • C40 Youth Engagement Playbook for Cities • UNICEF guide: The Use of Innovative Tools and Approaches to Engage Children and Young People as Agents of Change on Air Pollution
Policy and programme communication	>	Clear, accessible information about new policies, measures, and what they mean in practice.	>	• Breathe Cities blog: If Cities Want Public Support for Clean Air, They Need to Change How They Talk About it • Clean Air Fund toolkit: Communicating the Health Impact of Air Pollution
Mainstream and digital media	>	Use of social media, apps, and news outlets to share real-time data, alerts, and practical guidance while amplifying air quality messaging.	>	• Breathe Accra/Infinity 970: social media content • C40 Air Quality Communications Toolkit • C40 report: Clean Air Wins, Lessons and Insights from a Campaign in London



Gather input

- Cities can seek input from communities to inform policies, projects, or actions on air quality.
- This can be done by inviting feedback through surveys, public meetings, workshops, or other consultation processes.
- It helps gather insights, test ideas, and understand how different groups may be affected.





CASE STUDY

Jakarta: gathering input to shape its Low-Emission Zone

Jakarta used a needs assessment process to gather input from residents, workers, and other affected groups to shape the design of an integrated Low-Emission Zone (LEZ), known locally as Kawasan Rendah Emisi Terpadu (KRE-T).

This case shows the importance of consulting affected groups before key decisions are finalised, so that livelihoods, daily movement patterns, and existing urban dynamics are placed at the centre of policy design.

The community

Engagement focused on groups most directly affected by how restrictions are designed and enforced, including residents, commuters, e-hailing drivers, delivery workers, street vendors, and others whose livelihoods depend on street-level activity.

The gap

Jakarta's earlier LEZ experience in the neighbourhood of Kota Tua showed that stronger community engagement was needed to support implementation in future zones. This meant understanding early on how restrictions could affect different communities and street activity, so the policy would be fairer and more practical to implement.

Form of engagement

With support from Breathe Cities, Jakarta worked with local partner Empatika to better include perspectives that had been largely absent. This was done through a needs assessment: a process to identify and understand affected groups, their needs, and potential support or policy responses. This included:

- **using a multi-criteria decision analysis tool to identify priority neighbourhoods** as part of the feasibility assessment; potential locations were scored against 20 site selection indicators, including one Air Quality Index indicator; this helped identify where environmental, mobility, and socio-economic factors overlapped, including dense commercial use, heavy foot traffic, strong public transport access, and concentrated vulnerability
- **gathering input from people in the two identified priority neighbourhoods**, Blok M and Dukuh Atas; engagement focused on groups most likely to be affected by access restrictions or street changes, including e-hailing and delivery drivers, street vendors, and informal workers; this helped collect first-hand insights, understand impacts, and test assumptions about how the integrated LEZ would affect different groups
- **consulting non-governmental organisations and academic actors** and building on existing platforms such as Large-Scale Social Collaboration (KSBB), a multi-stakeholder forum connecting government, businesses, and communities

Overall, the consultations showed how different groups use these spaces, the impacts restrictions may have, and what support may be needed. The findings are expected to inform key aspects of upcoming regulation, including public participation provisions and possible exemptions.

CASE STUDY

Mexico City: gathering input to improve electric taxi uptake

Mexico City engaged taxi drivers to understand how to increase uptake of electric taxi transition incentives through the Individual Public Transport Replacement Programme under [Plan ProAire](#). This helped refine the programme in order to better fit drivers' financial, administrative, and operational realities.

By engaging both early adopters and those still hesitant, this case shows the value of direct experience for identifying practical and operational barriers that, once removed, can improve implementation.



The community

The programme directly affects taxi drivers, whose costs, vehicle access, and daily operations shape whether the transition can succeed. Engagement focused on both drivers who had already electrified and those still considering it.

The gap

The programme aimed to accelerate electrification by replacing older vehicles with cleaner ones, and offering financial incentives. Low uptake in the early stages of the programme revealed a gap between policy design and drivers' everyday realities.

