



Local Governments  
for Sustainability



SUSTAINABLE  
MOBILITY

# Report launch

Creating Sustainable Cities  
Through Low-carbon Freight -  
EcoLogistics in Argentina,  
Colombia and India

**4th VREF Conference on Urban Freight, 12:00-13:00 CET**

Yiqian Zhang, Sustainable Mobility Officer, ICLEI



UNIVERSITY OF GOTHENBURG  
SCHOOL OF BUSINESS, ECONOMICS AND LAW



# Speakers



**Sanjit Rodrigues**

IAS, Commissioner

Corporation of the  
City of Panaji, India



**Juan David Palacio**

Director, Área Metropolitana  
del Valle de Aburrá (AMVA)

Medellín, Colombia



**Camilo Urbano**

Leader of Urban Planning,  
Espacio

Bogotá, Colombia



**Yiqian Zhang**

Sustainable Mobility Officer,  
ICLEI World Secretariat

Bonn, Germany

# Agenda



- Introduction
- EcoLogistics Report 2021 launch
  - *Yiqian Zhang, Sustainable Mobility Officer, ICLEI World Secretariat*
- Presentations: EcoLogistics in India, Colombia and Argentina
  - Assessment of existing freight scenario and strategy planning for sustainable urban freight in Panaji by ***Sanjit Rodrigues, IAS, Commissioner-Corporation of the City of Panaji, India***
  - EcoLogistics in AMVA by ***Juan David Palacio, Director, Área Metropolitana del Valle de Aburrá, Medellín, Colombia*** (*Pre-recorded video in Spanish*)
  - Data challenges, opportunities, and learnings for policy-making Argentina & Colombia by ***Camilo Urbano, Leader of Urban Planning, Despacio***
- Q&A with the audience
- Closing remarks

# ICLEI - Local Governments for Sustainability



- Project Office
  - Country Office
  - Secretariat office
- 3/24/2021

# Why EcoLogistics?

25%

Total traffic in European cities

40%

Road space

40%

Urban transport-related CO<sub>2</sub> emissions

30 - 50%

Transport-related air pollutants

**EcoLogistics**

Low carbon freight for sustainable cities



Air pollution



GHG emissions



Noise pollution



Traffic safety



Congestion



Waste production



Land degradation



Urban quality of life

# EcoLogistics: Low carbon freight for sustainable cities

**EcoLogistics**  
Low carbon freight for sustainable cities



- The project is supported by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) through the International Climate Initiative (IKI).
- The project aims to increase the capacity of governmental and non-governmental actors to build strategies and policies to promote low carbon and sustainable urban freight in Argentina, Colombia and India.

Supported by:



based on a decision of the German Bundestag

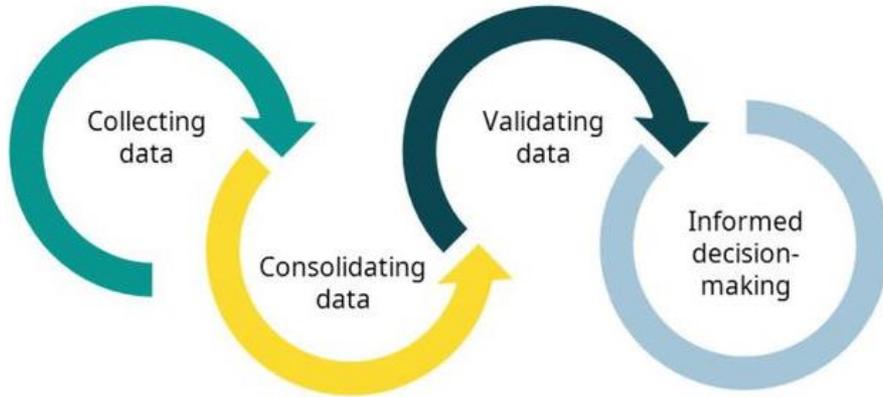


# EcoLogistics Report 2021



- Freight transport demand is expected to triple and its associated emissions to more than double by 2050 compared to the 2015 levels, if left unchecked. To reverse this trend, cities and companies need to turn promises into actions.
- ICLEI PRESENTS:
- **Creating sustainable cities through low-carbon freight: EcoLogistics in Argentina, Colombia and India**
- [sustainablemobility.iclei.org/ecologistics/report2021/](https://sustainablemobility.iclei.org/ecologistics/report2021/)

# Urban freight data gaps



*Use data to make informed decisions*

- As cities set strategies to decarbonize freight transport, it is critical that they use data to evaluate and make **science-based decisions**.
- However, there exists a range of common urban freight data issues.

