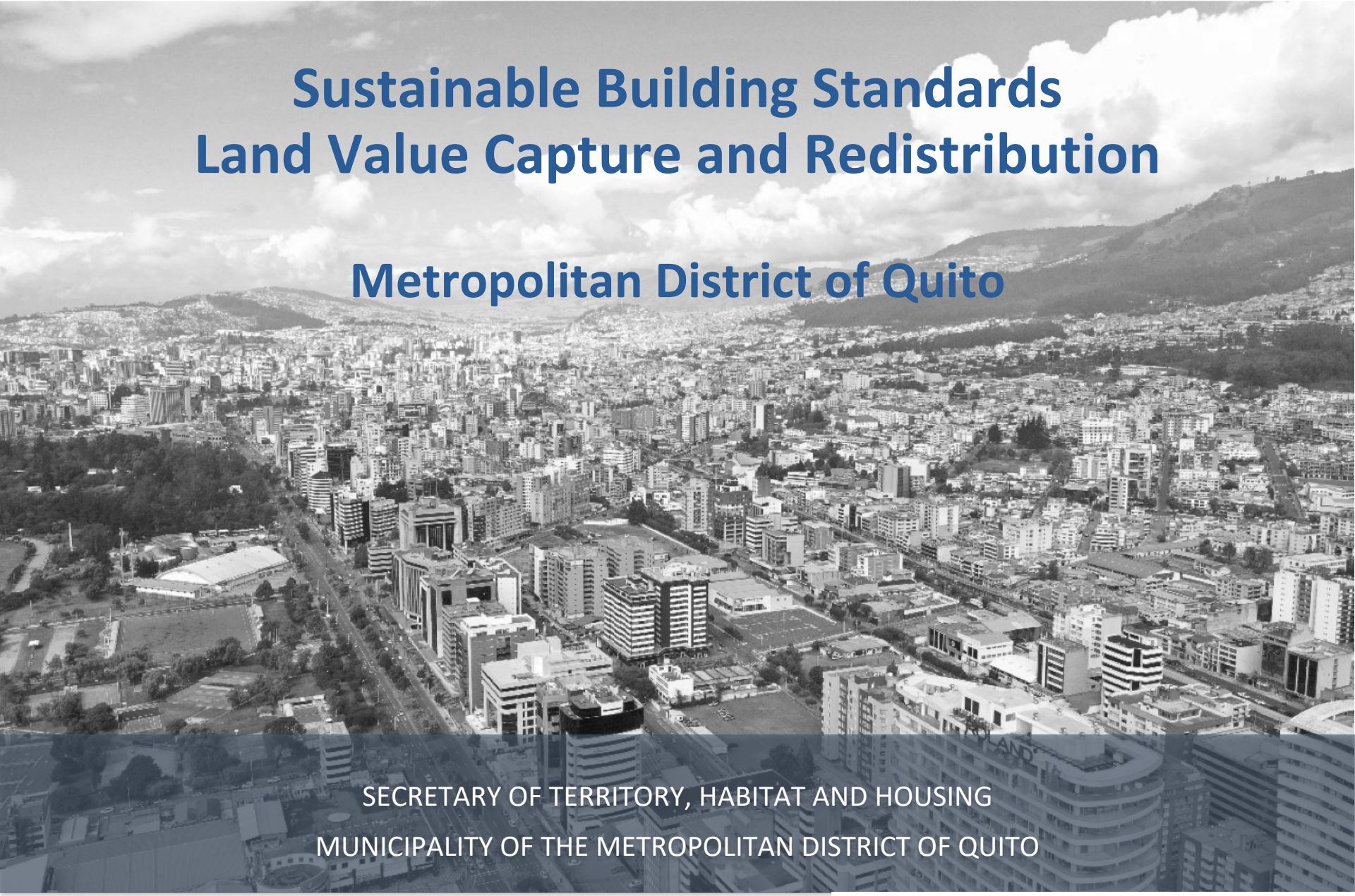
# Sustainable Building Standards
# Land Value Capture and Redistribution

## Metropolitan District of Quito



SECRETARY OF TERRITORY, HABITAT AND HOUSING

MUNICIPALITY OF THE METROPOLITAN DISTRICT OF QUITO

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## CONTEXT OF QUITO

- Due to Quito´s complex topography, the city´s main plateau morphology has led the expansion to be done in a linear way and towards the valleys.
- Lack of infrastructure and basic services and amenities in sub-urban sprawl areas.
- Environmental problems: fragmentation of natural habitats and soil impermeabilization.

