



MÉXICO
GOBIERNO DE LA REPÚBLICA



SEDATU
SECRETARÍA DE
DESARROLLO AGRARIO,
TERRITORIAL Y URBANO

New Approaches for Climate Finance at Municipal Level to Build Resilient, Inclusive and Sustainable Growth in Cities



Mexico Overview | Urban Sprawl



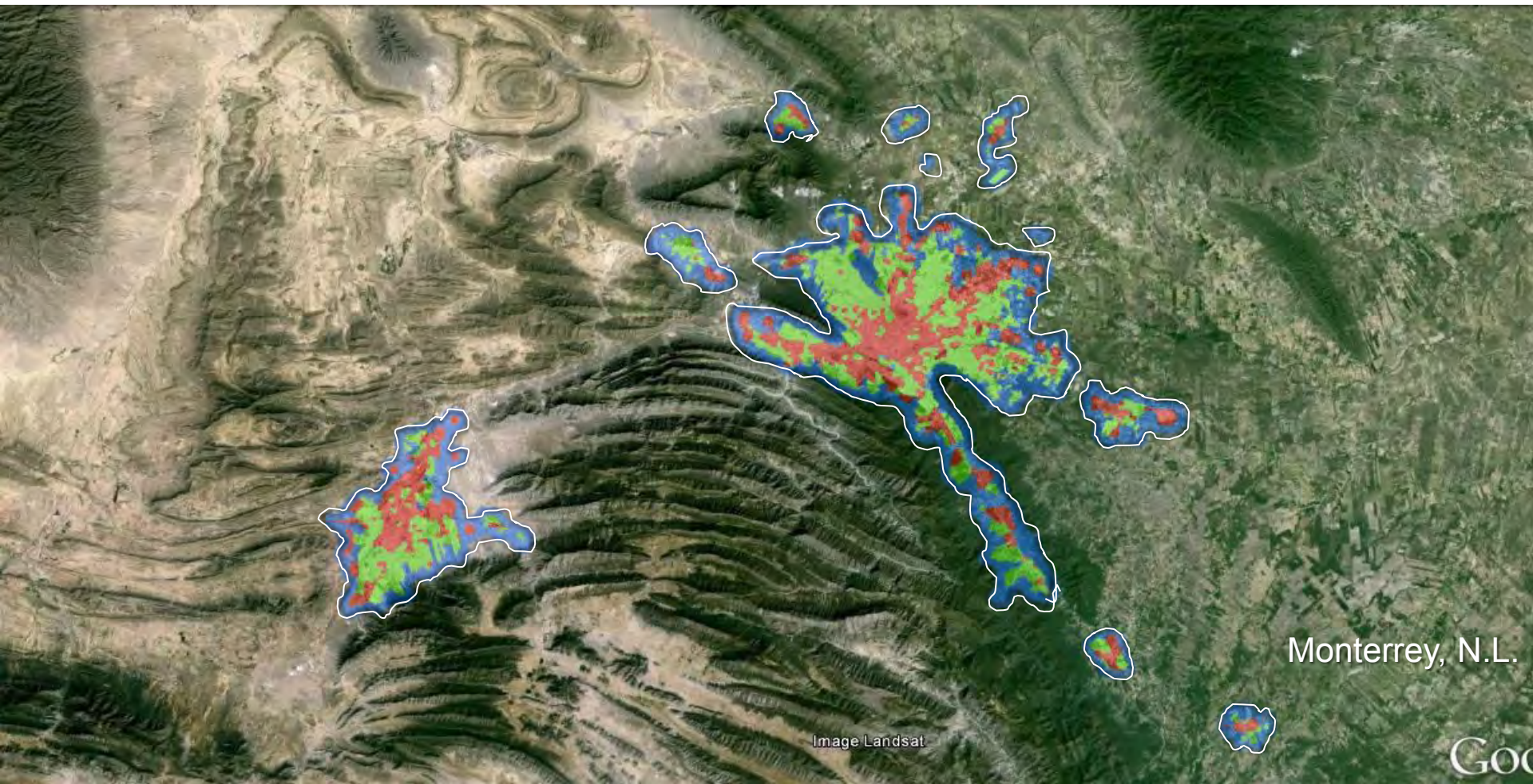
From 1980 to 2010 the urban population grew **2 times** as the surface of cities increased **8 times**¹

In 30 years **1 million 370 thousand hectares** have changed from forest, agricultural and preservation uses to urban land²

National Urban & Housing Policy

Containing Urban Sprawl

In Mexico, most local governments do not have an updated Urban Masterplan. In order to address urban expansion while the plans are being developed; **SEDATU has established Perimeters of Urban Restrain**. These perimeters have been created as an emerging strategy to contain urban growth by the allocating federal investment and subsidies within the established boundaries only.