Form of engagement

In early 2026, Breathe Cities supported Mexico City to work with the Instituto del Sur Urbano and the International Council on Clean Transportation (SUR-ICCT) as technical partners to engage taxi drivers. The process gathered information directly from drivers through in-depth interviews, workshops, and discussions, focusing on:

- **perspectives of the electric taxi drivers and those considering the transition** including the benefits, challenges, and operational realities of participating in the programme
- **practical barriers** such as limited access to credit, lack of credit history, high upfront vehicle costs, and delays and administrative pressure due to lengthy approval processes that exceeded institutional capacity
- **operational concerns** including vehicle range, performance, downtime, and the reliability of charging infrastructure
- **inclusion, power dynamics, and a fairer transition** for all drivers, including women, older and LGBTQ+ workers

While it is still early to assess the full outcomes, the engagement process has already surfaced key issues that can inform the revision of the taxi renewal programme. A roadmap is now being developed to update it and define electrification targets, with further consultation planned so taxi drivers can review the document and provide feedback.



Typical methods to gather input on air quality

Method		What it involves		Reference materials and applied examples
Formal consultations	>	Processes to gather input on proposed policies (e.g. air quality plans, traffic restrictions), often through public hearings or written submissions.	>	• Je participe - Métropole du Grand Paris: public platform for the Paris LEZ in 2024 (in French) • Transport for London (TfL) consultation website
Surveys and questionnaires	>	Structured tools to collect data at scale on behaviours and perceptions (e.g. commuting patterns, views on air quality).	>	• Bogota's Household Travel Survey (in Spanish) • Johannesburg's polling report on defining a clean air zone • London Travel Demand Survey
Standalone workshops, meetings, and discussions	>	In-person or small-group engagement (e.g. community meetings, focus groups, targeted consultations) to explore experiences, concerns, and ideas in more depth.	>	• Austin's Climate Equity Plan • Johannesburg's engagement with the Alexandra community on air quality
Digital platforms and data sources	>	Use of apps or platforms (e.g. mobility or delivery services) to gather insights and inform policy.	>	• Green Delhi App to report pollution issues in New Delhi • Waze for Cities: Partnership with Bogotá



Co-shape solutions

- Cities can directly involve communities in shaping air quality policies and programmes together.
- This can happen through formats such as working groups or participatory design processes, where communities actively influence decisions rather than only providing feedback.
- This helps ensure solutions are relevant to local realities and that support for them can be sustained over time.





CASE STUDY

Bogotá: centring the role of carers in clean air policy

As part of the [Urban Zones for Better Air](#) programme, known locally as ZUMA, Bogotá declared Bosa Apogeo as the city's first local clean air zone under [Plan Aire 2030](#). With Breathe Cities supporting its implementation, Bogotá then engaged carers, a group that can be missing from air quality data collection, to understand how daily care-related walking trips shaped their actual exposure to air pollution.

This case illustrates the importance of taking seriously the experiences of groups often left out of air quality planning. It shows how understanding their daily routines and concerns can help identify exposure risks that standard data may miss. This supports more targeted interventions, such as safer and better-connected walking routes.

The community

The engagement focused on carers, primarily women, whose daily routines involve frequent short walking trips to schools, health centres, parks, and other neighbourhood spaces in Bosa Apogeo, a low-income area facing poor air quality.

The gap

In Bosa, care-related trips are often short, repeated, and made on foot, making pedestrian infrastructure central to carers' exposure to air pollution. However, conventional data and planning did not fully capture these routes or the conditions carers face, creating a gap between air quality data and lived experience.

Form of engagement

To address this gap, Bogotá adopted an air quality outreach and participation strategy through the [AVANTIA](#) project, led by Bogotá's District Secretariat of Environment with the Barcelona Institute for Global Health (ISGlobal). This took the form of focus groups with women who care for children, adolescents, older adults, and disabled people. This entailed:

- **recruiting participants** through intercept surveys and referrals
- **making practical arrangements to support participation** with sessions scheduled around participants' availability and children allowed to attend where needed
- **discussing daily routines, routes, and barriers** such as short repeated trips, unpaved roads, safety concerns, time pressures, care responsibilities, and local exposure concerns, such as a park perceived as highly polluted due to smoke and unpleasant smells
- **conducting route-based exposure monitoring** using carers' input to select care routes, and portable air quality sensors with GPS, to link pollution levels to specific places and times

The process helped validate carers' concerns and created a stronger foundation for implementing the clean air zone in a way that improves the routes, spaces, and conditions that shape their everyday experiences.

CASE STUDY

Bangkok: co-shaping local air quality solutions

Breathe Cities and Bangkok worked with communities in 15 districts to develop air quality proposals to Thailand's National Health Security Fund, which is managed locally by the Bangkok Metropolitan Health Security Fund.

Bangkok's approach shows how providing the necessary technical and administrative support as part of an engagement can turn local priorities into fundable proposals.