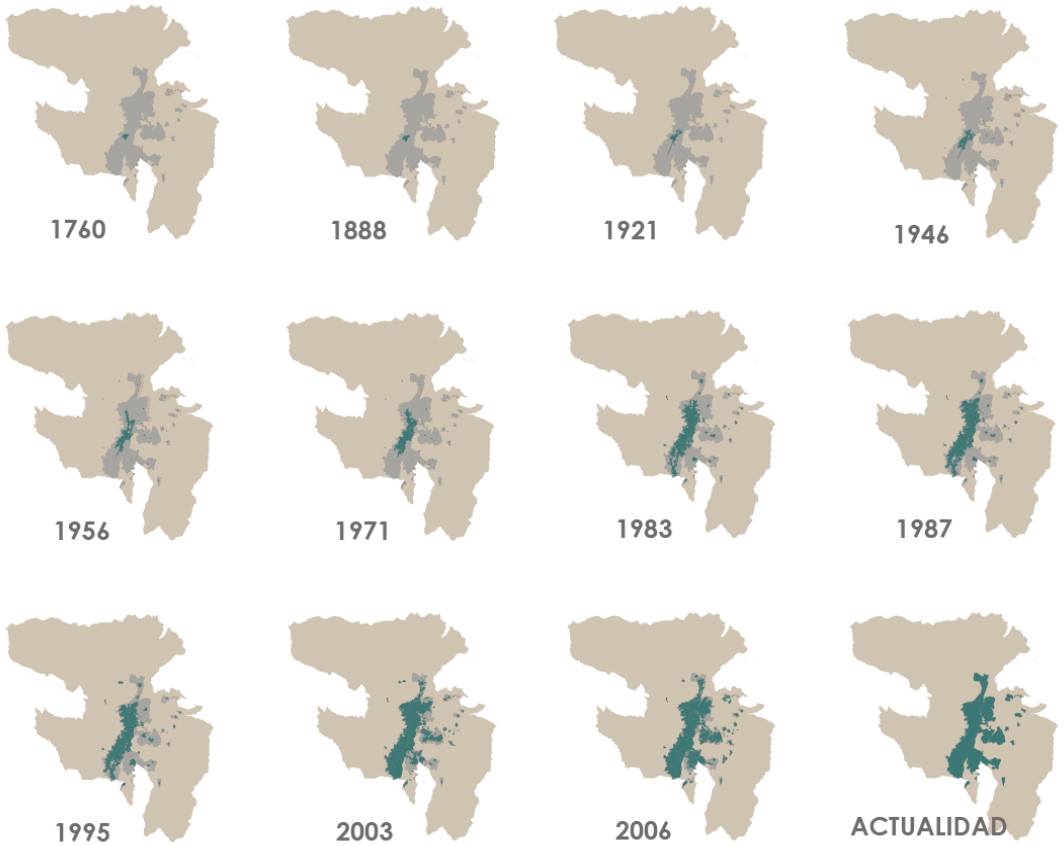
**URBAN SPRAWL**

Increase of movements and urban territory expansion.

Lack of infraestructure and basic services in expansion sectors.

Fragmentation of natural ecosystems

**UNSUSTAINABLE**



FRAGMENTATION OF NATURAL HABITATS

IMPERMEABILITY

**SOIL IMPERMEABILIZATION**

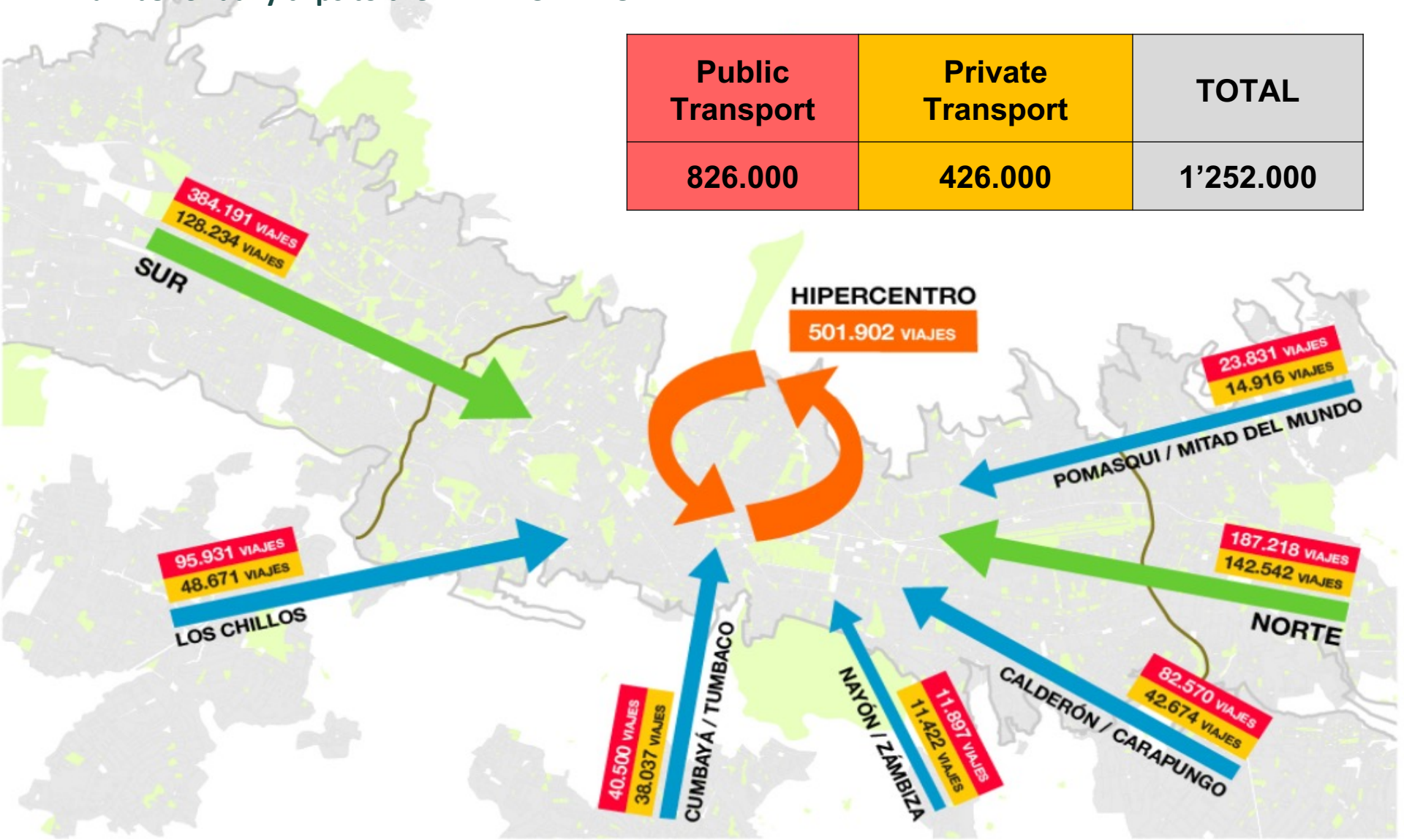
Flooding. Erosion and natural catastrophes. Interruption of natural cycles.