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Land Reserves

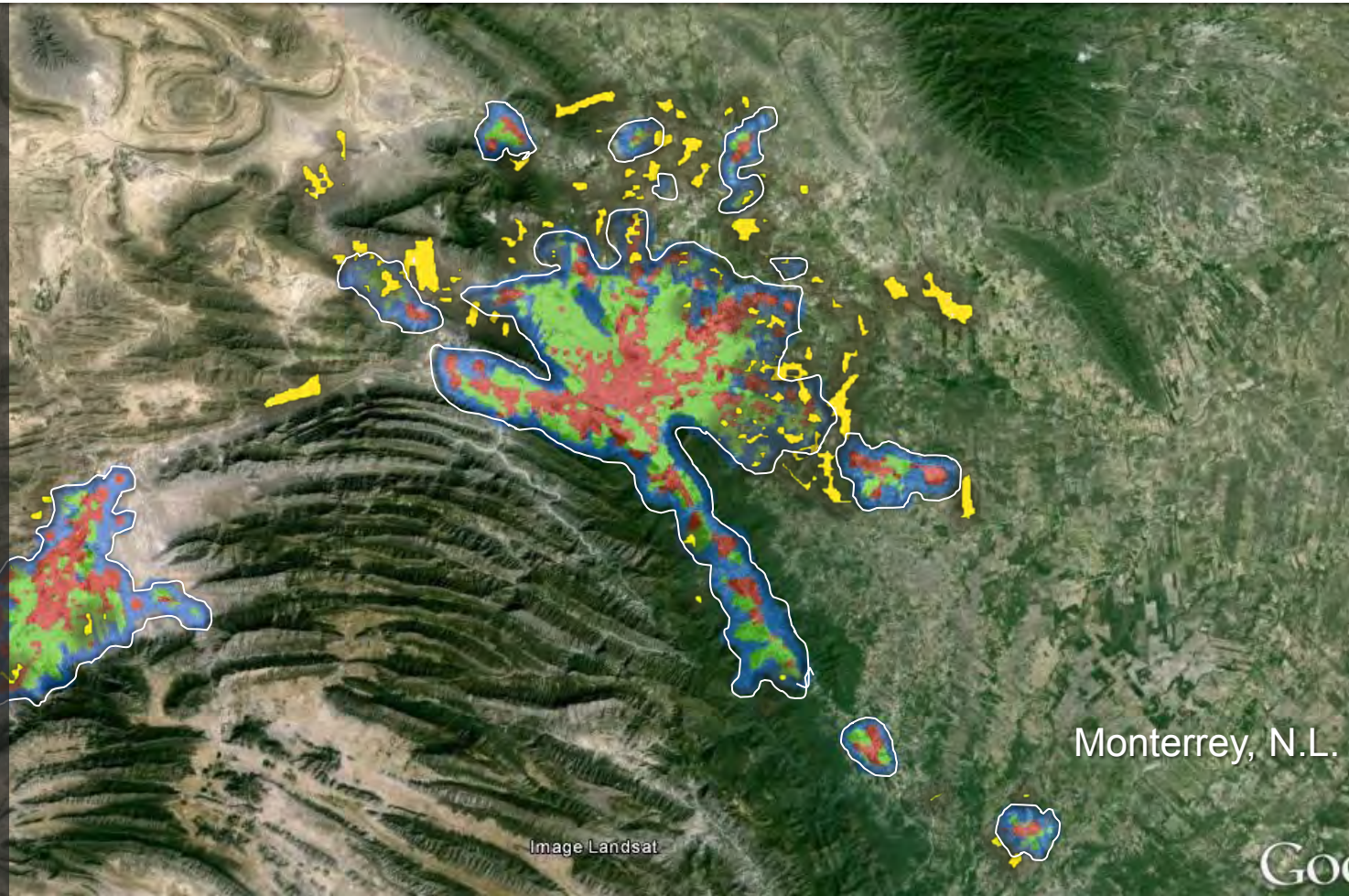
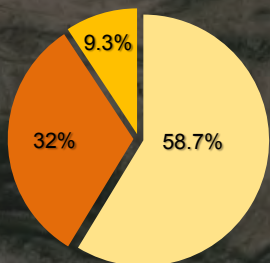
There are **110,000 hectares** of reserves registered in Mexico