The community

The engagement focused on vulnerable and low-income communities in Bangkok districts with high exposure to PM2.5, including those dependent on city services, such as children, older people, pregnant women, and disabled people.

The gap

Bangkok has made significant progress on air pollution over the past decade, supported by a strong technical foundation for air quality management. However, the priorities of low-income communities needed to be better reflected in local interventions. While the fund had supported health projects, it had not yet been used specifically for air quality.

Form of engagement

The engagement combined community training, proposal development, and institutional support to help residents design clean air interventions that could access existing public funding. This was done through:

- **training and facilitation** with communities across 15 districts to build capacity to engage with air quality data, health risks, the Air Quality Health Index, and participatory budgeting processes by Urban Studies Lab (USI) (commissioned by Breathe Cities) and local Bangkok Metropolitan Authority (BMA) health volunteers
- **low-cost sensors** deployed in these communities to generate air quality data to inform the discussions
- **proposal development** where communities developed ten proposals, including clean-air community spaces and dust-free rooms, spaces designed to limit small particles of pollution
- **technical and administrative support from city departments** to review proposals, ensure compliance with funding requirements, and connect residents to district-level support

By building community capacity, the process created a pathway for residents to identify local air quality priorities, develop their own solutions, and explore funding mechanisms for community-led urban clean air initiatives. Early proposals that were not approved at the national level also generated important learning on the need for stronger coordination between local and national institutions, laying the groundwork for subsequent clean air projects to meet funding criteria.



Typical methods to co-shape solutions on air quality

Method		What it involves		Reference materials and applied examples
Co-design processes	>	Collaborative spaces (e.g. a workshop series) where communities and officials jointly identify problems and develop solutions, often at neighbourhood level.	>	• Nairobi's co-writing of its Air Quality Management Plan 2025–2029 (see section 3.2)
Neighbourhood-level engagement	>	Place-based processes to refine interventions with local input, often focused on specific sites or communities.	>	• Global Designing Cities Initiative Handbook: How to Engage Kids in Street Design
Pilots and iterative testing	>	Trial interventions that are adjusted based on ongoing community feedback and learning.	>	• New York Heat Clean Programme



Partner to deliver action

- Cities can collaborate with communities by building partnerships where responsibility, resources, and decision-making are shared.
- This means working together to design and deliver air quality solutions, often with community organisations or other stakeholders playing an active role.
- It helps bring together different skills and knowledge to address complex challenges.





CASE STUDY

Sofia: partnering with Roma communities to find indoor air quality and heating solutions

Using low-cost sensors and household engagement, Sofia partnered with Roma communities in Fakulteta to understand indoor air pollution and heating practices, build trust, and identify practical clean-heating solutions. This supported efforts towards a Low-Emission Zone aimed at phasing out coal and wood by 2029.

This case shows how working through trusted intermediaries and combining technical evidence with community knowledge can shift clean-heating policy beyond fuel switching. Doing so opens broader discussions on affordability, housing quality, infrastructure reliability, services, eligibility for support, and the trust needed for implementation.

The community

Roma communities in Bulgaria are diverse, with related but distinct cultural and social characteristics, as recognised in the [national Roma inclusion strategy](#). In Fakulteta, an informal neighbourhood, poverty, stigma, and insecure housing increase residents' exposure to household heating pollution, especially in winter.

The gap

There was limited data on Roma communities' indoor and outdoor air pollution exposure, and limited understanding of household heating practices. Assumptions about fuel use, combined with low trust between communities and government, made meaningful engagement in policy discussions more difficult.

Form of engagement

With the support of Breathe Cities, a pilot was developed with a trusted intermediary, Trust for Social Achievement (TSA), which led a process that drew on its established relationships in Fakulteta, including:

- **using household-level evidence** such as the installation of low-cost sensors in 22 homes and public buildings; this data was shared through household visits and workshops, rather than publicly, helping residents understand conditions while reducing the risk of reinforcing stigma
- **shifting the focus from assumptions to practical solutions** linking air quality data to everyday concerns such as health and energy costs; the pilot found that many households already used electricity rather than coal; this shifted the focus from fuel switching to energy efficiency measures such as sealing gaps, improving air-conditioner installation, and adjusting usage practices
- **expanding engagement over time** as trust and evidence grew; technical experts and city officials became more involved, while community members contributed construction skills to support improvements

Ten households adopted cleaner heating appliances and there are efforts underway to explore pilots on electricity infrastructure, waste collection, and heating systems. Engagement continues through clean heating workshops, efforts to refine eligibility for clean-heating schemes, and a citizen monitoring mechanism called Waste Watchers.