**FRAGMENTATION OF NATURAL HABITATS**

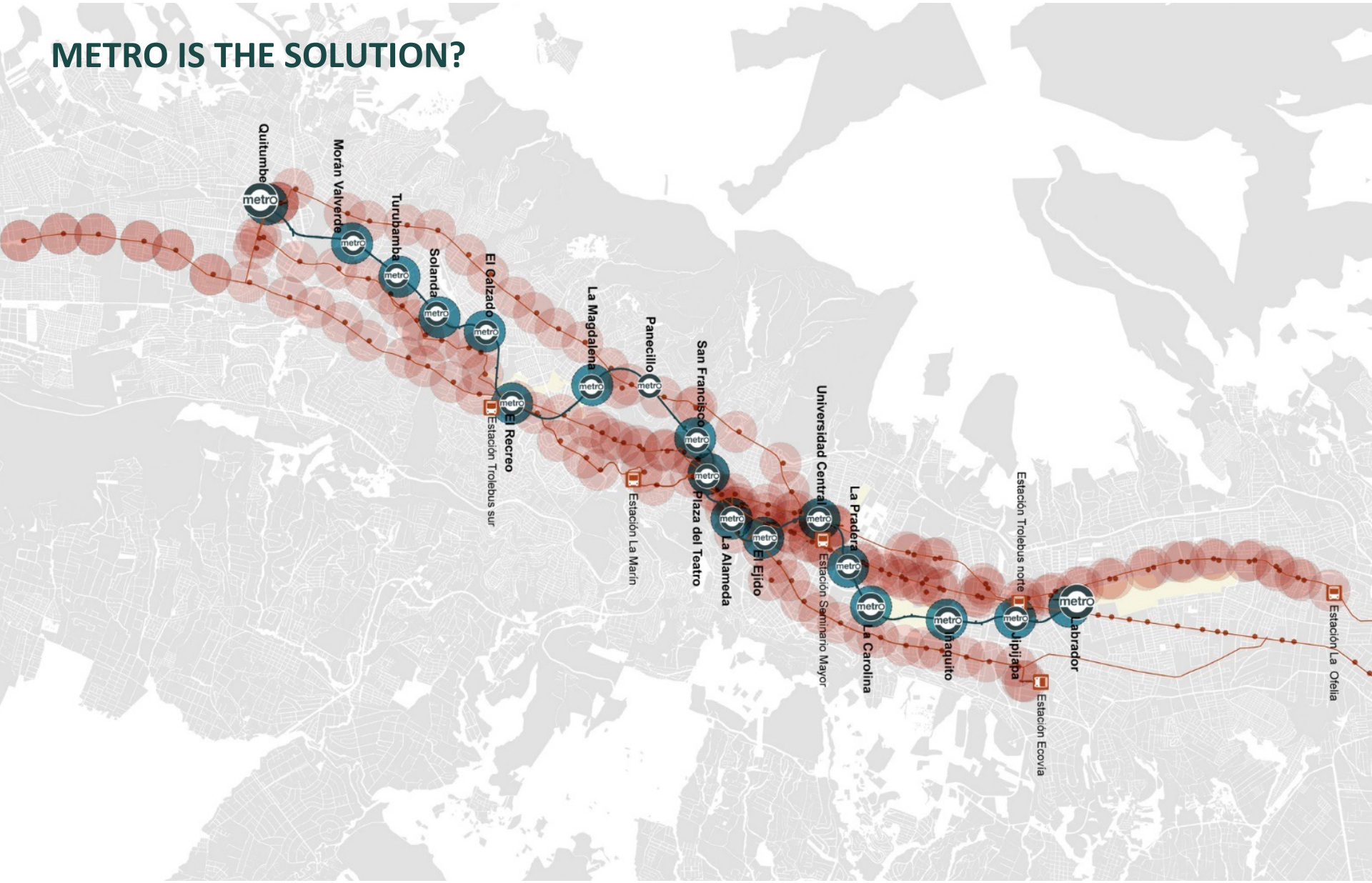
DeforestationLoss of natural habitats. Loss of ecosystemic services.

