



EcoLogistics Lessons learned

Urban Freight Transport (UFT)
decarbonization key takeaways

ABOUT ECOLOGISTICS PROJECT

Supported by the German Federal Ministry for the Economic Affairs and Climate Action (BMWK) through the International Climate Initiative (IKI). ICLEI's EcoLogistics project (2017 - 2022) aims to increase the capacity of governmental and non-governmental stakeholders to build strategies and policies to promote low-carbon and sustainable urban freight in Argentina, Colombia and India, involving nine cities and regions:

Argentina: Córdoba, Rosario, Santa Fe de la Vera Cruz (Santa Fe)

Colombia: Capital District of Bogotá (Bogotá), Metropolitan Area of the Aburrá Valley (AMVA), Manizales

India: Kochi, Shimla, Panaji

For more information, please visit: sustainablemobility.iclei.org/ecologistics

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ICLEI – Local Governments for Sustainability is a global network working with more than 2,500 local and regional governments committed to sustainable urban development. Active in 125+ countries, ICLEI influences sustainability policy and drives local action for low emission, nature-based, equitable, resilient and circular development. ICLEI's Members and team of experts work together through peer exchange, partnerships and capacity building to create systemic change for urban sustainability.

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FOREWORD

EcoLogistics: Low carbon freight for sustainable cities, a project led by ICLEI - Local Governments for Sustainability, is critical in helping develop road maps for efficient and sustainable freight transport. This document contains a preliminary list of needs identified before EcoLogistics started and the challenges, barriers, learnings and best practices as result of the work developed during the project classified in different categories.

The following publication highlights the lessons learned the period of four years in the different stages of EcoLogistics.

Beatriz Royo (Zaragoza Logistics Center)

This report presents key insights from an extensive study towards sustainable urban freight. Through analysis and practical experiments, we've identified challenges and opportunities in sustainable freight operations. An essential lesson is the need for a comprehensive approach, involving varied measures and policies. Collaborating with stakeholders is vital for expertise sharing and policy effectiveness. Context matters significantly for measure success. By implementing these lessons and tailored strategies, cities can accelerate zero-emission vehicle adoption, contributing to a cleaner, sustainable urban freight future.

ICLEI Sustainable Mobility

INTRODUCTION

The EcoLogistics lessons learned report provides a comprehensive overview of the process, challenges, and best practices encountered by cities and partners in their transition towards low-carbon urban freight transport. It focuses on the exchange of capacities and innovation in nine cities across, **Argentina** – (Cordoba, Rosario, and Santa Fe), **Colombia** – (AMVA – Metropolitan Area of Aburra Valley), **India** – (Kochi, Panaji, Shimla).

Cities recognized the need to address carbon reduction goals in urban freight transport and collaborated on defining Low Carbon Action Plans for Urban Freight (LCAP-UF). The report highlights how local freight transport contributes to greenhouse gas emissions and negative externalities, such as air pollution and noise, and emphasizes the importance of aligning local policies with national commitments.

Information sharing and collaboration were key during the baseline assessment and LCAP-UF development, although barriers such as trust, engagement, and budget limitations were identified. The report also outlines the recommendations compiled in the National Urban Logistics Policy Recommendations (NELPRs), which addresses dependency on national policies.

With its four chapters covering knowledge gaps, city results, demonstration projects, and a summary and outlook, this report serves as a valuable resource for cities worldwide embarking on their journey towards decarbonizing urban freight transport. By sharing experiences and lessons learned, the report aims to support cities in taking their initial steps towards sustainable freight operations.

KNOWLEDGE GAPS

EcoLogistics strives to enhance the knowledge base of its participant cities by organizing them into four dimensions within the knowledge space.

1. The lack of awareness in urban freight transport and its carbon footprint served as a fundamental dimension for the project, encompassing various.

2. The data and information dimension provides insights into the status of urban freight transport and carbon footprinting.

3. There is a lack of a unified and practical methodology for urban freight transport greenhouse gas inventories using primary data from the private logistics sector.