CASE STUDY

Johannesburg: partnering with youth for clean air action

Johannesburg engaged young people through an air quality campaign, combining training, youth-led activities, and formal links to city policy processes to build awareness and create clearer pathways for youth participation in air quality action.

This case shows how working with trusted partners and intermediaries can move engagement from awareness-raising to youth-led action, while creating stronger links between young people's priorities and city air quality policy.



The community

Young people in Johannesburg are directly affected by environmental conditions. However, an official [perception survey](#) done in partnership with Breathe Cities found that young respondents were generally less concerned about air quality than other groups, highlighting the need for targeted engagement with youth aged 13–25.

The gap

Air quality was not yet a clear priority for many young people, and there was an opportunity to create more relevant and meaningful pathways for them to contribute to air quality action and policy discussions.

Form of engagement

To address this, Breathe Cities, the South African Institute of International Affairs Youth Programmes (Youth@SAIIA), and Johannesburg partnered to deliver an air quality campaign called [AirAware](#). Between December 2024 and February 2026, a total of 1,100 young people participated, including high school learners and young professionals. The campaign included:

- **training, workshops, and hands-on activities** to build understanding of air quality and its links to daily life
- **selection of eight Youth Air Champions** who received additional training and joined site visits on industrial pollution, energy, and health impacts
- **development of youth-led campaigns** on waste, industrial emissions, smoking in schools, and health, which extended the campaign's reach through their own networks
- **development of a final [Youth Air Quality Statement](#)**, which was handed to the mayor's office, setting out youth priorities on health, green jobs, waste, mobility, and inclusion in air quality decision-making

The Youth Air Quality Statement calls for stronger monitoring and enforcement, clearer communication, cleaner transport and energy, better waste management, green jobs, and continued youth participation. Johannesburg committed to using these outcomes to inform policy, including plans for a clean air zone and wider planning through its Integrated Development Plan.



Typical methods to partner to deliver action

Method		What it involves		Reference materials and applied examples
Ongoing partnerships with key stakeholders	>	Collaboration with businesses, platforms, or institutions to test solutions and improve operations.	>	• Medellín's Air Quality Platform (in Spanish)
Action co-designed or co-delivered with a given community	>	Actions co-designed and delivered with communities to improve local conditions, including awareness campaigns and neighbourhood interventions.	>	• London Future Neighbourhoods • Mendoza Urban Lab
Advisory and governance structures	>	Formal mechanisms where communities contribute to decision-making and oversight of air quality policies.	>	• San Francisco Bay Area Air Quality Advisory Council
Citizen assemblies	>	Structured deliberative processes between a randomly selected and demographically representative group and policymakers, including expert input and professional facilitation.	>	• Miskolc Citizen Assembly for Air Quality Action • Wandsworth Citizen Assembly on Air Quality, London



Enable community-led change

- Cities can support communities to take a leading role in air quality decisions or actions.
- This means communities have influence and can lead initiatives themselves, with the city providing support where needed.
- It helps build local ownership and sustain action in the long term.





CASE STUDY

London: combining forms of engagement over time

London engaged residents and community groups to support the development and expansion of its Ultra Low Emission Zone (ULEZ), matching different forms of participation to each policy stage.

London's approach shows how engagement can evolve over time, from broad awareness-raising and formal consultation to targeted local participation, including support for communities to use air quality data and dedicated funding to sustain engagement.

The community

Engagement was citywide, reaching diverse communities with different levels of air pollution exposure, including multilingual groups and those less able to engage with technical policy discussions.

The gap

Many residents did not fully understand air pollution or what policies like ULEZ would mean for their daily lives and neighbourhoods. There was also a need to sustain engagement over time, particularly in disadvantaged and climate-vulnerable areas, and re-engage communities involved in earlier low-emission zone processes.