## Number of daily trips to the “HIPERCENTRUM”

| Public Transport | Private Transport | TOTAL |
|---|---|---|
| 826.000 | 426.000 | 1’252.000 |



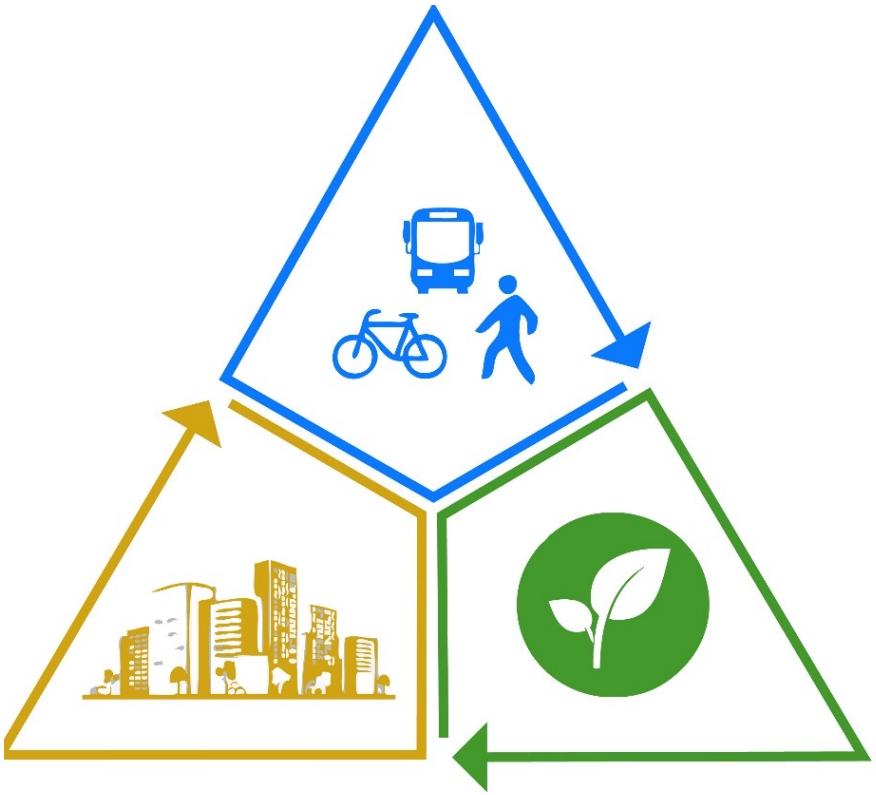
# METRO IS THE SOLUTION?



# Densification is the solution…

# HOW?

MOBILITY



LAND

ENVIROMENT

MOBILITY

LAND

ENVIROMENT

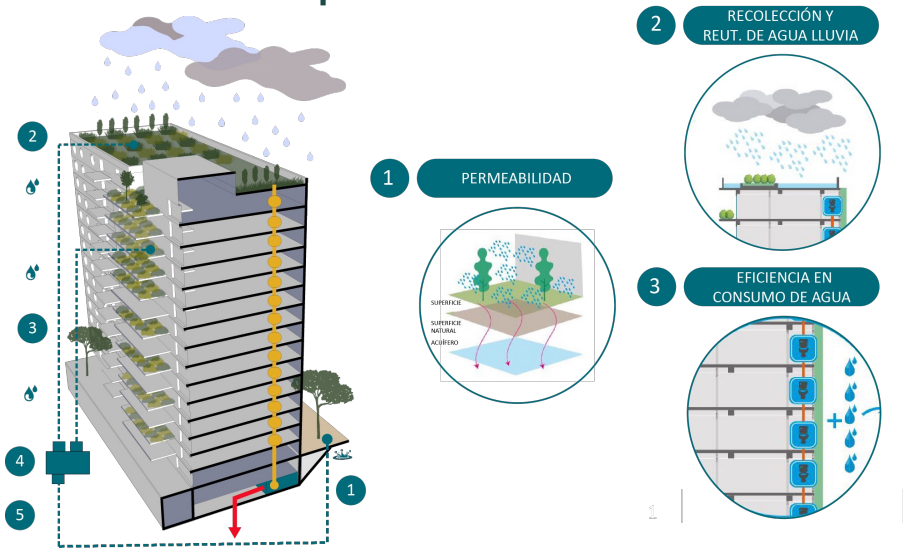
Mechanisms to reduce the effects of climate change through mitigation and adaptation strategies such as the transition from a gray buildings to green buildings, as well as measures to promote sustainable development (public space, urban green network).

