



EcoLogistics

Transporte de carga bajo en carbono
para ciudades sustentables

Low carbon urban logistics for Ciudad 30

Santa Fe de la Vera Cruz, Argentina



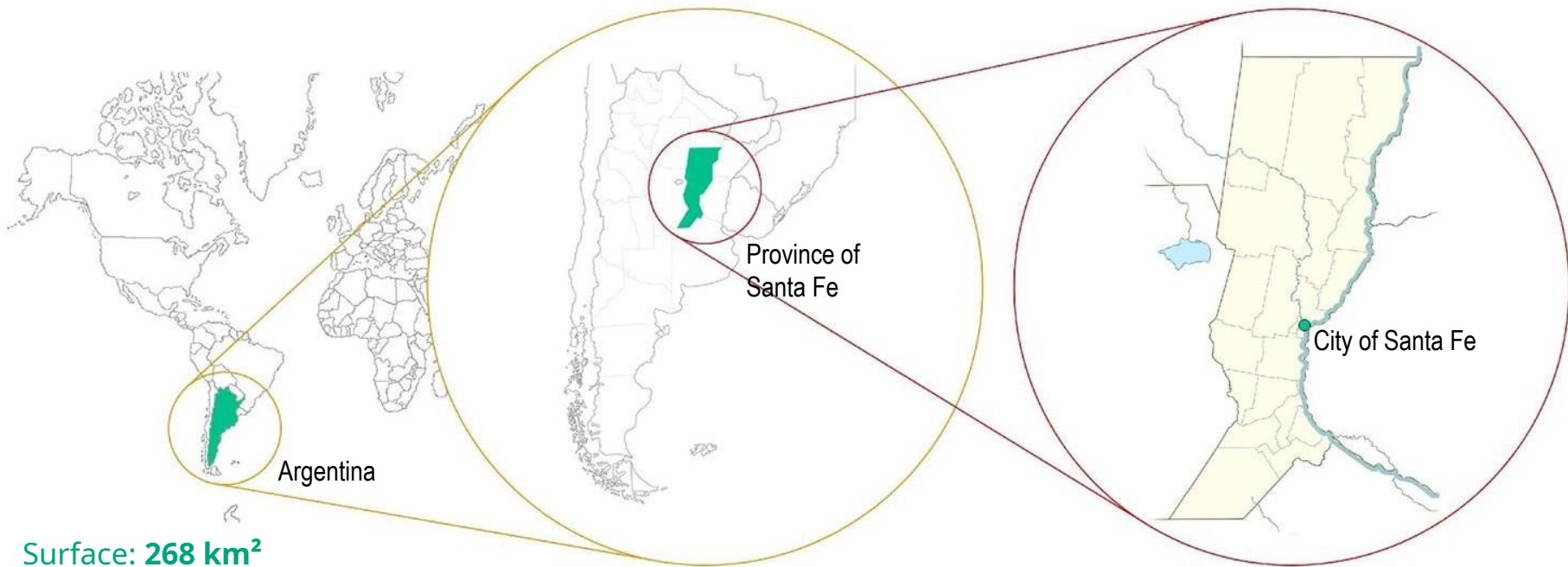
TERRITORY

Location



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Surface: **268 km²**

Population (2010)

- **Total 401 544 hab.**
- **Density 1498,3 inhab/km²**
- **Metropolitan area 510 000 hab.**

TERRITORY

Metropolitan Area of Gran Santa Fe



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City District
Santa Fe de la Vera Cruz