Form of engagement

London combined engagement approaches, such as formal consultation processes required by law and additional interventions to strengthen advocacy capacity within communities, including:

- **sharing clear, accessible information** translated into 17 languages, to build broad public awareness
- **gathering input** using large-scale public consultations to identify concerns, test assumptions, and improve policy design
- **co-shaping solutions** through structured engagements like [Talk London](#) around local conditions and constraints
- **partnering to deliver action** with communities, co-designing neighbourhood-level interventions through programmes such as [Future Neighbourhoods](#)
- **enabling community-led change** through [dedicated funding](#) of £7.7 million (approximately US\$10.3 million) and technical support to help communities use data to define priorities

Enabling community-led change

More generally, London is a great example where bold leadership, in collaboration with Breathe Cities, enabled community-led change. As part of the first phase of Breathe London, launched in 2021, the [Breathe London Communities programme](#) provided low-cost sensors to 60 community groups across 24 boroughs, cultivating a network of Londoners sharing and working with air pollution data to improve the environment in their communities. Community groups have used Breathe London data in their efforts to ensure cleaner air near schools, green spaces, and other areas of communal importance. Data from 30 Breathe London sensors installed at 18 primary schools showed that closing roads around schools to traffic at pick-up and drop-off times reduced harmful nitrogen dioxide levels by up to 23%. The programme is an example of how sensors can empower residents to identify sources of pollution and make changes in their local communities.





Typical methods to enable community-led change on air quality

Method		What it involves		Reference materials and applied examples
Community-led monitoring and knowledge generation	>	Initiatives where communities collect and use air quality data or information, often supported with tools and training.	>	• Breathe Cities report: Strength in Numbers: How Cities are Innovating through Data to Unlock Ambitious Clean Air Action • Breathe London platform • Clean Air Fund blog: From Data to Participation: Lessons from Community-led Air Monitoring • Purple Air: Air Quality Sensors World Map • Smart Citizen: open source environmental monitoring tools
Participatory innovation	>	Locally driven initiatives or events that test solutions and raise awareness in a way that can be taken forward by affected communities.	>	• Phoenix Hackathon on air quality • Toronto environmental grants
Participatory funding and budgeting	>	Processes where communities decide how resources are allocated for air quality or environmental improvements.	>	• Madrid's Decide Madrid: citywide participatory budgeting platform (in Spanish) • Porto Alegre: citywide participatory budgeting (in Portuguese)
Community decision-making and governance	>	Formal or informal mechanisms where communities lead or directly shape policies and decisions.	>	• Accra's partnership with informal waste workers

Choose the form of engagement

In practice, engagement doesn't always follow a fixed path. Cities often start with one approach and adjust it over time as new challenges, opportunities, or stakeholders emerge. They may also use multiple approaches in parallel to engage different stakeholder groups.

To choose an approach or combination of approaches, start by assessing the rationale for engagement.

What are the key issues, gaps, or challenges you are trying to resolve?		What form(s) of engagement will help address these?
Important technical data on the state of air quality is released, but is difficult to understand.	>	<u>Share information</u> in a way that speaks to the target population so they understand air quality issues and what actions or policies mean for them.
A new policy on electrification has little uptake from drivers.	>	<u>Gather input</u> to better understand barriers to uptake, and how to address them.
A planned air quality intervention (e.g. a low-emission zone or street redesign) does not reflect how people actually move through the area.	>	<u>Co-shape solutions</u> to ensure policies and programmes reflect local realities and needs, strengthening relevance and buy-in.
Efforts to reduce local pollution require air quality data and community action, but data collection is limited, engagement is fragmented, and trust is low.	>	<u>Partner with communities</u> to collect data and deliver more effective and shared solutions through collaborative efforts.
Communities are already taking action on local air pollution, but lack the resources or support to scale their efforts.	>	<u>Enable community-led change</u> to strengthen ownership of outcomes and sustainability.





Put engagement into practice

Drawing on the experience of cities supported by Breathe Cities, this section highlights practical ways to ensure effective engagement in air quality action.

Clarify the influence a community will have

Engagement works best when people feel heard and see that their input shapes decisions. This requires being clear from the outset about what communities can and cannot influence, how decisions are made, and how regulations or technical limits shape outcomes.

It also means showing how a community's direct experience is translated into analysis, recommendations, and policy or governance changes. This helps manage expectations, validate people's contributions, and ensure engagement leads to real changes in policy and practice.

Ask yourself:

- What can communities influence, and what is outside their control?
- How do regulations, technical limits, and governance arrangements shape decisions?
- How will community input be used, and how are decisions made?
- Which parts of the policy are open to input, and which are fixed?

Connect air quality to people's experiences and concerns

Air quality can feel abstract or technical. Engagement works best when it is linked to people's everyday lives, by connecting it to issues people care about, such as health impacts (e.g. respiratory illness, long-term exposure), economic concerns (e.g. transport costs, livelihoods), and household realities (e.g. fuel use, energy access, time people spend commuting).

Ask yourself:

- 🔗 What issues matter most to the communities you are engaging with?
- 🔗 Which of these issues has the most relevant link to air quality?
- 🔗 How does air quality affect their daily lives, work, or health?
- 🔗 What examples or language will make the issue more relatable?
- 🔗 How can you link technical data to the community's own experience?