68% of them qualify to obtaining subsidies for housing projects

58.7% Located within the perimeters - 64,844 Ha

41.3% Located outside the perimeters -35,363 Ha

9.3% May obtain subsidies subject to a previous assessment -10,288 Ha

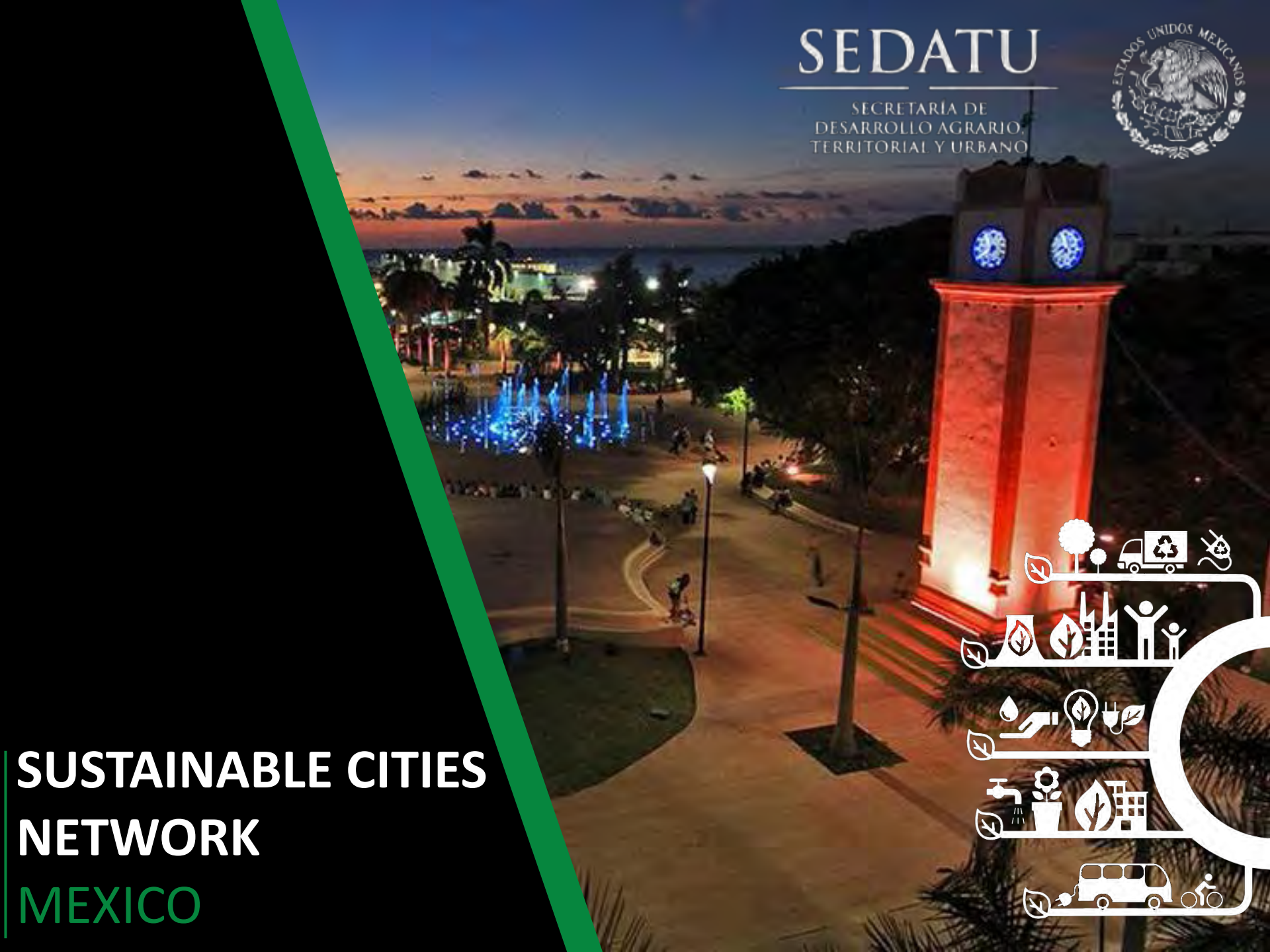
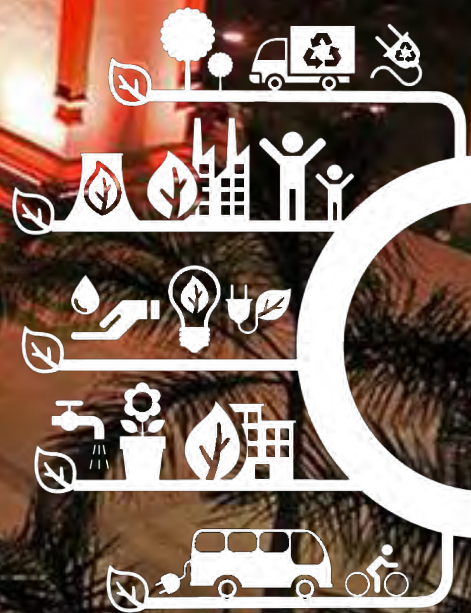


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SUSTAINABLE CITIES NETWORK MEXICO





- Ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums
- Provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport.
- Enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries
- Strengthen efforts to protect and safeguard the world's cultural and natural heritage
- Reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management
- Provide universal access to safe, inclusive and accessible, green and public spaces.
- Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning
- By 2020 **substantially increase** the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels

The SEDATU's Sustainable Cities Strategy is defined as a technical and integrated management instrument containing a cross agenda with members of the public, private and social sectors, defining programs, projects, actions, interventions and investments concurrent and targeted for a sustainable and efficient urban renewal.