# Where do we stand?

**EcoLogistics**  
Low carbon freight for sustainable cities



## ICLEI EcoLogistics Self-Monitoring Tool User Guide

For urban freight transport emissions accounting

Version 2.0



- Cities need to understand the emission contributions of different logistics activities. **Calculating emissions is a first step.**
- ICLEI’s EcoLogistics Self-monitoring Tool is developed for local governments to **estimate**, **evaluate** and **track** their urban freight performance over time.
- So where do we stand?

[sustainablemobility.iclei.org/ecologistics/self-monitoring-tool](https://sustainablemobility.iclei.org/ecologistics/self-monitoring-tool)

# Some of the first cities to compile data on urban freight activities.



- Desktop research
- Multi-stakeholder discussions
- Close consultation with public officials
- Surveys and interviews

# Baseline in numbers

**9** LOCAL  
AND REGIONAL  
GOVERNMENTS

**40+** MILLION  
TONS OF GHG  
EMISSIONS  
REPORTED

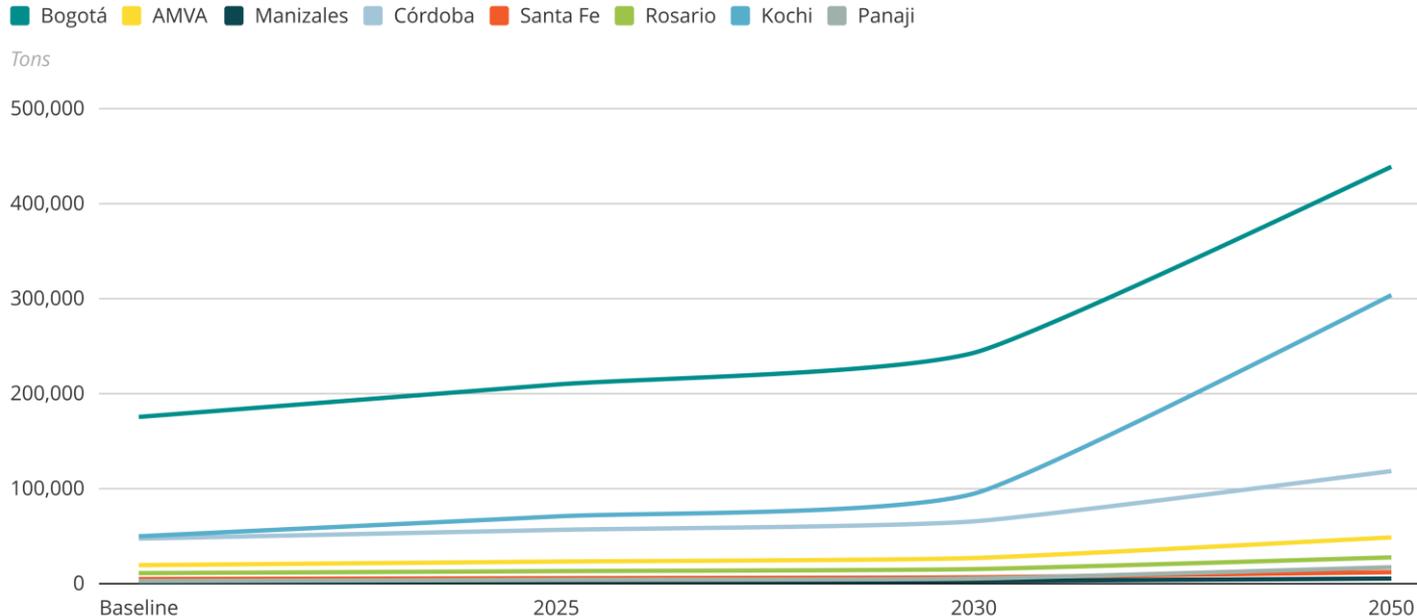
**5.8+** MILLION OF  
TOTAL  
REGISTERED  
VEHICLES

**13,000** FREIGHT  
VEHICLES IN THE  
SAMPLE

**313,000** TONS  
OF BASELINE  
EMISSIONS (SAMPLE)

# If we continue business-as-usual

- The BAU scenario points to road freight emissions' sustained growth in the project cities, if no additional measures are taken.

