



C40 Zero Emission Area workshop and peer exchange

The C40 Zero Emission Area workshop and peer exchange brought together Latin American signatory and potential signatory cities to support the delivery of commitments made in the Fossil Fuel Free Streets Declaration.

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The importance of green and healthy streets

One third of greenhouse gas emissions from C40 cities come from transport and traffic is the biggest source of air pollution, globally responsible for up to one quarter of particulate matter in the air. As cities continue to grow, they are becoming more congested, with people spending more time in traffic.

To date, 28 of the world’s leading cities have decided to change course and have endorsed the creation of more green and healthy streets (G&HS). This shift is creating streets that are made for people. They are safer and prioritize access for and the experience of pedestrians, cyclists and public transit users. They are pushing the envelope to decarbonize public transit. By limiting personal vehicle usage, ushering the transition to zero-emission vehicles and public transit fleets and investing in infrastructure for people over cars, these cities are stepping up to address the climate crisis and build better cities.

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The declaration specifies city commitments to procure, with partners, only zero emission buses from 2025; and ensure a major area of the city is zero emissions by 2030.

This workshop was convened as part of the partnership between C40 and TUMI. TUMI - the Transformative Urban Mobility Initiative - is the leading global initiative on sustainable mobility implementation that is formed through the union of 11 prestigious partners. TUMI supports mobility projects globally and supports city-level policy-makers with the tools to enable them to make decisions that positively transform mobility in their cities. In order to leverage the peer-to-peer regional experiences in the region, the GPSC join efforts with the C40-TUMI partnership to initially bring GPSC Latin American cities such as Brasilia, Lima and Asunción. The final list of participants represented the cities of Lima, Medellín, Mexico City, Quito, Santiago and Rio de Janeiro and shared experiences with a primary focus on how to take forward plans for establishing zero-emission areas.

Workshop objectives:

- Discuss challenges and strategies for overcoming barriers in the creation of zero emission areas.
- Identify city needs and resources for implementing.
- Learn new approaches and good practices.
- Create a detailed plan for the actions needed to implement a zero-emission area.

Workshop attendees

The table below details the participants from GPSC cities.

GPSC Cities	# of Attendees
Lima, Peru	2

Other Cities	
Mexico City, Mexico	1
Medellin, Colombia	7
Quito, Ecuador	2
Santiago, Chile	1
Rio de Janeiro, Brazil	2
Total	15

Workshop themes

How to define a zero-emission area

Many considerations must go into defining, locating and implementing a zero-emission zone and those considerations must be evaluated given local context. Cities attending the workshop discussed what constitutes a zero-emission area and each presented their own thinking for an area in their city. The following sections highlight key thematic discussions and recommendations based on presentations and city dialogue.

Finding the right scale and integrating with transit

The scale of the zero-emission area was debated with a discussion about a smaller, more restrictive area and a broader area approach with a bigger reach. Many cities highlighted that having a smaller zero emission area is not necessarily easier than a broader area because even small areas need to be connected to the broader city transport network planning. Several cities emphasized the importance of achieving transit integration of multiple modes of transport (bikes, buses, etc.) and providers.

Taking a phased implementation approach to meet targets by 2030

Several cities felt that the restrictions within the area should be strengthened over time towards the goal of 2030. A phased approach was particularly important since natural gas-powered vehicles would not be appropriate for a zero emission (fossil fuel free) area and considering the electric vehicle (EV) market is still developing in 2019.

Cities agreed a phased implementation approach towards 2030 was also important to ensure that proposals do not increase social disparities and inequalities. Additionally, the design should include

consideration for disabled access and alternatives for those who rely on their car to travel for example, from outside the city boundary.

Considering scenario implications and lifecycle emissions

Issues such as cradle-to-grave emissions were touched upon, in particular EV battery disposal. Although the Green and Healthy Streets approach focuses on only tailpipe emissions, it is important to keep lifecycle emissions in mind with design and decision-making.

Establishing an enabling environments and appropriate policies

Different approaches between an outright ban on fossil fuel vehicles versus charging non-compliance vehicles as a soft disincentive were highlighted by the presentation on the operation of London's Ultra Low Emission Zone (ULEZ). Cities discussed the need for legislation to be in place in Latin America for an emissions-based ban or emissions-based charge and compared the progress in different countries.

Engaging the right stakeholders, establishing good communications and building public buy-in

For cities adopting a phased approach or proposing interventions which require behavior change, there would be need both for a strong public communication plan with a clear end goal of zero emissions and a clear narrative of the potential benefits of the intervention to public health, overall mobility and to the local economy. This is to minimize future public opposition and promote community buy-in to a new zero emission mobility vision, especially as the zero emissions areas are intended to expand over time.

Cities highlighted that community acceptance was essential to the success of this intervention and several stakeholders were particularly highlighted including commercial retailers and landowners, drivers, freight operators, private bus operators.

In addition to citizen stakeholders, cities noted that inter-governmental engagement would be essential and particularly highlighted the national vehicle and the transit operators. Where cities lacked the total capacity to control access to an area or influence vehicle purchase, engagement and collaboration was extremely important.

Finding a political champion and empowering citizens

Finally, cities highlighted the significance of political will to ensure the success of implementing zero emission areas. Related to this was empowering citizens who are supportive of the intervention to maintain the impetus of the political support.