All this on a feasible implementation scenario, measurable on medium and long term, in order to promote a city with better quality of life within the parameters of environmentally friendly . Focusing and directing the concurrent actions among levels of government.





- **CAMPECHE**
CAMPECHE
- **ISLA COZUMEL**
QUINTANA ROO
- **TEHUACÁN**
PUEBLA
- **HUAMANTLA**
TLAXCALA
- **JUCHITEPEC**
MORELOS

#CIUDADESSUSTENTABLES





**CD SUSTENTABLE
CAMPECHE**
MÉXICO-FRANCE


Focus programs of various agencies of the Government on the action polygons defined in the Strategy of Sustainable City. Multilateral collaboration.




Integral Planning



Sustainable Urban Mobility & Devpmt



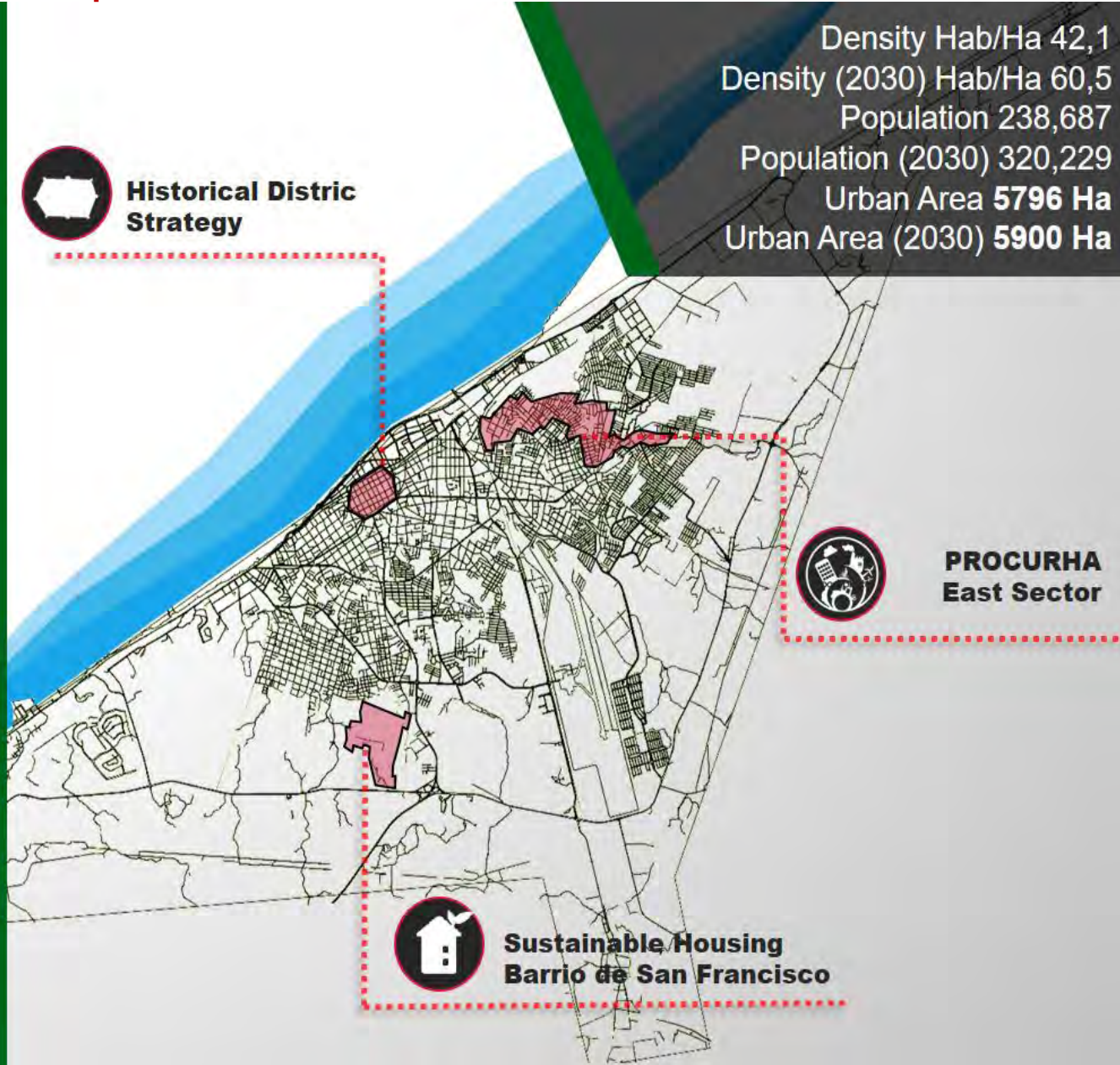
Social Fabric Regeneration



Governance



Historical Distric Strategy



Density Hab/Ha 42,1
Density (2030) Hab/Ha 60,5
Population 238,687
Population (2030) 320,229
Urban Area **5796 Ha**
Urban Area (2030) **5900 Ha**