4. There is a need for collaborative tools to set and monitor decarbonization targets effectively.

Urban freight transport and carbon footprint awareness

The common needs expressed by the cities at the onset of the project. Cities lacked understanding of urban freight transport and needed greater capabilities to decarbonize the sector. Project partners used this as a guide to define outcomes and methodology.

Specific requirements varied by country, with India and Colombia in need of upgraded technology and information sharing, along with Colombia and Argentina prioritizing logistics in urban planning for low-carbon sustainable mobility.

Common Needs

- Understanding the evolution of urban logistics, its distribution channels and their impact on the environment and livability of cities.
- Developing strategies to translate scientific targets into actionable plans.

- Recognizing the impact of low-carbon action plans and setting appropriate targets.
- Clarifying the role of electrification and the carbon intensity of energy sources in achieving decarbonization goals.
- Defining the role of digital technologies in decarbonizing logistics operations.
- Establishing new business models that improve and decarbonize city logistics.
- Understanding the importance of collaboration between the industry and public administration in achieving sustainable urban freight transport.

EcoLogistics has been actively involved in generating knowledge for its project partners and participant cities. The organization has successfully raised awareness about the complex nature of urban freight transport and its impact on economic growth. It has also highlighted the negative consequences that require the commitment of local authorities, public administration, logistics industry, mobility providers, and other actors of urban mobility.

Despite different stakeholders having varying objectives and interests, all cities came together to form work groups and achieve project milestones such as baseline measurements, low carbon action plans (LCAP-UF), pilot project definitions, project implementation, national recommendations, EcoLogistics handbook, and compilation of lessons learned. To address the needs outlined before, the challenges, barriers, learnings, and best practices have been translated into actionable insights for future projects with similar characteristics.

Challenges

- Six out of nine cities developed their urban freight initiatives from scratch, which included efforts of data collection and establishing collaborative relationships with public bodies and logistics operators. Not all authorities had previously included freight in their urban mobility plans, indicating a need for greater focus on freight transportation in overall urban planning.
- Urban freight transportation is fragmented, and engaging diverse stakeholders is challenging. Indian cities face additional complications due to presence of numerous government organizations but no dedicated agency for a comprehensive sector development.
- The cities observed the noteworthy influence of national policies on local-level initiatives, emphasizing the dependency and impact of overarching policy frameworks regardless of the country.

Learnings

- EcoLogistics performed as a knowledge transfer hub calling cities to reduce carbon emissions. It connected cities for sharing experiences and best practices.
- Colombia put together the public and private sectors. It included the decarbonization of UFT in the local political agenda. This hub allowed close data gaps for establishing the baseline to define policy goals and emissions reduction targets.
- The dissemination, promotion and capacity-building activities increase visibility and local communities' awareness. India acknowledged that regular capacity-building training helps to sensitize decision-makers on the need for urban freight planning.

Barriers

- The transition toward new urban mobility considering city logistics requires new business models and enhanced dynamic decision-making that relies on low-carbon intensity electrification transport modes and advanced digital technologies.
- Cities observed that Urban freight transport faces challenges including a industry with low profit margins, lack of technological advancements, and bureaucratic procedures that hinder innovation
- As stated by Colombia, information sharing, the engagement of the private sector and the need for changes in estate regulations that affect local decisions reduce the pace of innovation.

Best Practices

- Experts in logistics and carbon foot printing, along with local organizations like MOVI in Rosario, Argentina, helped gain industry support and achieve decarbonization goals for urban freight transport. This success sets the stage for future efforts.
- The EcoLogistics initiative involves public and private sectors collaborating to develop baseline reports, LCAP-UF, and NELPR. These efforts help identify priorities and future directions for the logistics sector in each city.
- India has implemented new measures and initiatives, such as including a logistics committee in the mandate of the Kochi Metropolitan Transport Authority and approving the LCAP-UF in three cities.