Establish urban and sustainability standards for edifications in Quito, in order to promote the development of a city with a more resilient, inclusive, accesible and healthy habitat for all its citizens; therefore increasing life quality for all its citizens.

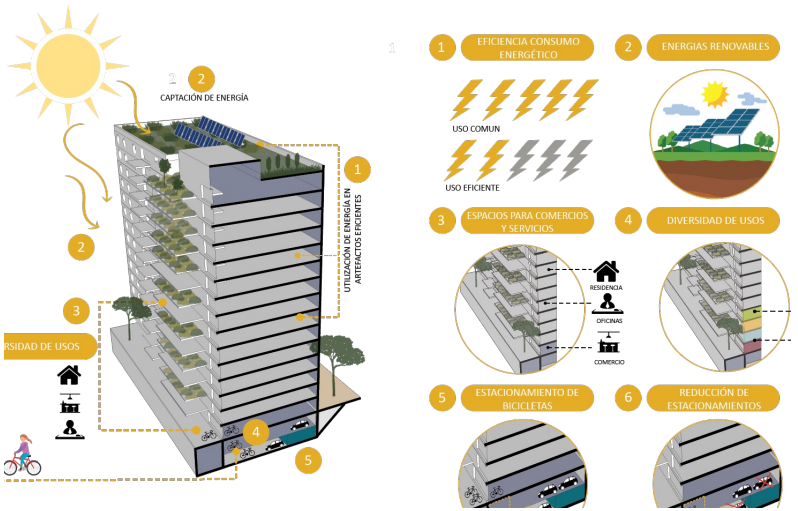

**Territorial Model with Edificability Standards:**

Urban development with high density and sustainable buildings in several centralities. Densification and connectivity of the Green Urban Network. Walkability. Soil permeability. Restoration of ecological cycles.

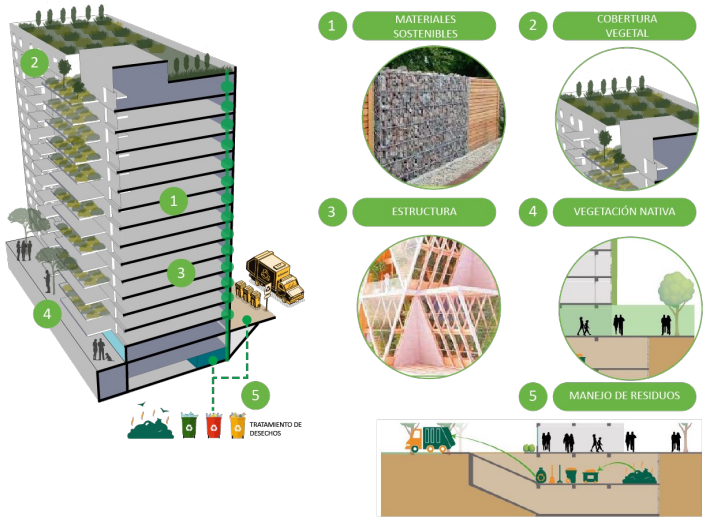
## 1. Water consumption

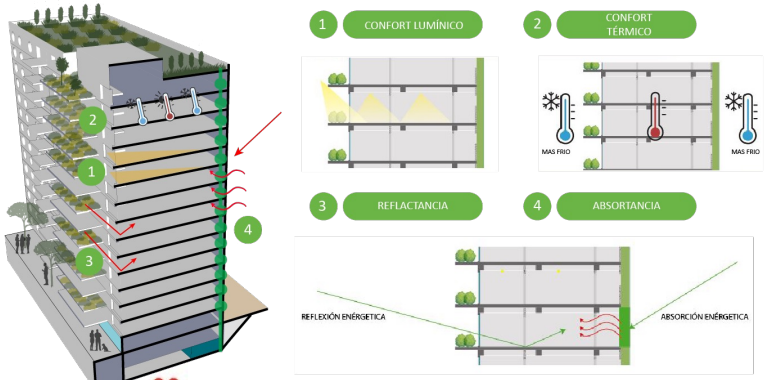



## 2. Energy, sustainable mobility, use diversification




## 3. Sustainable materials, green infrastructure, public recreational space maintenance, Bioclimatic and heat island effect standards