PROCURHA East Sector



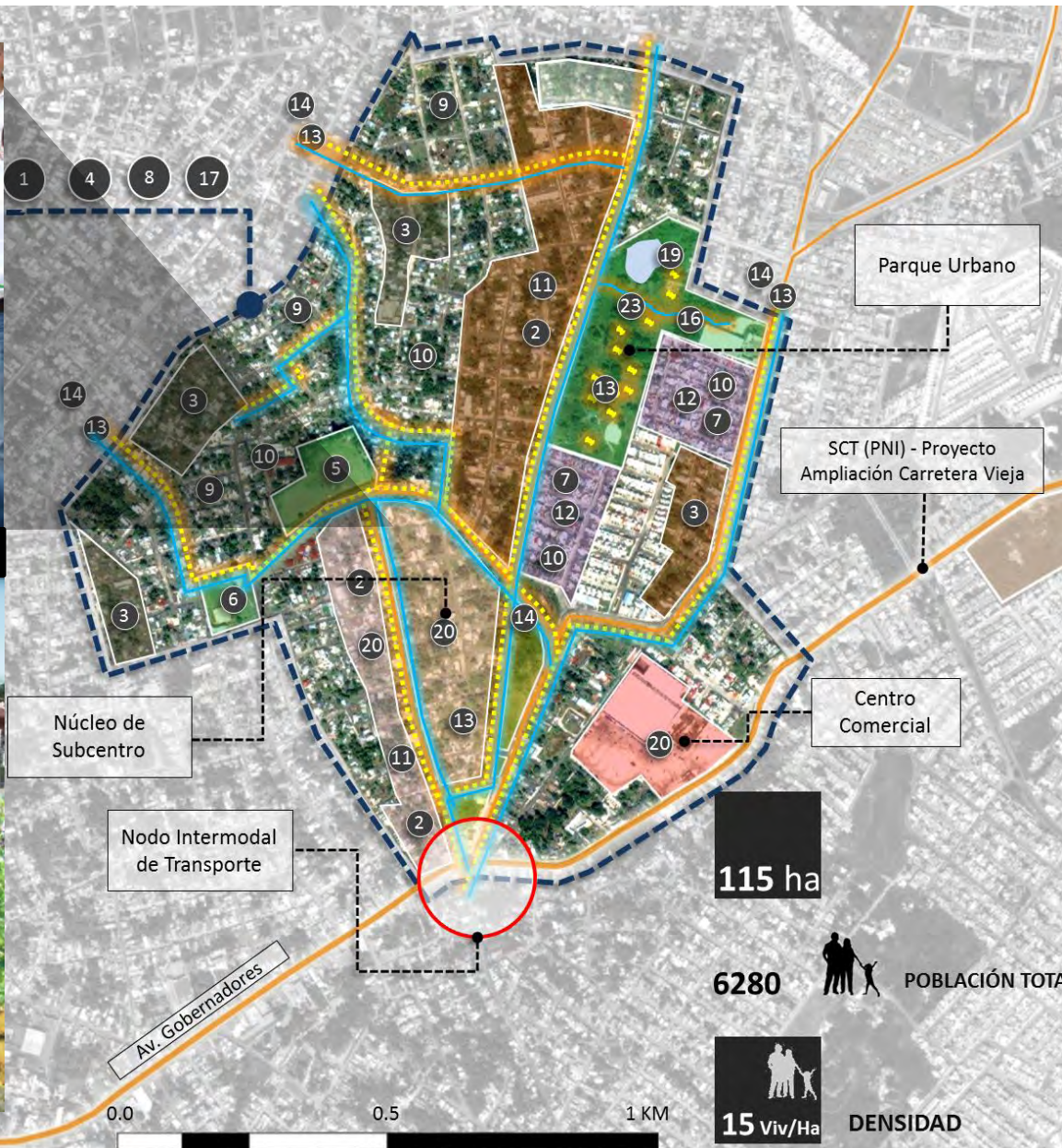
Sustainable Housing Barrio de San Francisco