TERRITORY





City of Santa Fe de la Vera Cruz



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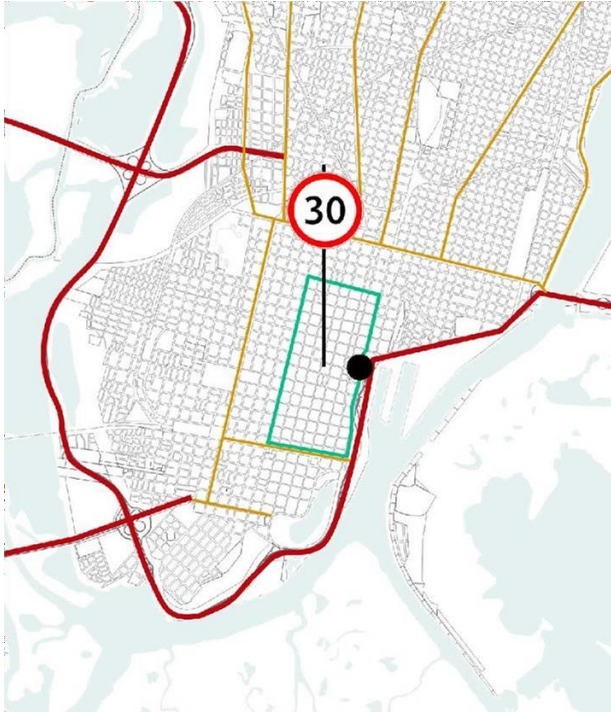
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-  Ciudad 30 according to Ord. 12.720
-  Alberdi Park/Underground Parking
-  Road corridors
-  Metropolitan connection axis

TERRITORY

Ciudad 30 according to Ord. 12.720



Ciudad 30 is an area of the city where safe and healthy mobility is promoted.

The measures established are

- Speed reduction to 30 km/h on its streets;
- Obligatory inclusion of bicycle racks in covered and semi-covered spaces at public building
- Regulation of the guarding of motor vehicles and bicycles in private parking lots;
- Modification of the Municipal Ordered Parking System (SEOM) schedule due to the COVID-19 pandemic;
- Execution of 3.2 km of bike lanes
- Loading and unloading spaces demarcation with a maximum distance of 200 meters each.

It covers 2% of the urban area of the city -Resides 5% of the total population - Concentrates 30% of the shops and institutions

OBJECTIVE



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General objective:

Reduce GHG emissions assigned to freight transport in the Ciudad 30 area

Specific objectives:

- Install the first "urban distribution center" for cargo deconsolidation, improving the last mile of urban logistics in the Ciudad 30.
- Organize and optimize the loading and unloading docks in the area Ciudad 30.

PROJECT



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Use a semi-underground parking located under the Plaza Alberdi as an Urban Distribution Center, a place that will serve to carry out the freight transport from large vehicles to smaller and environmentally friendly vehicles, which will be in charge of the last mile distribution in Ciudad 30.

To order the loading and unloading of Ciudad 30, the exclusive spaces will be increased, optimizing their distribution and identification in the most requested sectors, and implementing technology for the management of freight transport from the placement of parking sensors that will send data in real time a mobile application that will allow to manage its use and control.

Urban logistics will be completed by installing traffic lights and street lighting.

As a transversal measure, to be able to measure the impact of the project, atmospheric monitoring sensors will be placed to assess the air quality in the Ciudad 30 area.

PROJECT

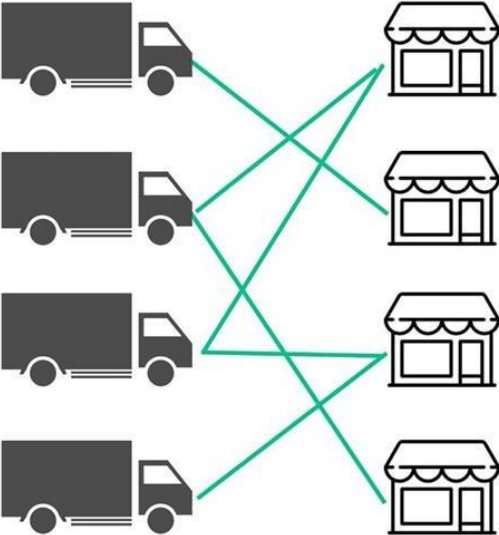
Logistic diagram:



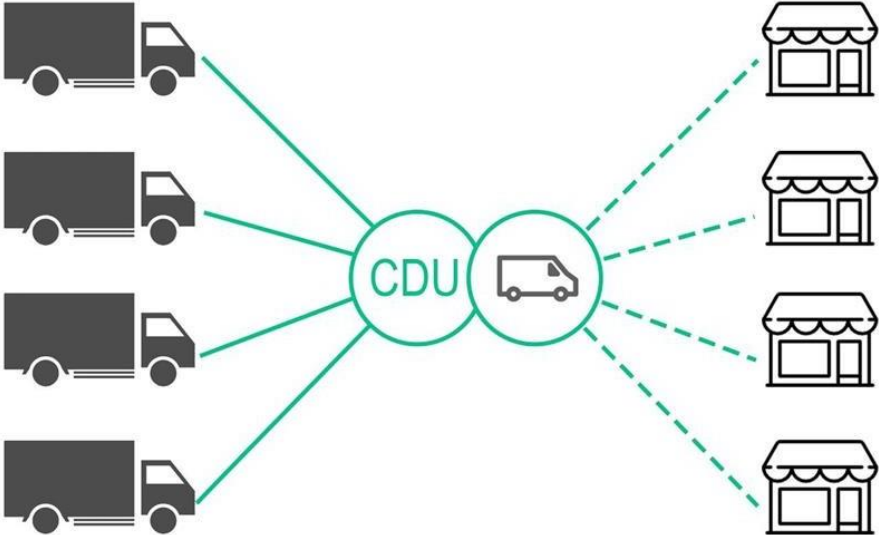
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- Current logistics:



- Logistics using the Urban Distribution Center:



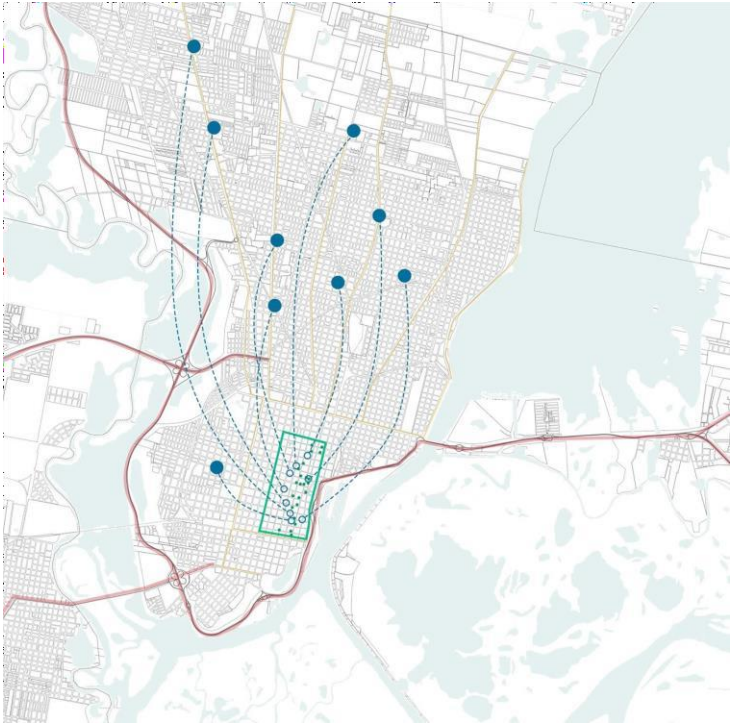
PROJECT

Logistic plan:

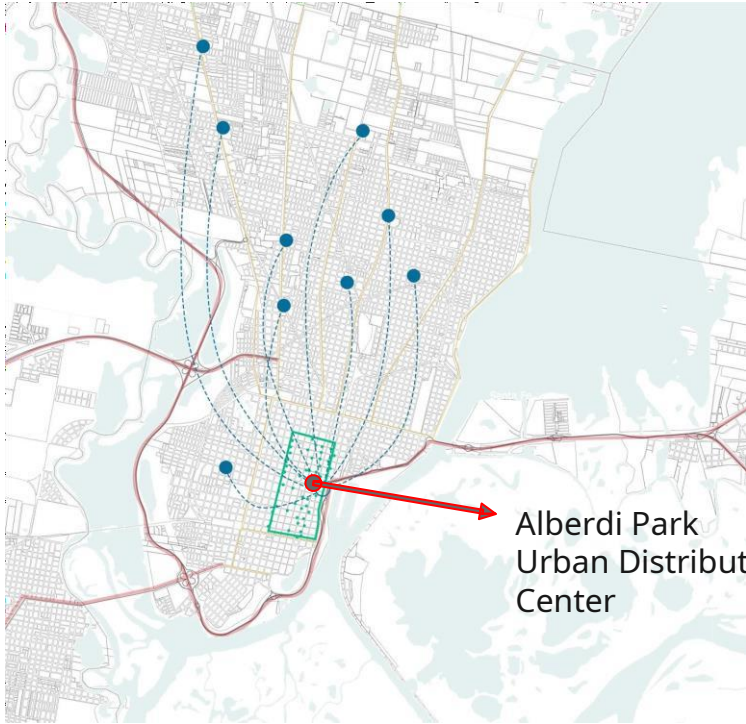


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- Logistics Companies
- Commercial Area



Alberdi Park
Urban Distribution
Center

- Logistics Companies

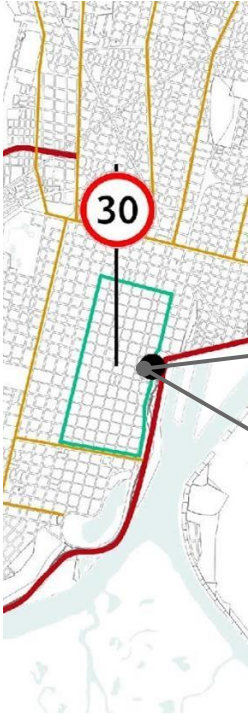
PROJECT

Urban Distribution Center (CDU):

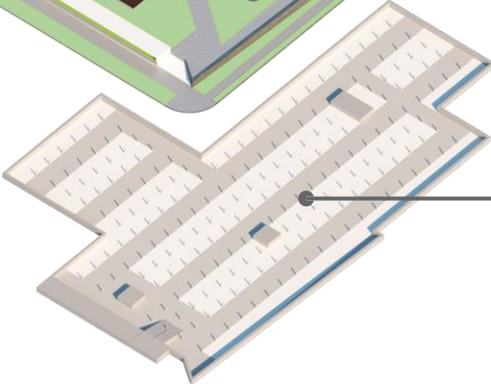


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Alberdi Park



Parking Alberdi and Urban Distribution Center



PROJECT

CDU Access:



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Access to Parking



Access to Urban Distribution Center

PROJECT

CDU Access:



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Access to Parking



Access to Urban Distribution Center

PROJECT

CDU interior:



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Parking module



Urban Distribution Center modules

PROJECT

Loading and unloading docks:



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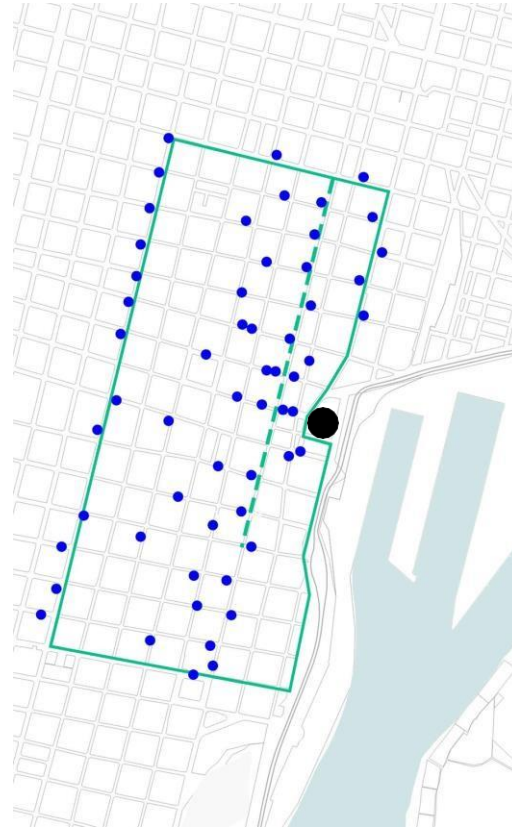
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- Existing loading and unloading docks