Build trust between institutions and communities

Trust between institutions and communities is critical for effective engagement on air quality. Often, city-led and grassroots-led air quality efforts happen separately. When trust is weak, cities and communities miss opportunities to build on each other's strengths, work together, and increase their overall impact.

People may question data or worry about how policies will affect their lives, and where trust is low, they may disengage altogether. They may also have supported earlier policies, but if these are not delivered or engagement is not sustained, frustration, tension, and reduced trust can emerge.

Understanding the reasons for this, such as past experiences or unmet expectations, is an important starting point. Building trust takes consistent effort over time.

Ask yourself:

-  What is the current level of trust towards city government or institutions, and why?
-  What are the main sources of distrust, if any?
-  Who do communities already trust, and how can they be involved?
-  Are you embedding signals of trust throughout the process (e.g. inviting communities in a way that feels intentional, respectful, and genuinely values their presence and contribution)?
-  How will you maintain continuity in engagement?
-  How will you show that the process values the community?

Align engagement with decision-making cycles

Engagement strategies are shaped by time, capacity, and institutional realities and cities may be working within planning cycles that are shorter than the long-term change needed for air quality action.

Engagement is most effective when it is aligned with key decision points where there is still room to influence outcomes and when longer processes are broken into phases with clear opportunities to participate.

Ask yourself:

- 1 When are the key decision points in the policy process?
- 2 At which stages is there still room for community input to shape outcomes?
- 3 How can engagement be phased over time to match the process?
- 4 What early, visible actions can show progress while building longer-term engagement?



Maximise resources

Designing an engagement approach requires understanding the resources that can support the process.

Where resources are available, careful thought should be given to the financial support required to enable participation. This may include covering transport, childcare, data costs, or, in some contexts, compensating people for their time and expertise, acknowledging the value of these. This compensation is sometimes a request from participating groups (e.g. youth groups or civil society organisations).

Where compensation is provided, it should be handled transparently, with clear criteria and safeguards to ensure it supports participation without influencing what people say. Payment may not always be appropriate or feasible, and can raise challenges around resources, expectations, or perceived conflicts of interest.

Engagement also does not always require new resources, it can often be strengthened by making better use of what already exists. This includes working through trusted local partners, building on existing platforms or initiatives, and drawing on available data and past engagements to focus efforts where they are most needed.

Resource planning should consider not only the budget required to run engagement activities, but also how existing community assets, intermediaries, local data, public facilities, city programmes, and external funding opportunities can be leveraged.

Ask yourself:

- 1 What budget, time, and capacity are available, and where should they be prioritised?
- 2 Which organisations or intermediaries already have strong relationships with communities?
- 3 What existing platforms, programmes, or communication channels can be used?
- 4 What knowledge, data, or past engagement can inform this approach?

Build alignment across government

Air quality cuts across sectors such as transport, health, planning, and environment, and often spans different levels of government.

Engagement is more effective when there is strong internal alignment. This means involving the right actors and creating a shared understanding of roles, responsibilities, and decision-making processes.

Ask yourself:

- Which departments and actors need to be involved, and at what stage?
- How aligned are priorities and messages across institutions?
- What mechanisms exist (or are needed) to coordinate across teams and sectors?
- How will roles, responsibilities, and decisions be communicated clearly?



Maintain engagement over time

Participation often declines after the planning phase, particularly during implementation. Sustaining engagement requires ongoing effort from cities and communities, recognising that residents and community partners are also investing time, knowledge, and expertise over the longer term.

City efforts include creating regular opportunities for dialogue and building on existing relationships and networks. They also support communities to engage more actively in decision-making processes and take on leadership roles.

Where possible, engagement should be built into formal planning, regulatory, or budgeting processes so it becomes part of clean air action, rather than a one-off consultation. Cities should also look for ways to connect engagement with wider efforts by coordinating with relevant sectors such as mobility, health, housing, and social services.

Ask yourself:

- 1 How will you keep communities engaged beyond the initial stages?
- 2 What role can communities play in ensuring the long-term success and sustainability of the policy or programme?
- 3 Are you working with appropriate facilitators who can build trust and sustain long-term commitment?
- 4 What moments in the process are important for re-engagement?
- 5 Which partners or networks can help maintain relationships over time?
- 6 How will you keep channels open for ongoing dialogue and feedback?