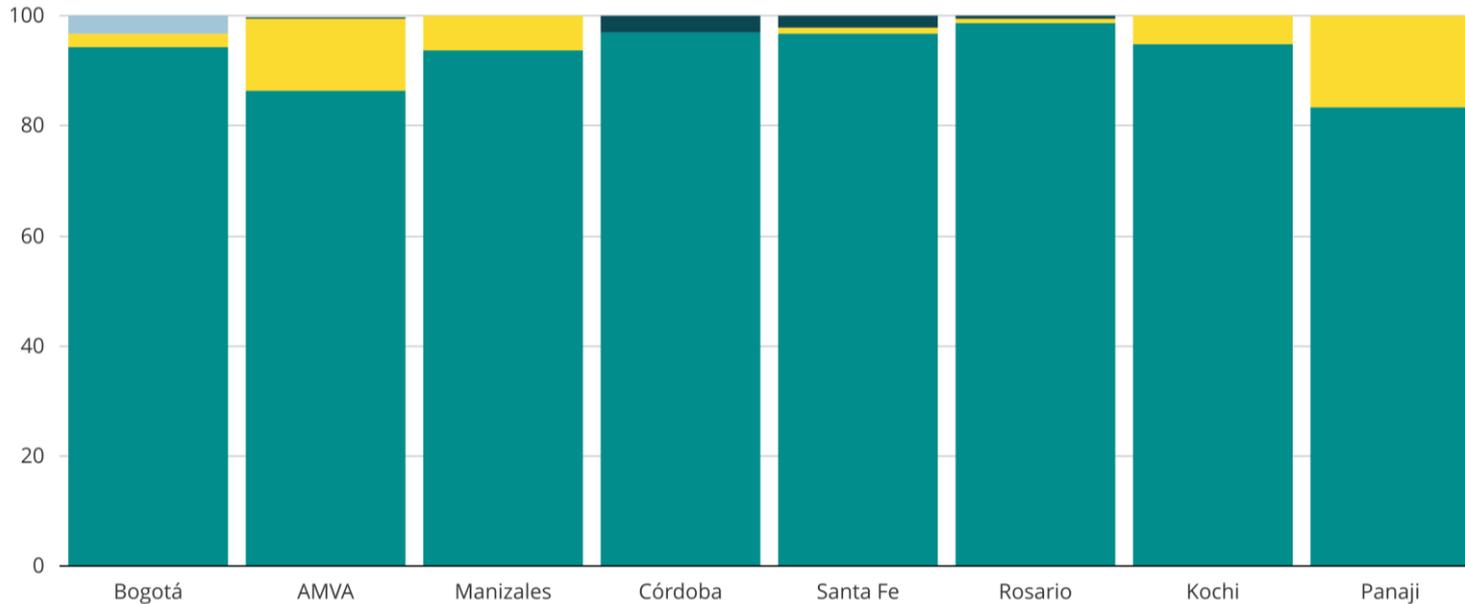


# Where are the emissions from?

- A large share of the emissions comes from diesel-fueled vehicles (over 80%).

■ Diesel ■ Gasoline ■ Electricity ■ CNG

Percentage (%)