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MOBILITY

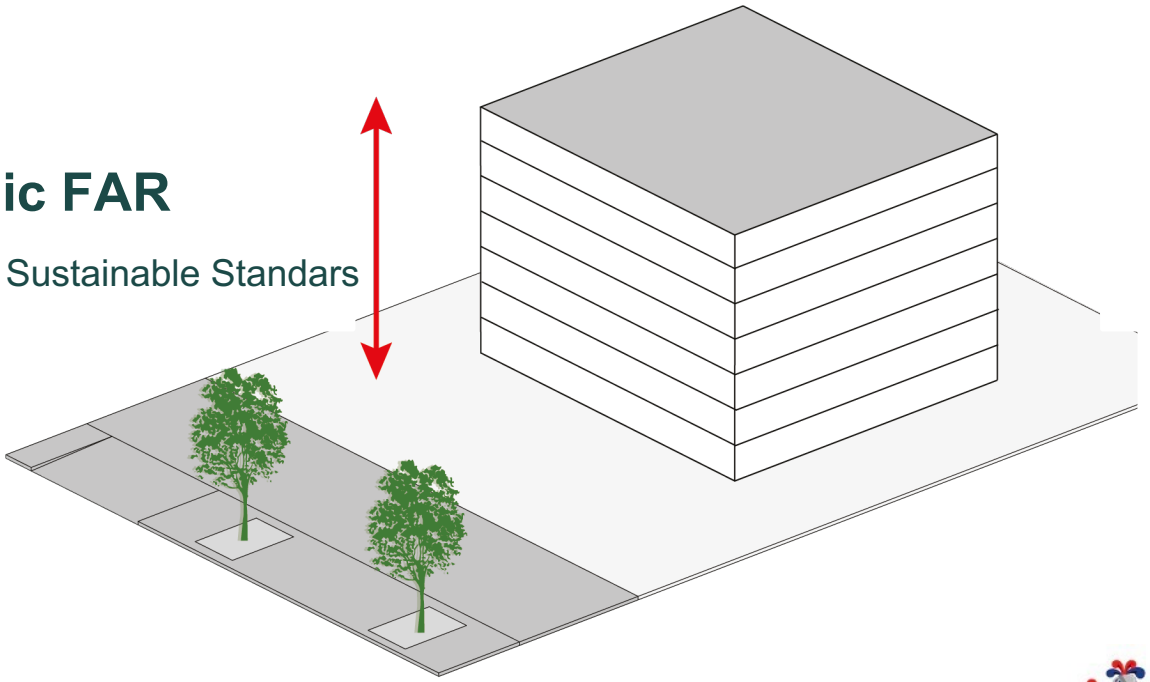
LAND

ENVIROMENT

# Floor Area Ratio (FAR)

## Basic FAR

Basic Sustainable Standars



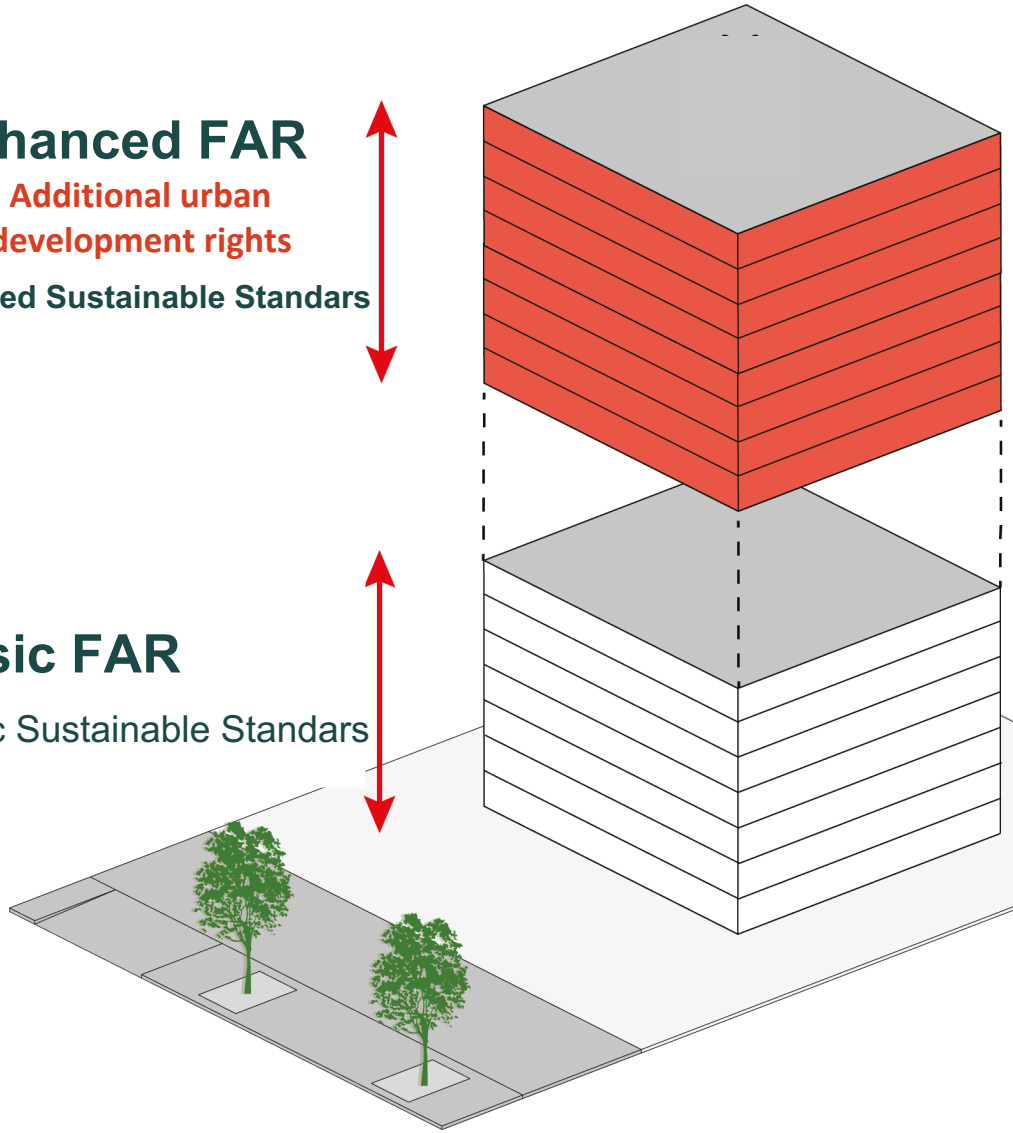
Example:
- Bike parking
- Waste separation and management
- Groundfloor integration to the public space