Measure the outcomes of engagement

Engagement is an iterative process that requires intentional moments for evaluation and learning. Cities should build in ways to track whether engagement is achieving its intended outcomes. This means assessing what was delivered and who was reached, as well as the extent to which barriers to participation were reduced, useful input was generated, decisions were influenced, tangible change occurred, and relationships were strengthened.

Measurement should be planned at different stages of the process. This allows cities to use findings to update tools, adjust methods, improve facilitation, allocate resources, and maintain relationships with communities and partners over time. It also helps ensure that lessons from one engagement process inform future policies and programmes.

Ask yourself:

-  Do you have an existing evaluation framework that can be used or adapted, or do you need to develop a new one?
-  At which points in the process will you monitor and evaluate engagement?
-  What information will you track to assess whether engagement is reaching its intended outcomes?
-  How will the team use the measurement tools consistently and update methods based on what is learned?
-  What resources are needed to carry out measurement and evaluation, and how will findings improve this and future engagement processes?



Conclusion

Ambitious climate and clean air action is under pressure from limited resources, competing priorities, and public pushback. In this context, meaningful engagement is critical for building the support needed to sustain and accelerate action.

- 1 Clean air action is most effective when it is **rooted in, and shaped with, the communities** it is intended to benefit. In doing so, policies and programmes become more relevant, fair, and effective.
- 2 There is no single model for engagement. Cities can **share** information, **gather** input, **co-shape** solutions, **partner** with communities to deliver action, or **enable** community-led change.
- 3 What matters most is that **engagement is accessible, relevant, transparent, and sustained** over time.
- 4 Effective **engagement is the result of collaborative work**. Communities, city governments, civil society organisations, researchers, and many others all have roles to play in turning participation into action.
- 5 Cities have the **opportunity to create an ecosystem** of actors that leverages diverse knowledge, builds trust, and shares ownership for urgent, long-term change.
- 6 To support these efforts, this resource offers practical approaches, city examples, and further resources that can strengthen community engagement in different contexts. The resource is a **starting point for deeper learning, collaboration, and shared action**.
- 7 Good engagement and shared commitment deliver supported and lasting change. This resource operationalises this understanding to inspire actors across the Breathe Cities initiative and beyond, **catalysing action that cleans the air we all breathe**.





Glossary

Air pollution: any single pollutant, or combination of the most common air pollutants that harm health. These include particulate matter (mainly PM10 and PM2.5), nitrogen oxides (NOx), carbon monoxide (CO), ozone (O3), and sulphur dioxide (SO2). Not all pollutants come from the same sources, but all are harmful to health, with impacts shaped by short- and long-term exposure.¹

Air quality management plan: air quality management plans (AQMPs) typically include a series of measures designed to manage and reduce air pollutants. These measures are based on an assessment of air quality and forecasts of future trends.

Citizen science: scientific work carried out by members of the public and non-scientific professionals, frequently used as a public participation tool. Residents get involved through data collection, monitoring, and analysis.²

Clean air zones: specific areas of a city in which measures have been introduced to reduce toxic air pollution, promote a transition to cleaner energy uses, prioritise people over cars, and promote a shift to active travel, including walking, cycling, and public transport. Rather than a single policy or action, clean air zones should be seen as a suite of measures that can be gradually implemented to transform the way residents and visitors experience and get around the city.

Climate action: efforts (policies, programmes, measures) to reduce greenhouse gas emissions (mitigation) and strengthen resilience and adaptive capacity to climate-induced impacts (adaptation).

Community: a group that is bound together by a common interest, characteristic, and/or place.

Energy transition: the shift away from fossil fuels to cleaner energy sources such as sunlight, wind, and other renewable sources.

¹ World Health Organization. Air quality, energy and health. Available at: <https://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants>

² Environment and Heritage, Government of New South Wales (2024). 'What is citizen science?'. Available at: <https://www.environment.nsw.gov.au/research-and-publications/your-research/citizen-science/about-citizen-science>

Inclusion/inclusivity: the practice of including relevant stakeholders and communities, particularly marginalised groups, in the policy-making and urban governance process, in order to ensure a fair policy process with equitable outcomes despite their different needs. An inclusive policy goes beyond consulting the impacted stakeholders. It ensures that everyone's voice is represented in decision-making, especially those suffering from inequalities, and that policies are designed and evaluated on the basis of their direct impacts and the distribution across the population.

Lived experience: direct or first-hand experience that provides real-world insight and perspectives on an issue or context.