Sustainable Cities Network

CAMPECHE, CAMPECHE



PROCURHA HOUSE

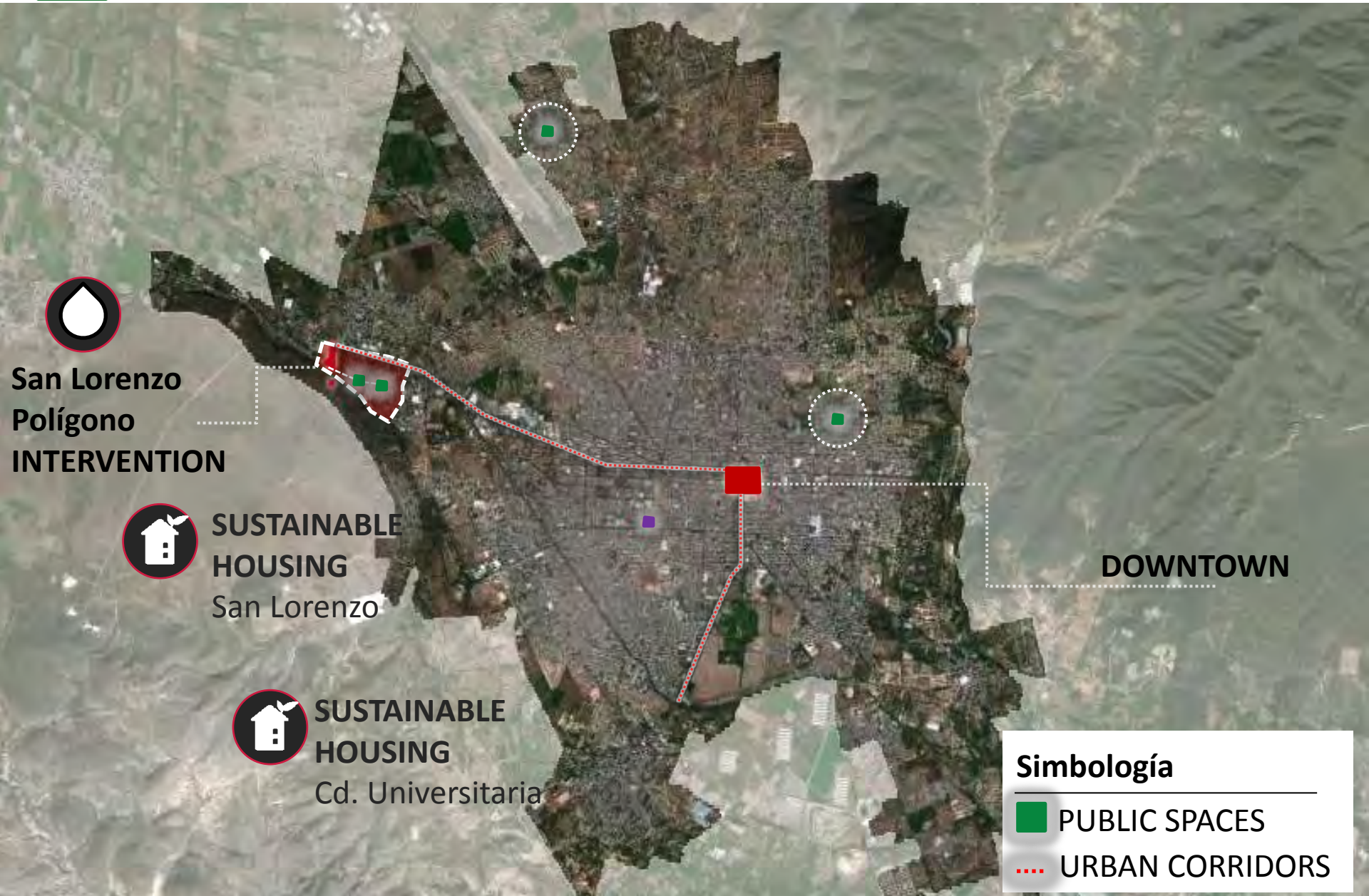




CD SUSTENTABLE TEHUACÁN

MÉXICO-GERMANY-ONU HABITAT





**San Lorenzo
Polígono
INTERVENTION**



**SUSTAINABLE
HOUSING**
San Lorenzo



**SUSTAINABLE
HOUSING**
Cd. Universitaria

DOWNTOWN

Simbología

-  PUBLIC SPACES
-  URBAN CORRIDORS

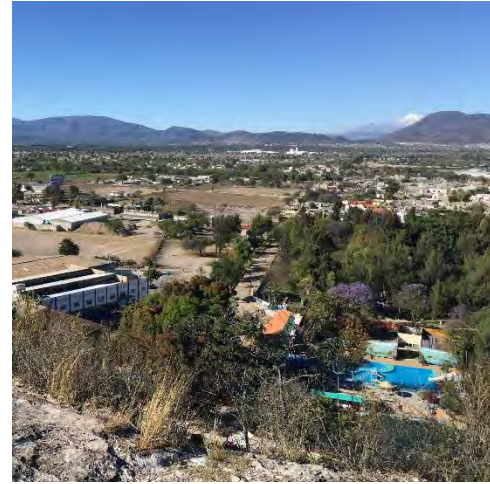
 ENVIRONMENTAL & URBAN
MANEGMENT

 PLANNING 6 GOVERNANCE

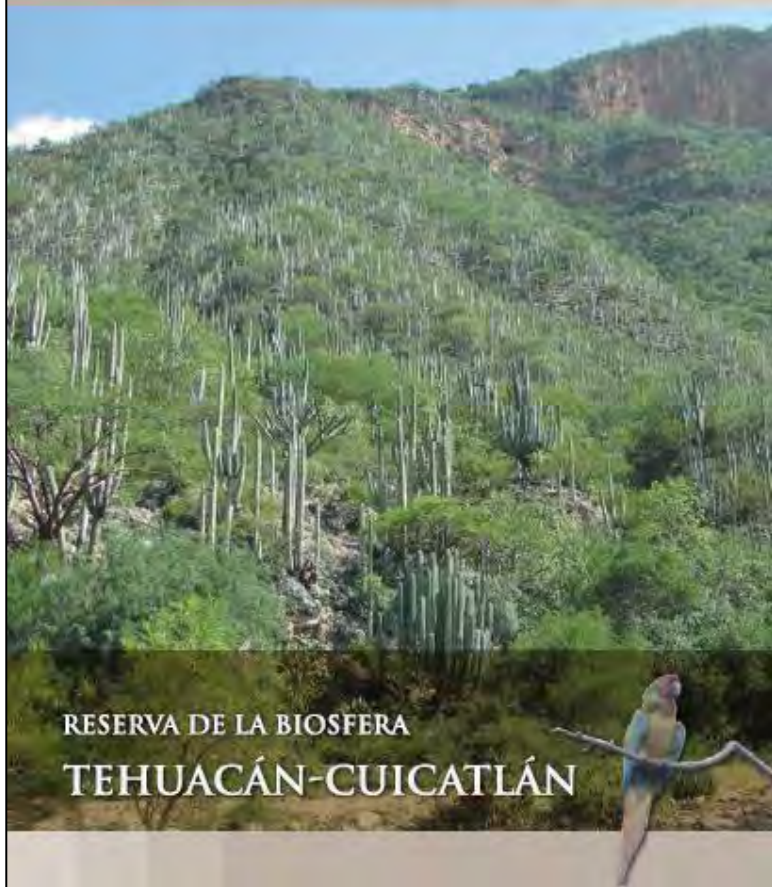
 URBAN CONSOLIDATION

 PUBLIC SPACES

 SUSTAINABLE HOUSING



PROGRAMA DE MANEJO



RESERVA DE LA BIOSFERA
TEHUACÁN-CUICATLÁN

Biosphere Reserve Management Program

- Tehuacan is strategically located between Mexico City and Oaxaca City.