- Projected Loading and Unloading
- Docks Urban Distribution Center



PROJECT

Other Interventions:



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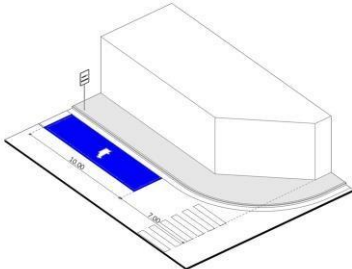
- Urban Distribution Center
- New lamps for Parking Alberdi sector.
- New traffic lights for traffic management
- Atmospheric sensors for measuring air quality

PROJECT

Loading and unloading dock with sensor



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Loading and unloading dock



Loading and unloading dock with parking sensors

PROJECT

Loading and unloading dock with sensor



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-Parking sensors

- Mobile app



PROPOSED ACTIVITIES



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Evaluation:

- Survey of merchants and actors performing their own CyD management.
- Survey of AAUCAR associates.

Preparation:

- Drafting of code of use of the CDU.
- Mobile application development.
- Dissemination to potential users.
- Registration of companies and merchants.

Facilities:

- Traffic lights.
- Street lighting.
- Parking sensors in docks.
- Atmospheric monitoring sensors
- Infrastructure Inside the parking (a private charge).

Post-work:

- Training for inspectors and users.
- Content update to get driver's license.
- Baseline construction with atmospheric sensor data.
- Logistics data processing.

KEY INDICATORS



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- CO₂eq tonnes reported for the freight transport sector
- Baseline atmospheric monitoring results
- Total of utility vehicles in circulating fleet per year
- Road accidents per 10,000 vehicles per year
- Number of loading and unloading docks improved
- Violations reported for improper occupation of loading and unloading docks per year
- Number of registered/enabled logistics companies
- Number of businesses that carry out their own registered logistics/year

IMPACT



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- Reduction of GHG emissions at the centre.
- Reduction of traffic jam.
- Increased road safety.
- Management and improvement of loading and unloading docks infrastructure
- Reduction of indiscipline and illegal occupation of docks.
- Generation and systematization of data from the implementation of the registry
- of companies that carry out loading and unloading in the local center.
- Reduction of noise pollution in the local center.