Low-emission zone (LEZ): a designated area in a city where high-emitting vehicles are not allowed to circulate in order to improve air quality by reducing pollutants such as NO_x and PM. These areas are closely related to ultra-low-emission zones (ULEZ) which imply even more stringent emission standards.

Low-cost sensor (LCS): a lower-cost air quality monitoring device that can range from a simple single-pollutant sensor to a multi-pollutant device that includes communications and meteorological monitoring capabilities. While they range in price, they tend to be lower cost than equipment that collects data at a quality that is certified for use in assessing regulatory compliance. LCS have great potential for real-time air quality monitoring in dense networks, and are in an early stage of development with rapid changes in technologies and providers.

Monitoring: an important part of air quality management is establishing, maintaining, and increasing reliable citywide air quality monitoring, and making data publicly available in an accessible format, in a timely manner or as close to real-time as possible.

Open data: data that anyone can access, use, reuse, and share freely, with no restrictions.³

Participatory budgeting: a democratic process in which community members decide how to spend part of a public budget. It deepens democracy, builds stronger communities, and creates a more equitable distribution of public resources.⁴

Stakeholder: a person or group that has a vested interest and knowledge in specific processes and/or policies, whose outcomes they are able to influence or are affected by.⁵

³ UNESCO. (n.d). 'What is Open Data?' Available at: <https://www.unesco.org/en/query-list/o/open-data>

⁴ Participatory Budgeting Project. (n.d). 'What is Participatory Budgeting?'. Available at: <https://www.participatorybudgeting.org/about-pb/#what-is-pb>

⁵ Adapted from Stakeholder Participation, FAO, n.d. Available at: <https://www.fao.org/4/v7890e/v7890E09.htm#Who%20are%20stakeholders>

Additional resources



These resources support the approaches outlined in this document. They bring together practical guides, tools, and examples that can be adapted to different contexts.

Community air quality monitoring

Resources to support cities and communities in designing, deploying, and using air quality monitoring systems, including low-cost sensors:

- **AFRI-SET** - [Monitoring capacity support](#): supports the development of air quality monitoring systems and technical capacity across West Africa.
- **EDF** - [Breathe London Blueprint: use of sensors](#): a practical example of deploying sensor networks at scale to generate hyper-local data and inform policy and public engagement.
- **JustAir** - [Real-time air quality monitoring guide](#): a resource on how community-led monitoring can support advocacy, awareness, and equitable interventions.
- **United States Environmental Protection Agency** - [Air Sensor Toolbox](#): practical guidance on selecting, using, and interpreting data from low-cost air sensors.

Digital engagement

Resources to broaden participation, gather input at scale, and support more transparent, data-informed engagement processes:

- **Decidim** - [Digital participation and debates](#): an open-source platform (used in Barcelona) that enables online consultations, debates, and participatory processes at scale.
- **Stockholm Environment Institute** - [MapStakes](#): a tool for mapping, involving, and tracking stakeholders throughout co-creation processes, helping structure engagement over time.
- **Participedia** - [Participation case database](#): an open platform documenting real-world case studies in different contexts.

Designing air quality policies for everyone

Resources to help involve the people most affected by air pollution at different stages of policy design and implementation, ensuring no community is overlooked:

- **C40 Cities** - [Inclusive Climate Action Implementation Guide](#): practical guidance to help cities design and implement climate action that is inclusive, equitable, and responsive to the needs of different communities.
- **C40 Cities** - [Inclusive Engagement Playbook](#): a detailed practitioners' guide on everything cities need to know about how to deliver inclusive community engagement.
- **C40 Cities** - [Vulnerability and mapping guidelines](#): a framework to assess vulnerability of an urban area, and prioritise buildings and social groups in retrofitting programmes.

Engagement by group or sector

Resources to support engagement with specific groups or policy areas, including young people:

- **C40 Cities** - [Clean Air Zone Toolbox](#): provides specific guidance to implement equitable clean air zones with broad public and political support.
- **American Public Health Association** - [Climate and Health Youth Education Toolkit](#): provides knowledge on climate and health, including air quality, to support awareness and action.
- **Global Action Plan** - [Clean Air for Schools](#): offers practical resources and campaigns to help schools and students understand and take action on air pollution.
- **Global Designing Cities Initiative** - [Removing Pollution from Play](#): focuses on reducing children's exposure to air pollution in public spaces, combining urban design interventions with youth engagement.
- **UNICEF** - [Air Pollution and Children Resources](#): provides youth-friendly materials and campaigns focused on how air pollution affects children, supporting awareness and advocacy.