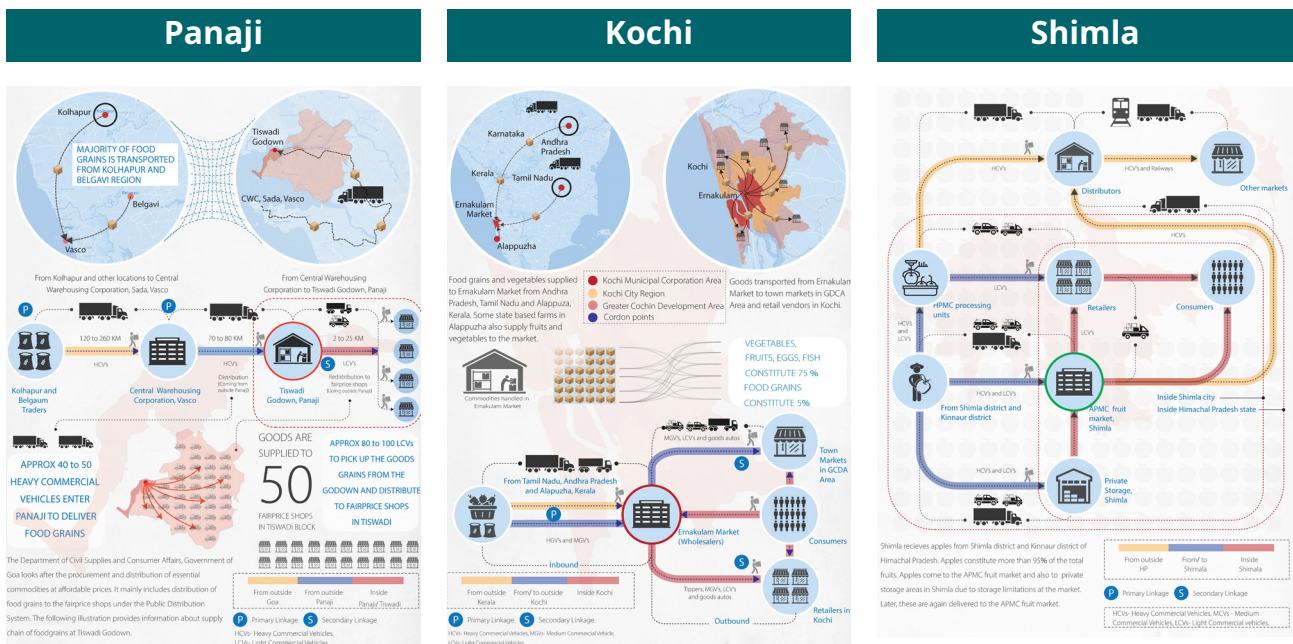
Challenges

- Rosario in Argentina has improved their data collection methods for urban logistics by involving the industry in calculating greenhouse gas inventories. The city has also implemented incentives to encourage company participation.
- As stated by the cities in Colombia, collecting data for GHG emissions is not a priority yet. The companies are not keeping this information by default. They needed to reserve a specific time for filling out the surveys.¹
- Insufficient data and fragmentation make it difficult to assess freight emissions in India. The EcoLogistics initiative successfully mapped supply chains in Indian cities Figure 3.

Learnings

- Cities in Argentina were wary of the results for mapping greenhouse gas emissions due to a small sample size and national economic state but agreed to gradually improve data collection while increasing participants.
- Colombia prioritized transparent communication with companies to raise awareness about UFT GHG emissions inventories.
- India emphasized engaging with informal stakeholders and making them understand the significance of urban freight.

Figure 3. Mapping supply chains in [Panaji](#), [Kochi](#), and [Shimla](#).



Source: SMOD, 2022

¹ During the data collection period, Bogotá and the Metropolitan Area of the Aburrá Valley (AMVA) experienced air quality problems. This situation highlighted freight companies as significant pollution contributors, leading to the enforcement of stricter transportation regulations by the governments. These challenges affected the data collection effort.