CO-BENEFITS



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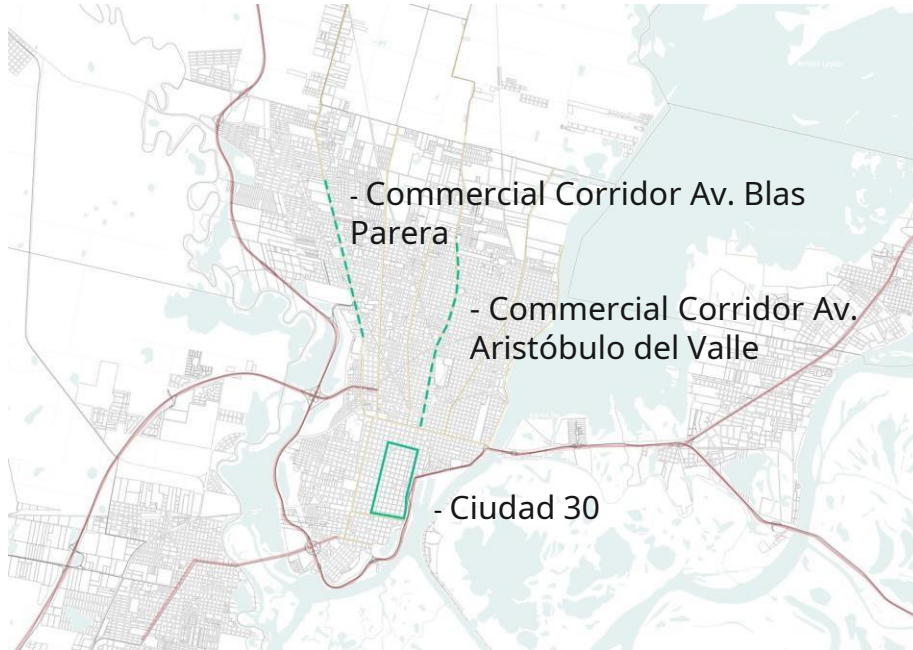
- Reuse of a private space that is currently being underoccupied.
- Reduction of friction with other urban uses of public space,
 - mainly between pedestrians and medium and large vehicles.
- The hierarchical organization of freight transport in the city center as a fundamental part of the mobility system.

SCALING POTENTIAL



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- Turning the Plaza Alberdi into a logistics center
- Implementation of the "Green Seal" program.
- Replicate the Distribution Center in other sectors of the city identified as commercial corridors, such as Av. Aristóbulo del Valle and Av. Blas Parera.
- Possibility to unloading at the Distribution Center at unconventional times without disturbing neighbors.
- Migrate the smart tacking system to the SEOM for private vehicles.
- Work to legislate small electric vehicles for use in last mile distribution.

STAKEHOLDERS



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- Local working group: particularly AAUCAR and Centro Comercial de Santa Fe.
- Logistics companies based in the city of Santa Fe.
- Merchants of the Ciudad 30 area, particularly the pedestrian San Martín. The area of Ciudad 30 concentrates 30% of the total of shops, bank and related entities of the city.
- Municipality of Santa Fe: Secretariat of Control and Citizen Coexistence, Secretariat of Production, Secretariat of Environment, Secretariat of Works and Public Spaces, Secretariat of Communication and Secretariat of Urban Development.
- Other beneficiaries: Ciudad 30 inhabitants (5% of the total city).

- One of the main results of the project EcoLogistics is to support local governments in the development of their action plans, where Santa Fe has made a great progress in the definition of the LCAP-UF and on a demonstration project that is in line with the strategic axes defined.
- The formation of the LWG is a very important result for the city since the relationships generated with the different actors from the different activities proposed in the framework of EcoLogistics allowed to address other issues of the city's agenda in a fluid and prosperous way.
- As for the direct impact of the demonstration project, it will contribute to:
 - Reduce emissions in the city center, and, consequently, global emissions.
 - Reduce the number of large and medium-sized vehicles in the center and order the loading and unloading system, in order to make it more efficient, safe and environmentally friendly.

The demonstration project is directly related to the first and third axis of the LCAP-UF, and indirectly to the second:

REGULATION AND CONTROL

The implementation of the project aims, among other things, to fulfill the objective of "Strengthen the control system for cargo and logistics activities in the city, aligning it with the local climate action plan". This would be a direct consequence of the implementation of the intelligent control system of loading and unloading docks.

RATES AND TAX INCENTIVES

The relationship is not direct since the implementation of the project does not provide incentives of this type, but the promotion of the "Green Seal" program, as recognition to companies that comply with the stipulations in the implementation of the same.

INFRASTRUCTURE

The axis objective is to improve existing road infrastructure to ensure efficient use of the network from the point of view of GHG emissions. With the implementation of the project, the existing infrastructure will be strengthened due to the enabling of the load deconsolidation center and to the improvement of the docks both in the visual/signage, as in the inspection.



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