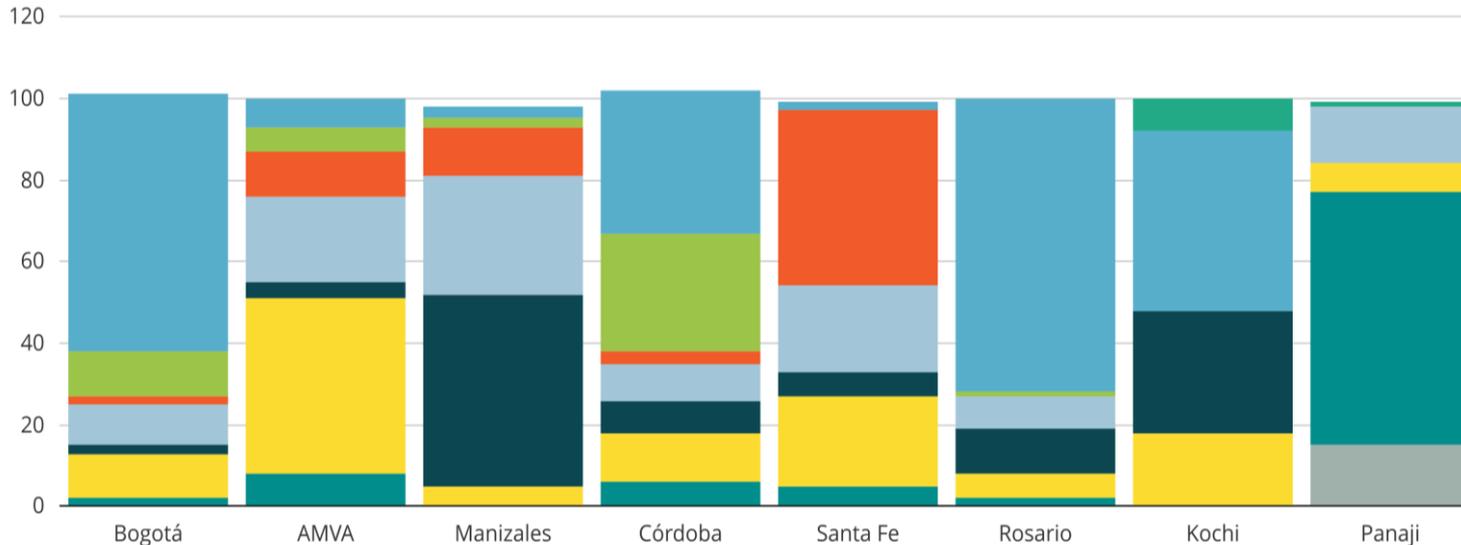


# Where are the emissions from?

- The majority of the emissions from the freight vehicles are attributable to heavier vehicles, although the share of heavy vehicles is generally much smaller than that of the LGVs.

Motorcycle (2-wheeler) Tempo Light good vehicle (< 3.5 t) Rigid Truck (7.5 t - 12 t) Rigid Truck (3.5 t - 7.5 t)  
Rigid Truck (12 t - 20 t) Rigid Truck (> 20 t) Truck and Trailer (> 20 t) Motorized rickshaw / tuk tuk

Percentage (%)



# So, how did we get there?

The emissions chart shows that we need to apply sustainable principles to move goods in the cities.

**The why is clear!** The how remains the big challenge.

By understanding various challenges related to urban freight, we can unveil the most impactful intervention points.

# Urban freight challenges

**Air quality & emission reduction** are one of the key drivers for sustainable urban freight.

The **infrastructure capacity** consumed by freight activities is often overlooked.

There exists a range of **common urban freight data issues**.

Urban freight interventions are often **piecemeal, place-based, and limited** to a certain group of stakeholders.

There is increasing awareness on sustainable freight at the national level, albeit **uneven distribution of efforts** among countries.

# How to reverse this trend?

Whether from the point of view of the transport activity, modal distribution of flows, environmental impacts, or political responsibility and public organization of the supply chain, urban logistics is at center of attention.

Here is what city leaders could do to reduce emissions from the sector.

# Looking ahead

## Recommendations for city leaders



**1. A combination of measures - Carrot and stick**



**2. Integrating passenger and freight transport**



**3. Working collaboratively across regions and industry**



**4. Leveraging data to make evidence-based decisions**

# Recommendations for city leaders

City	Existing actions for addressing urban freight issues	Group
Kochi	A proposal to redevelop the Ernakulam market area, one of the major hotspots for urban freight, has been initiated. The new redevelopment plan touches upon requirements for freight such as loading/unloading bays, non-motorized transport (NMT) delivery system to shops, clustering of shops and routing strategy. Discussions on revitalization of inland waterways for freight transport have started, together with Integrated Urban Regeneration and ater Transport System (IURWTS).	Infrastructure management
Bogotá	Loading/unloading restrictions of freight vehicles; as part of the program "EnCARGAte de Bogotá", freight vehicles may carry out loading and unloading activities from 10 p.m. to 5:30 a.m. on arterial roads, whilst on local roads, vehicles with no more than two axles may load and unload from 8:30 a.m. to 4:30 p.m. and 7 p.m. to 5:30 a.m.	Parking/ Loading areas management
AMVA	Dedicated delivery times and spaces for loading/unloading and parking for freight vehicles in the center of Medellín; implementing 71 freight transport initiatives to optimize loading in congested areas.	
Manizales	Manizales's Master Mobility Plan ("Plan Maestro de Movilidad", PMM, 2017) aims to create an inclusive and integrated transport system; it has set out measures to improve urban logistics (e.g., to provide parking space for freight vehicles).	
Córdoba	Córdoba regulates loading and unloading operations of freight vehicles throughout the city.	
Rosario	Rosario has set up exclusive bus lanes and designated areas for loading and unloading activities for goods vehicles in the city, which is used to improve lane utilization and mobility.	
Santa Fe	Parking spaces for loading/unloading are indicated by a yellow line and specific road signs, which specify loading/unloading rules and timing.	
Bogotá	The city will be establishing a facilitation unit to support freight vehicle owners in vehicle scrapping and renewal, making use of the instruments and resources developed by the national government. It aims to renew more than 11,500 light- and medium-sized trucks by 2030.	Vehicle-related strategies