Barriers

- The level of fragmentation of the sector makes this task even more complex.
- Small and medium companies do not have fleet management systems or do not simply collect any data. The lack of visibility of big companies with entiers of small suppliers and carriers hinders tracking this information too.
- Companies are reluctant to share sensitive data. In Argentina, some companies shared a lack of interest in responding to the questionnaire. The potential bias was negatively assessed by the state of Argentina's national economy, increasing the skepticism of the private industry.
- The lack of a local government mandate at city level in transport planning decisions is a barrier for India.

Best Practices

- Public administration needs to define mechanisms and policies that foster data collection and monitor the status of urban freight transport, such as ecolabels, awards, or promotion activities.
- For Colombia, incentives such as capacity-building programs increased the willingness of companies to invest time and share data. The development of online monitoring tools like [AMVA](#) in Colombia helped shippers and carriers provide cities with up-to-date data.

GHG emissions methodology

One of the challenges encountered in the project was the creation of greenhouse gas emissions inventories. This is due to the various methodologies used by different cities, making it difficult to compare data.

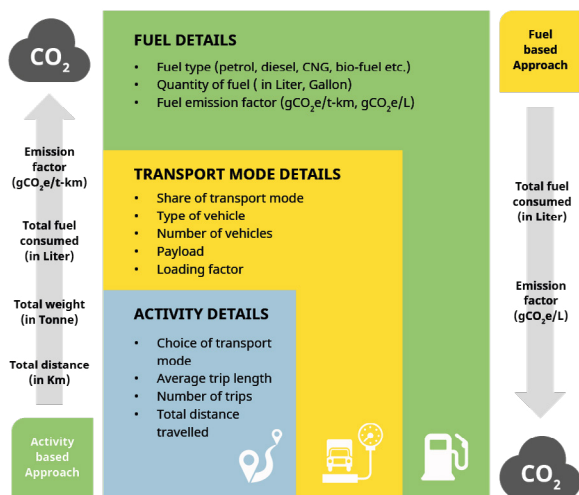
To address this, the Global Protocol for Communities was introduced in 2014 as a universal and recognized methodology (Fong et al., 2014). However, collecting data for urban freight transportation is still a challenge as it requires a prominent level of data granularity, which discourages city authorities from tracking GHG emissions inventories (Arioli et al., 2020; Li et al., 2017). Private companies also struggle to account for emissions produced by their suppliers while transport service providers are hesitant to share primary data with cities due to concerns over sensitivity of the information. Even though technologies facilitate data monitoring, collection and secure sharing, companies are still reluctant to provide this information as they feel it is revealing sensitive information. As recognized by cities in Argentina and Colombia, private companies in these countries mistrust sharing data openly with the public authorities.

To address these complexities, the EcoLogistics project analyzed the Global Logistics Council Emission Calculation methodology to identify data gaps and provide a flexible methodology for EcoLogistics cities, the EcoLogistics project analyzed GHG and the Global Logistics Council Emission Calculation (GLEC) methodology (Greene et al., 2019)². to identify data gaps and provide EcoLogistics cities with a flexible methodology that covers data gaps based on GLEC default values and assumptions.

Figure 4 provides more details on the EcoLogistics methodology, which was developed through a harmonization process reported in (Smart Freight Centre, 2018) and further in (ICLEI, 2020c).

² GLEC Framework: The global method for calculation and reporting of logistics emissions.

Figure 4. EcoLogistics bottom up, top down approach..



Source: EcoLogistics, 2020

Standard GHG emissions methodological issues

- Complexity and amount of GHG emission methodologies.
- Lack of adhesion between city GHG inventories and industry GHG inventories.
- Reduce interest in collecting data and understanding the methodologies for GHG collection.
- Exclusion of urban freight emissions from city GHG emissions inventories.
- Despite reducing UFT GHG emissions inventory complexity and developing an Excel-based tool, the cities still struggled to use it.

Challenges

- After unifying methodologies and covering data gaps, cities have issues with adopting it. Firstly, the lack of local factors and then the default vehicles defined by the EcoLogistics methodology required additional harmonization steps.