Managing freight and fleet commercial vehicles

Restricting vehicular traffic or only allowing access to zero-emission vehicles to reduce emissions and create safe, human-oriented streets in ZEAs can create logistical challenges for freight, delivery, construction and service vehicles. A key issue raised by signatory cities in Latin America was how to ensure continued access to zero emission areas by freight and logistics fleets to service a mix of land use activities.

The following key challenges were raised through the discussion:

City Powers

City powers negotiating, influencing and regulating freight delivery patterns.

Multiple operators

How to engage with and find solutions for multiple and different logistics chains?

Strategies to reorganize logistics for construction goods and freight to reduce overall vehicle miles travelled in the city.

Technology (High Gear Vehicles)

Lack of current technology options for zero emissions heavy vehicles.

How to increase the availability of zero emission freight vehicles? What are the ways of helping to drive down the price premium?

Small operators

How to take into consideration fleet problems of small logistics companies?

The complexities of agents and small business operations.

Initiatives to help upgrade to clean individual cargo vehicles (including initiatives other than funding from government).

Consumer and behavior change

How to influence behavior change in consumers?

How do you create a clear pathway for everyone to work toward?

Stakeholder engagement

As a regional workshop, the group identified a number of areas for Latin American city signatories to potentially come together and drive forward the Green and Healthy Streets agenda (G&HS) through stakeholder engagement, collective action and influence.

Stakeholders

- Develop a coherent narrative around G&HS and how to engage with stakeholders
- Bring in best practices to demonstrate how this can work
- Increase G&HS cities collaboration
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Key stakeholders identified for detailed engagement strategies were commercial retailers in the ZEAs, drivers. Other key stakeholders were those within government and many cities highlighted that inter-institutional coordination was a challenge.

Communications

- Create an infographic and video that demonstrates the concept of a zero emissions area (ZEA).
- Need a public campaign to build buy in as there are so many competing priorities in a city, need to emphasize that everything is related.

Tools

- Frameworks for building a successful ZEA and metrics to measure outcomes.
- State updates on ZEA implementation.

Zero Emission Area terminology

- The workshop provided the ideal opportunity to clarify and agree on the terminology of the G&HS commitment through a technical concept note.

Closing

The two-day workshop and peer-to-peer exchange concluded with a panel discussion featuring the Mayor of Medellín, Federico Gutierrez; the Deputy Mayor of Lima, Andrea Cuba; and the Governor of Jakarta, Anies Baswedan.

Each discussed their experiences grappling with consequences of unsustainable mobility and the steps they have taken to reverse air pollution and increase low-emission transport, walking and cycling infrastructure.

Medellin

Mayor Gutierrez reiterated the importance of local level action to address the global climate crisis and the role of mayors to catalyze and lead change in their cities. Mobility, he remarked, is the one thing that affects citizens more than anything else. In Medellín, he is trying to improve the experience for all users equally. Under Mayor Gutierrez's 4-year term bicycle routes have more than doubled to reach 80 km. At the time of the panel, the city was preparing to roll out their first fleet of 64 EV buses, making it the second largest electric fleet in Latin American after Santiago, Chile. The city is also moving to electrify its fleet of taxis. Medellín's 30 Green Corridors initiative, which targets areas of the city devoid of greenery and replaces concrete with trees and plants, has already decreased temperatures in some places by three degrees Celsius, making it more comfortable to walk and cycle in those areas.

Lima

Deputy Mayor Cuba reflected on challenges in Lima including high levels of informality in transport and poor air quality. In response to air quality concerns, the city has implemented an online, real-time measure of air quality that is available to residents, empowering them with information to make important daily choice to protect their health. The city has taken steps to increase walking and cycling in the historic district by restricting access to cars. Speed limits have been reduced to make roads safer for all users. And, the city has invested in upgrading public transit including building new bus stations.

National level policies have targeted behavior changes among public servants, providing incentives such as giving employees one workday off for biking to work a specified number of days.



Jakarta

Governor Baswedan shared his ambitious goal of increasing the number of public transit users to 75% of its population by 2030 and to integrate all public transport into a single system. In 2017, Jakarta was considered the 4th most congested city and large segments of the population were spending almost a third of their income on transport alone. The city decided to take action to lower public transport costs significantly while improving the experience for riders and informal operators. Through initiatives to integrate informal transport operators into more formal systems via a process of negotiations, listening to the goals and aspirations of the operators and building trust between the government and informal operators, the government was able to integrate 11 operators under one system. For operators, this change meant monthly income was more predictable; for users, a more reliable schedule. Subsequently it reduced congestion, resulting in less congestion as drivers were not dependent on money per passenger and therefore were not stopping traffic and waiting to fill vehicles with passengers. From 2017 to 2018, the city's placement as the 4th most congested city dropped four positions. Looking ahead, the governor aims to move Jakarta out of the top 10 most congested cities list.



Final Remarks

Mayor Federico closed the session, describing the city of Medellin as a phoenix that has risen from the ashes. Participants of the workshop emerged with new tools, a strengthened network of city delegates from which to draw support and ideas. From here, they will establish a vision of how to transform areas of their cities to be less congested, less polluted, safer, more conducive to walking and cycling and ultimately more sustainable and vibrant places to live.