- Infrastructure management
- Parking/Loading areas management
- Vehicle-related strategies
- Traffic management
- Pricing, incentives, and taxation
- Logistical management
- Freight demand/Land use management
- Stakeholder engagement



## A combination of measures- Carrot and stick

Adopt and implement a portfolio of carrots and sticks to drive faster decarbonization of freight transport

# Recommendations for city leaders



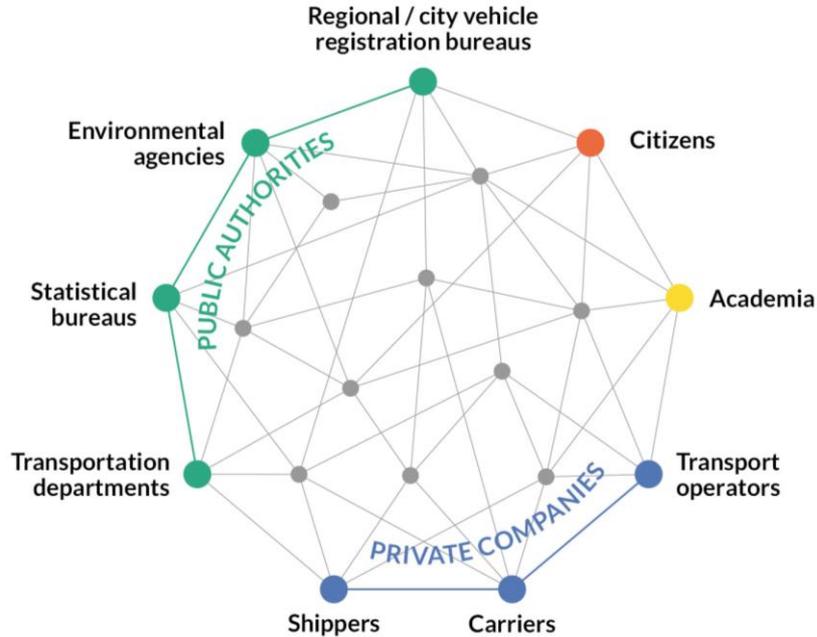
*In 2018 and 2019, the Kochi Port recorded the highest growth rate of 9 percent in cargo handling. The Government of Kerala envisages developing bus ports and logistics ports and has proposed to set up a Special Purpose Vehicle (SPV) named the Kerala Freight Port Limited.*



## Integrating passenger and freight transport

identify if policies, infrastructure, business models and energy sources serve both sectors

# Recommendations for city leaders



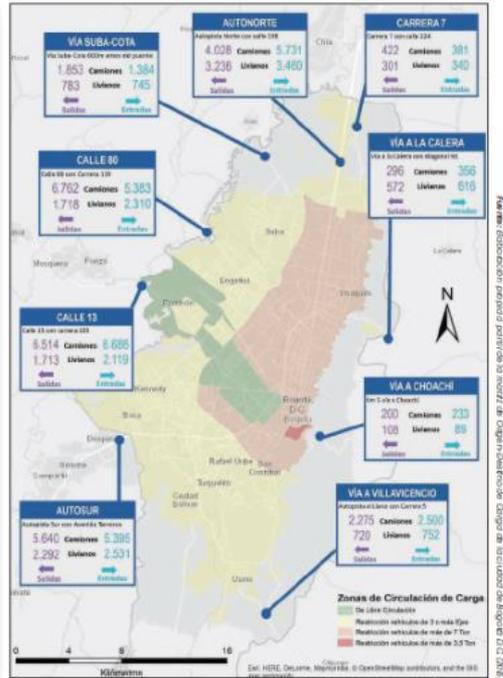
*Urban freight transport related stakeholders*



## Working collaboratively across regions and industry

By bringing multi-stakeholders onto the same table, it can be ensured that they can be heard and can participate in a constructive fashion.