# Floor Area Ratio

## Enhanced FAR

**Additional urban development rights**

**Increased Sustainable Standars**



Example:
- Efficiency in water consumption
- Efficiency in energy consumption
- Plant cover

## Basic FAR

Basic Sustainable Standars

Example:
- Bike parking
- Waste separation and management
- Groundfloor integration to the public space

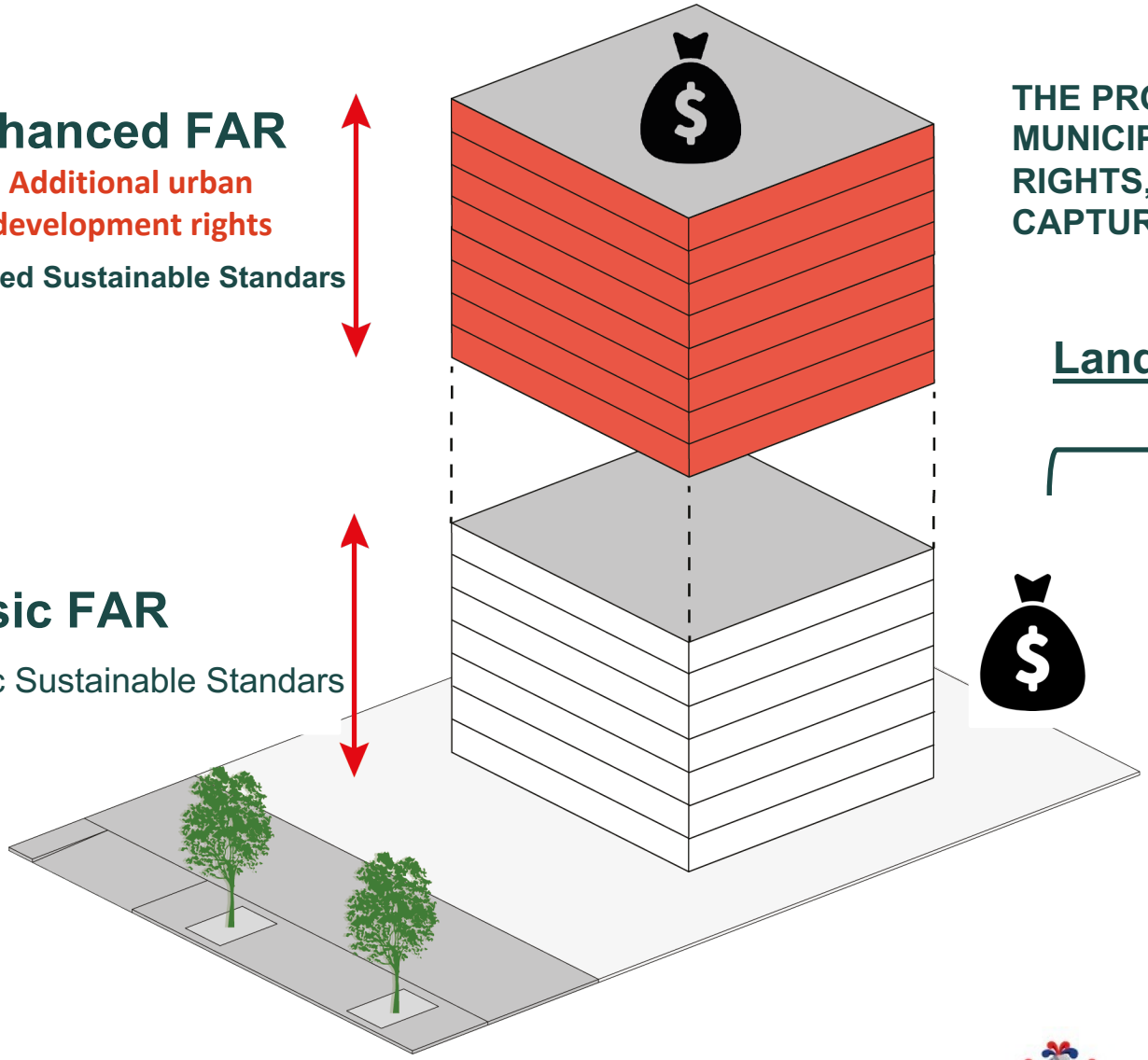
## Enhanced FAR

**Additional urban development rights**

**Increased Sustainable Standards**

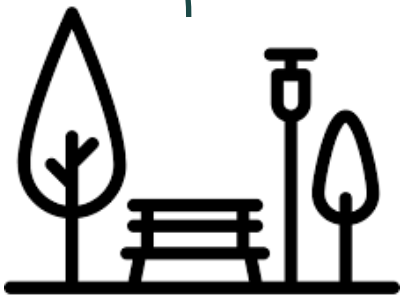
## Basic FAR

Basic Sustainable Standards



**THE PROJECT HAS TO PAY TO THE MUNICIPALITY FOR ACQUIRED AIR RIGHTS, THROUGH LAND VALUE CAPTURE**

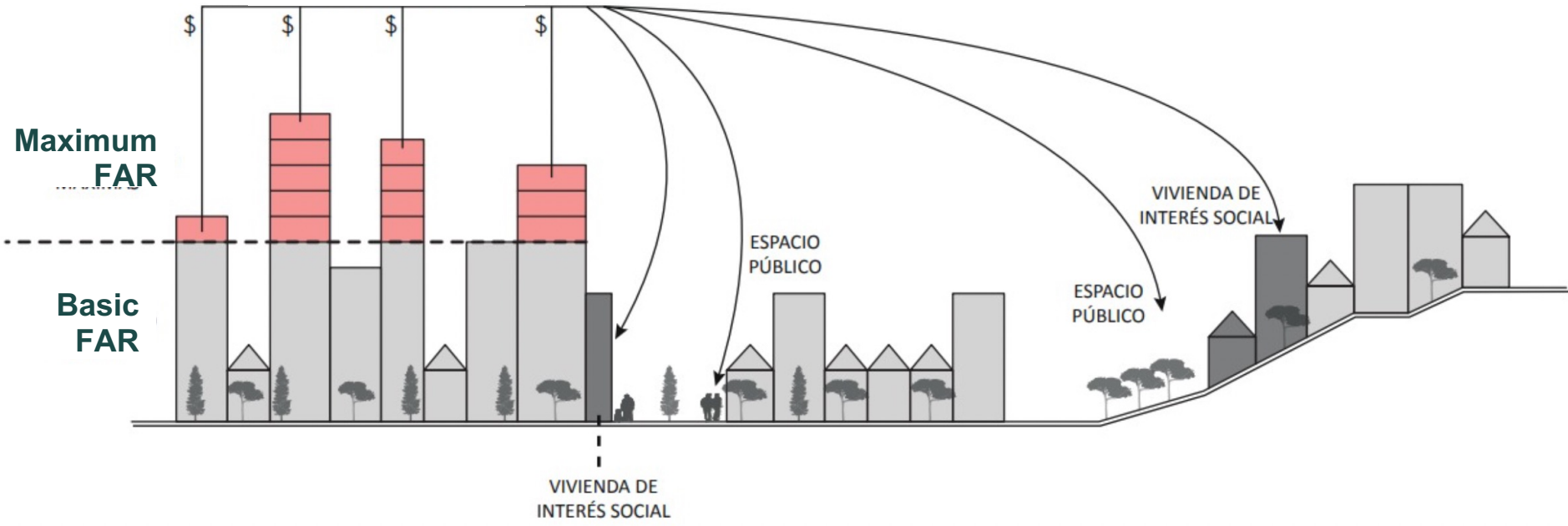
## Land Value Capture



**THE PROJECT HAS TO PAY TO THE MUNICIPALITY FOR ACQUIRED AIR RIGHTS, THROUGH LAND VALUE CAPTURE**

**LVC IS INVESTED IN LOW INCOME NEIGHBORHOODS IN NEED OF INFRAESTRUCTURE AND AMENITIES**

Land Value Capture - COD



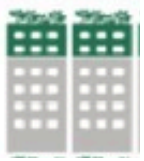
## To acquire air rights in centralities and TOD areas…

http://www.emaseo.ec/noticias/patrocinado-quito-una-ciudad-que-mira-al-reciclaje

## Developers have to apply sustainable standards and pay the Land Value Capture to the Municipality

## Municipality redistributes LVC in low income neighborhoods Quito

http://www.quitoinforma.gob.ec/2021/02/08/e

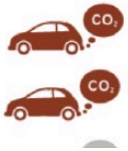


45+ approved buildings

113,138 Lt of retained water
294 000 gallons of water


647 565 Lt of saved water
323 781 bottles of potable water


162 933 Lt of treated grey water
36 207 Lt of water discharges




50% in energy consumption

50% in energy consumption
Generated on site

48% of ungenerated waste

20% of built area with green infrastructure.

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# THANK YOU