- Colombia had to unify the conventional metrics used by private companies (e.g., gallons) with international metrics (e.g., liters). Due to this difference in metrics, allying with multinational companies operating in other countries was an added complexity.

Learnings

- From the harmonization process, it is possible to observe the differences and commonalities between GPC and GLEC.
- Overall, the cities acknowledged the need to make resources available for understanding the methodology.
- As stated by some cities, Manizales, Rosario, and Santa Fe in LATAM, the EcoLogistics set the first steps for accounting for UFT GHG emissions inventories and triggering the need to allocate more and better resources for GHG reduction and sustainable policies.

Barriers

- The learning curve for adopting the methodology is one of the main barriers. Moreover, cities already using a methodology were more reluctant to adopt a new one (Santa Fe in Argentina).
- As stated by cities in India, the limited time and budget also hinder the possibility of investing enough effort in overcoming the learning curve.

Best Practices

- All the cities agreed on the benefits of involving mobility and transport offices. It allows cities to leverage their consulting experience and network connections for building stakeholder groups.
- Indian cities comprise the national government to endorse the NELPR methodolog.

Tools

The EcoLogistics project was initiated to address the urgent need for a comprehensive self-monitoring tool that followed a standardized methodology and offered a range of functionalities to the participating cities. This tool was devised to effectively monitor annual UFT GHG emissions inventories, project GHG emissions, assess the impact of different UFT GHG emissions reduction strategies (such as distance optimization, off-hour deliveries, eco-driving, and fuel technology changes), and provide an easy-to-use interface with a comprehensive control that policymakers and urban planners could utilize with ease. The EcoLogistics self-monitoring Tool was custom-built. Initially, an English version of the software (ICLEI, 2020b) and a user manual (ICLEI, 2020b) were developed. Further, a Spanish version of the tool (Royo et al., 2020) and a user manual (ICLEI, 2020a) were provided, which included specific metrics for liquids (measured in gallons instead of liters) to cater to the needs of LATAM countries.

Challenges

- The main challenge experienced at the beginning of the project was the lack of fluent communication among the software developers and cities. Therefore, once implemented, the second version in Spanish with tailored functionalities was developed to increase the users' acceptance.

- In Rosario (Argentina), the challenge was limited adoption. It is necessary to scale up the data collection to more private companies and capacitate more users for introducing the data.

Learnings

- Cross-functional teams with representatives from local communities, developers and environmental experts with agile methodologies ensure the result satisfies their needs and future adoption and reduces the learning curves.

Barriers

- The main barriers to adopting the tool are related to the barriers identified for embracing the methodology. One is the need to dive deep into the required assumptions. The second one is the need to harmonize the representative data of the city as the vehicle categories and metrics considered in the methodology and adopted by the Excel-based software.

Best Practices

- The GHG experts, developers and city representatives must collaborate to ensure the tool satisfies the underlying methodology and users' needs.
- Reserve time for learning methodology and the tool. Delivering user manuals and webinars helps reduce the learning curves.

BASELINE REPORTS AND LOW CARBON ACTION PLANS FOR URBAN FREIGHT TRANSPORT

EcoLogistics recommend three essential steps for the cities in the development of the baseline reports and the low-carbon action plans for urban freight transport:

1. Recognizing urban freight transport as a critical element in shaping the new urban mobility strategy.

2. Ensuring the participation of all key stakeholders in the transition towards the new urban mobility, including veto players and essential members of city logistics.

3. Establishing clear and measurable Key Performance Indicators (KPIs) to track and measure progress towards the decarbonization of city logistics.

UFT: ugly duckling of urban mobility

Cities worldwide have traditionally prioritized improving passenger mobility, often overlooking the importance of urban freight distribution channels and logistics requirements. However, with the rapid growth of e-commerce and the increasing urgency to address climate change, cities are now recognizing the significance of urban freight transport for economic growth and the need to decarbonize this sector.

Many EcoLogistics cities initially had to begin by characterizing urban freight and assessing its contribution to climate change through baseline reports³.