# Recommendations for city leaders



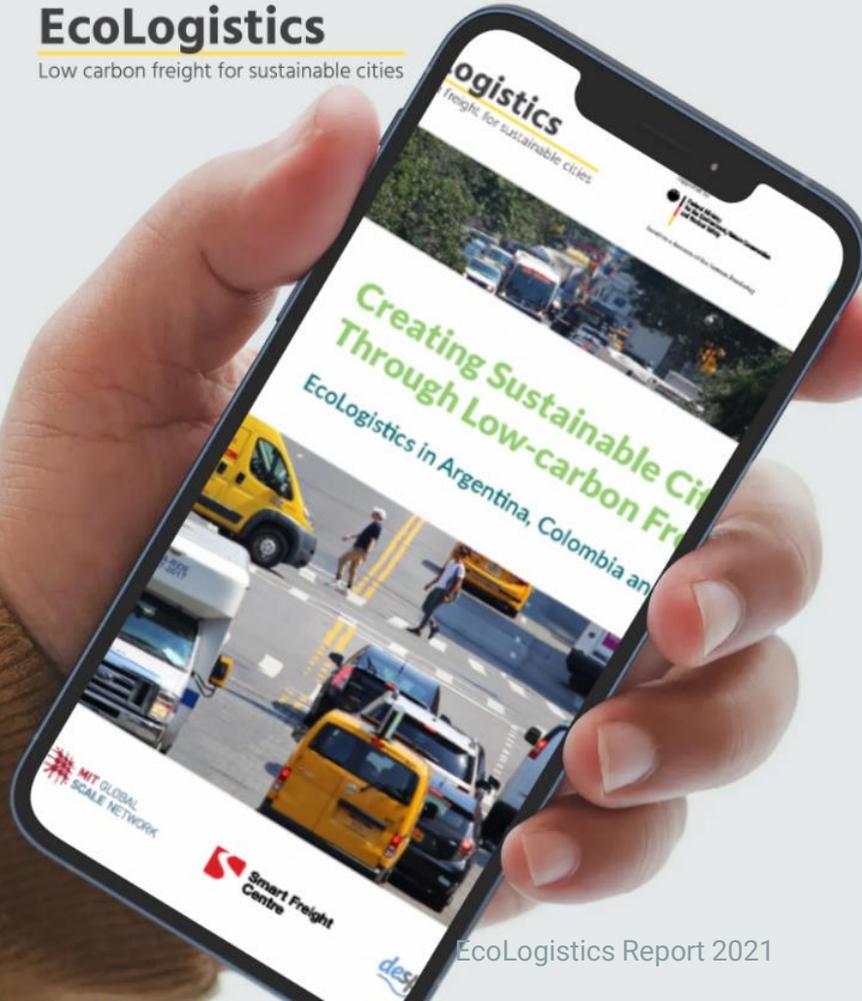
Fuente: Elaboración propia basada en los datos de Open-StreetMap, datos de autoridades de Bogotá D.C. (2018)

Bogotá is making sources available for freight transport initiatives and data collection. The picture presents Bogotá's most important freight corridors indicating traffic volumes of light goods vehicles and trucks.



## Leveraging data to make evidence-based decisions

The practices undertaken by *EcoLogistics* offer a roadmap for how city collaboration could take place and how tools can be developed to support emission calculation and data sharing.



# EcoLogistics Report 2021

Download at  
[sustainablemobility.iclei.org/  
ecologistics/report2021](https://sustainablemobility.iclei.org/ecologistics/report2021)

# Questions?

## Get in touch



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**EcoLogistics**

Low carbon freight for sustainable cities

# ICLEI Roundtable EcoLogistics: Improving last-mile delivery

**Wednesday, 24 March, 15:30-16:30 CET**

4th VREF Conference on Urban Freight



# Speakers



**Juan Esteban Martínez Ruíz**

Undersecretary of Policies for  
Mobility  
District Secretariat of Mobility,  
Bogotá D.C., Colombia



**Tu My Tran**

Head of Sustainable Mobility,  
ICLEI World Secretariat  
Bonn, Germany



**Michael Browne** (Moderator)

Professor of logistics and urban  
freight transport, University of  
Gothenburg



**Municipalidad  
de Rosario**

**City of Rosario, Argentina**  
*(Pre-recorded video)*