- It is referred to as the floristic province Cuicatlán Tehuacan Valley , representing approximately 0.05 % of the national territory.
- Tehuacan has a Protected Natural Area (PNA) declared EL18 September 1998 , in order to protect the biodiversity of the region and promote processes that allow the sustainable development of the communities living there .
- This region is characterized by its great biological and cultural wealth where more than 10,000 years have developed indigenous communities.





**CD SUSTENTABLE
COZUMEL MaB
UNESCO**

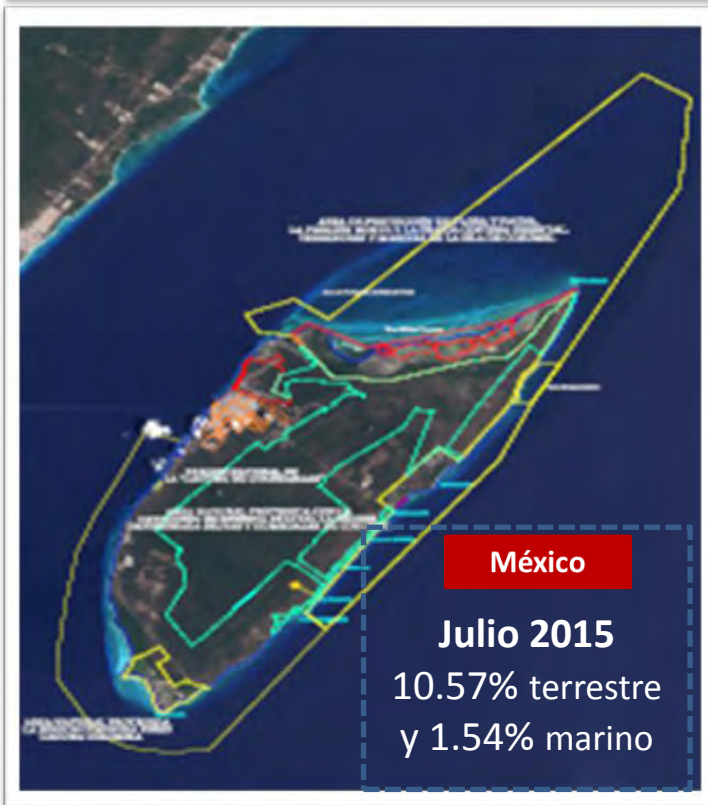
MÉXICO-UNESCO



Aichi Goals for biodiversity



Área Natural Protegida	National Goal	Cozumel:
Land	17%	51%
Marine	10%	90%



Recently Cozumel joined to the World Network of Biosphere Reserves MaB UNESCO Program