This information served as the foundation for developing Low Carbon Action Plans for Urban Freight (LCAP-UF). In contrast, cities like those in Colombia had already begun measuring various transport characteristics and incorporating freight into their mobility networks and traffic management systems. For instance, Bogota's mobility and environmental office has been studying freight management since 2015, while AMVA has been addressing potential emissions since 2013, primarily for air quality concerns.

Regardless of their previous focus on urban freight transport, all EcoLogistics cities have now recognized this critical activity as an essential component for their economic growth and have included it in their urban mobility plans and decarbonization strategies.

Challenges

- Cities faced familiar challenges integrating urban freight transport into mobility planning, such as data collection, understanding methodologies and tools and navigating stakeholder dynamics. This involved private industry, public departments, and political support.
- India highlighted the need to persuade private stakeholders about the importance of decarbonizing urban freight and the necessity of urban freight planning.

Learnings

- To overcome the challenges, Colombian cities stated that the involvement of city planners and local experts allows the creation of tailored solutions and direct communication in understanding pain points.
- Indian cities organized regular capacity-building activities for stakeholders at the city level. Achieving NDC's policies has been a strength over the last year.

Barriers

- Potential participants considered workshops as time-consuming activities that are not among their daily work priorities and do not offer short-term profit.
- Colombia noted lack of expertise and non-tangible results that deterred companies from participating in webinars and workshops.
- Indian local governments had a narrowed inclusion of urban freight as a mandate.

³ EcoLogistics Baseline 2021 <https://sustainablemobility.iclei.org/ecologistics-2/report2021/>

- Private stakeholders had a limited understanding of the need for an urban freight action plan.

Best Practices

- Cities agreed that projects like EcoLogistics help develop sustainable urban freight with local governments.
- Indian cities recommended organizing regular meetings with stakeholders and prioritizing the project as per the need and goals of different stakeholders. Ensuring that the urban freight vision has something to offer to all stakeholders is essential.

Multi-stakeholder engagement

Decarbonizing urban freight transport requires the commitment of the entire local community. Identifying stakeholders and understanding their roles, interests, and levels of commitment is crucial. This helps identify potential challenges and collaborations that may impact the planning process. It also allows for the development of corrective plans to manage dominant or weak stakeholders⁴. However, at the beginning of the project, cities found limited public administration involvement and little cooperation from the logistics industry.

The project served as a catalyst for cities to initiate discussions and establish working groups, leading to positive outcomes. For example, in Bogota, a logistics group was formed, providing regular updates, and engaging the freight operators' community. Rosario created a dedicated chair for logistics and urban freight planning. Kochi and Panaji accelerated the development of e-transport networks for freight and passengers.

However, these achievements were not achieved without challenges and valuable lessons learned.

Challenges

- Active engagement of local communities was crucial for the success of the project. Private companies often faced challenges due to their operational priorities. Additionally, collaboration among various public departments with different objectives, such as environmental, financial, technological, and urban planning, was necessary.
- Indian cities, it proved difficult to have all stakeholders on common ground. Moreover, for the IT department, it was complicated to ensure that different public departments worked together.
- The lack of resources and defined roles in small town offices hindered the implementation of proposed actions in the LCAP-UF. Therefore, it is crucial to establish national policies like the NELPR to guide and support these activities.

Learnings

- Cities considered that co-creation practices with representatives from the local community stakeholders were essential to defining the LCAP-UF but will also be a priority to execute the actions.
- Before EcoLogistics, there was no space to discuss urban freight logistics in Manizales. It was considered a national responsibility. With the project and examples from Bogotá and AMVA, the city understand that there are actions which a mayor's office can manage.

⁴ Guideline to identify Key actors and stakeholders URL - <https://www.eltis.org/guidelines>

Barriers

- Cities are complex ecosystems with many conflicts among the public administration departments and representatives from private stakeholders. It hinders the coordination and management of dedicated resources. Furthermore, when it comes to Indian cities, stakeholders may not be readily inclined to contribute.
- Argentina outlined that public offices are highly politicized. Therefore, the response and actions depend on national agendas.

Best Practices

- The continuous involvement of participants and feedback requires emphasizing the importance of their contribution in creating the blueprint. It is crucial to provide them with added-value activities, such as capacity-building sessions with experts who can impart practical knowledge and share their experiences. This will enhance their engagement and ensure their active participation throughout the process.
- In Colombia, the EcoLogistics framework can complement other strategies and help transform various ideas into actionable steps aimed at achieving sustainable urban logistics.

Key performance indicators and targets

Monitoring the city performance through Key Performance Indicators (KPIs) is crucial for corrective actions. In the project, defining environmental KPIs was essential for monitoring low-carbon action plans. The pilot projects required predefined KPIs reflecting the triple bottom line. Measuring GHG emissions in urban freight transport involved baseline KPIs following the EcoLogistics methodology. Continuously monitoring emissions and adopting the methodology

for demo projects ensured availability of consistent data. A comprehensive set of indicators assessed economic, financial, operational, and environmental impacts. Below are highlighted the challenges, learnings, barriers, and best practices.

Challenges

- Cities wanted to explore the impact of all the Kyoto protocol gases. Therefore, it was essential to calculate CO₂ and CO_{2e} based on the experts' opinions.
- All the cities agreed that cities do not have enough trained officers to measure, monitor and control GHG emission indicators.
- India lacks KPIs tailored to their cities' context, such as measuring the economic impact of urban freight. The skepticism of private stakeholders poses a challenge to measuring and implementing decarbonization actions, as they fear it may impact profitability.

Learnings

- The definition of targets based on a literature review provides rough but reasonable estimates of the potential emissions reduction.
- For Colombia, by monetizing every indicator, stakeholders can understand with a tangible number the impact of actions and the project's relevance on their financial performance. and As the methodology relies on secondary data, Indian cities must validate default values with primary surveys.

Barriers

- The main barriers to monitoring the actions are the lack of resources and dedicated budgets.

Best Practices

- Using several sources of information and experts' to validate the targets.
- Colombia involve the academia and aggregate value to the analysis.
- For Indian cities, the involvement of private stakeholders in defining the KPIs was crucial, especially on parameters that affect the profitability of operations.

DEMO PROJECTS: TEST, ASSESS, SCALE & TRANSFER

To materialize the actions outlined in the LCAP-UF, EcoLogistics cities developed detailed demo projects. While only one pilot per country received financial support from the project⁵, cities gained insights into action implementation and key aspects through small-scale proof of concepts. Most cities faced a lack of existing UFT pilot projects to

test new mobility solutions in their specific context. They had to initiate prototypes and evaluate their impacts, enabling them to determine whether to scale up and replicate in other locations or adjust and proceed. Each country in EcoLogistics designed three prototypes, and the final projects selected for implementation were diverse in nature⁶.

- **Rosario – Argentina:** *BiciPack Bicycles for sustainable logistics.*
- **Bogota – Colombia:** *Proofing alternatives for fleet replacement and consolidation for last mile freight.*
- **Kochi – India:** *Introducing electric loaders in prominent market centers and developing charging infrastructure.*
- **Shimla – India:** *Ongoing freight parking & loading zones.*
- **Panaji – India:** *Promoting collaborative last-mile delivery (load pooling) through electric freight vehicles.*

In total, five projects were implemented. The design and implementation of the demo projects allowed identifying several challenges, barriers, learnings, and best practices.

Challenges

- EcoLogistics cities in Latin America and India faced complexities in defining demonstration projects, including planning, resources, stakeholders, and KPIs.

⁵ In India, the local government of Panaji, and Kochi support the installation of charging infrastructure as national policy, Allowing the execution of 1 demo project in every city. In total EcoLogistics execute 5 pilots. (1 in Argentina, 1 in Colombia, and 3 in India).

⁶ <https://sustainablemobility.iclei.org/ecologistics-2/demonstration-projects/>

- Colombian cities stated that public offices are not proactive, and companies with experience are against changes in a brief time.
- Difficult to identify a project which is of interest to all the stakeholders (City government and private stakeholders)
- Divergent stakeholder priorities: private stakeholders prioritize profitability and efficiency, while governments focus on reducing environmental externalities and driving short-term changes.
- Argentina crosses a complex political environment, declining certain actors from the project; in the end, only two cities were active enough, Santa Fe and Rosario.
- Finance alignment: Linking the finance pipeline to city needs and stakeholder requirements minimizes delays and ensures high-quality outcomes.

Barriers

- The main barriers are the financial support for implementing the project and the engagement of stakeholders. The level of adoption is a challenge for scaling up the demo.
- The lack of knowledge and experience in implementation or innovation products is a weakness. Moreover, the regulatory ambiguity and the boundaries between the local cities' government and urban freight work on a regional scale are substantial burdens.
- The commercial language is a gap between the coordination and understanding of city needs. All demonstration projects suffered slightly different calls for proposals—however, budgets and objectives were similar.

Learnings

- State the boundaries clearly (geographic area, distribution channel, stakeholders involved, resources needed)
- Start early by engaging the local stakeholders that will participate in the project.
- Measure methodologies of indicators must be clarified in the project's first phase to avoid later delays.
- City agenda alignment: Kochi and Panaji synchronized infrastructure installation with EcoLogistics, facilitating resources to vehicle procurement.
- Get to know the local conditions to contract and execute projects.
- Communication channels must be clear for deciding with stakeholders and partners.

Best Practices

- To ensure pilots are successful, it is recommended to involve experts in the decision-making process to select the best candidate and make a pre-feasibility study to identify the weak points, risks, and mitigation strategies.
- For Argentina, it was essential to ensure companies were ready to innovate and had updated tools to answer and react to different activities.
- A continued follow-up involving city officials, stakeholders, and partners in weekly meetings facilitated immediate feedback and, when necessary, re-oriented the project objectives.

CONCLUSIONS

This document provides a comprehensive overview of the EcoLogistics project, highlighting its various phases, activities, objectives, challenges, results, and the valuable insights gained by EcoLogistics cities and partners.

EcoLogistics served as a global knowledge transfer hub, facilitating the exchange of expertise and experiences on decarbonizing urban logistics. It connected renowned experts in logistics management and carbon foot printing, established direct links and support networks with innovative cities. The project successfully brought together the public and private sectors and actively promoted the integration of urban freight decarbonization into local political agendas. This collaborative hub played a crucial role in bridging data gaps, enabling the establishment of baselines and the definition of policy goals and emission reduction targets.

One of the key pillars of EcoLogistics was the formation of multi-stakeholder groups, involving both public and private sectors. These groups fostered collaborative efforts in developing baseline reports, LCAP-UF, and the National EcoLogistics Policy Recommendation (NELPR). Participant countries emphasized the significance of these outcomes in identifying priorities and charting future directions for the sector in each city.

By defining a minimum set of data, EcoLogistics enabled the mapping of the current status quo and measurement of GHG emissions. This approach allowed for the postponement of urban freight transport characterization and GHG emissions calculation. It is crucial for public administrations to establish mechanisms and policies that facilitate data collection and monitor the status of urban freight transport, such as implementing ecolabels, awards, or promotional activities.

The cities agreed that starting small and continuously improving data collection and management mechanisms while increasing the sample size is the preferable approach.

The involvement of cross-functional teams comprising representatives from local communities, developers, and environmental experts, along with use of agile methodologies, ensured that the project's outcomes met their needs and were well-positioned for future adoption. Allocating sufficient time for learning the methodologies and tools was deemed necessary, and the provision of user manuals and webinars proved effective in reducing learning curves and fostering engagement.

Cities recognized the essential role of co-creation practices with local community stakeholders' representatives, not only in defining the LCAP-UF but also in prioritizing and executing the necessary actions. Establishing clear communication channels with stakeholders and partners is vital for effective decision-making processes.

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