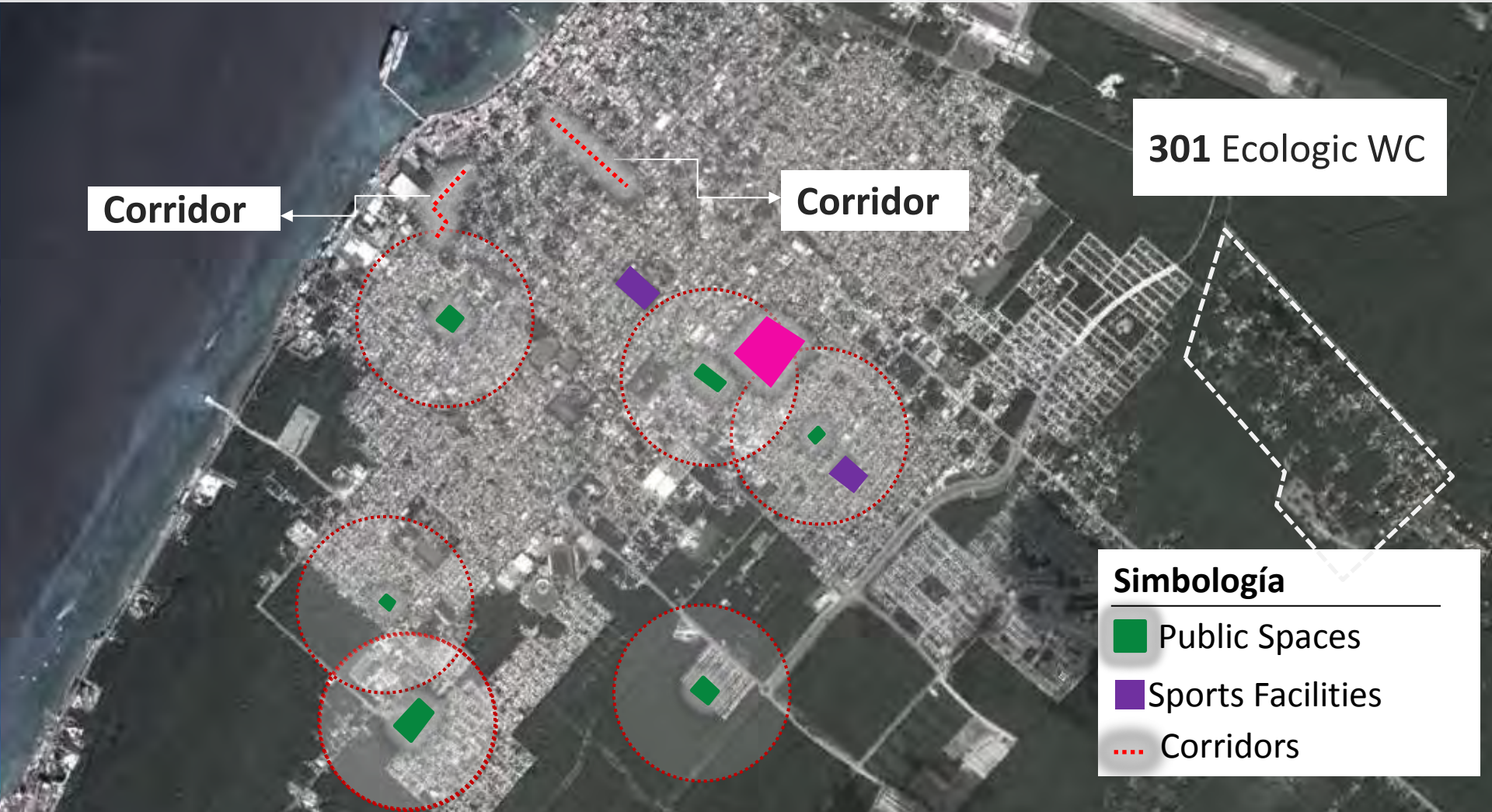
International Conservation considers the island as a "Key Biodiversity Area" (KBA) for the wealth of irreplaceable species that inhabit the island; BirdLife International is a "Endemic Bird Area" (EBA) for the richness of endemic species and subspecies of birds; North American Bird Conservation Initiative recognized as an important region for migratory birds; Conservation International identifies as part of the "Hot Spot" Mesoamerican and the Alliance for Zero Extinction is a site with a significant concentration of species threatened with imminent extinction.

It is proposed :

- Update of Urban Planning & Ecological Planning instruments .
- Risks map update.
- Sustainable Urban Mobility
- Development of the Urban Environmental Management System

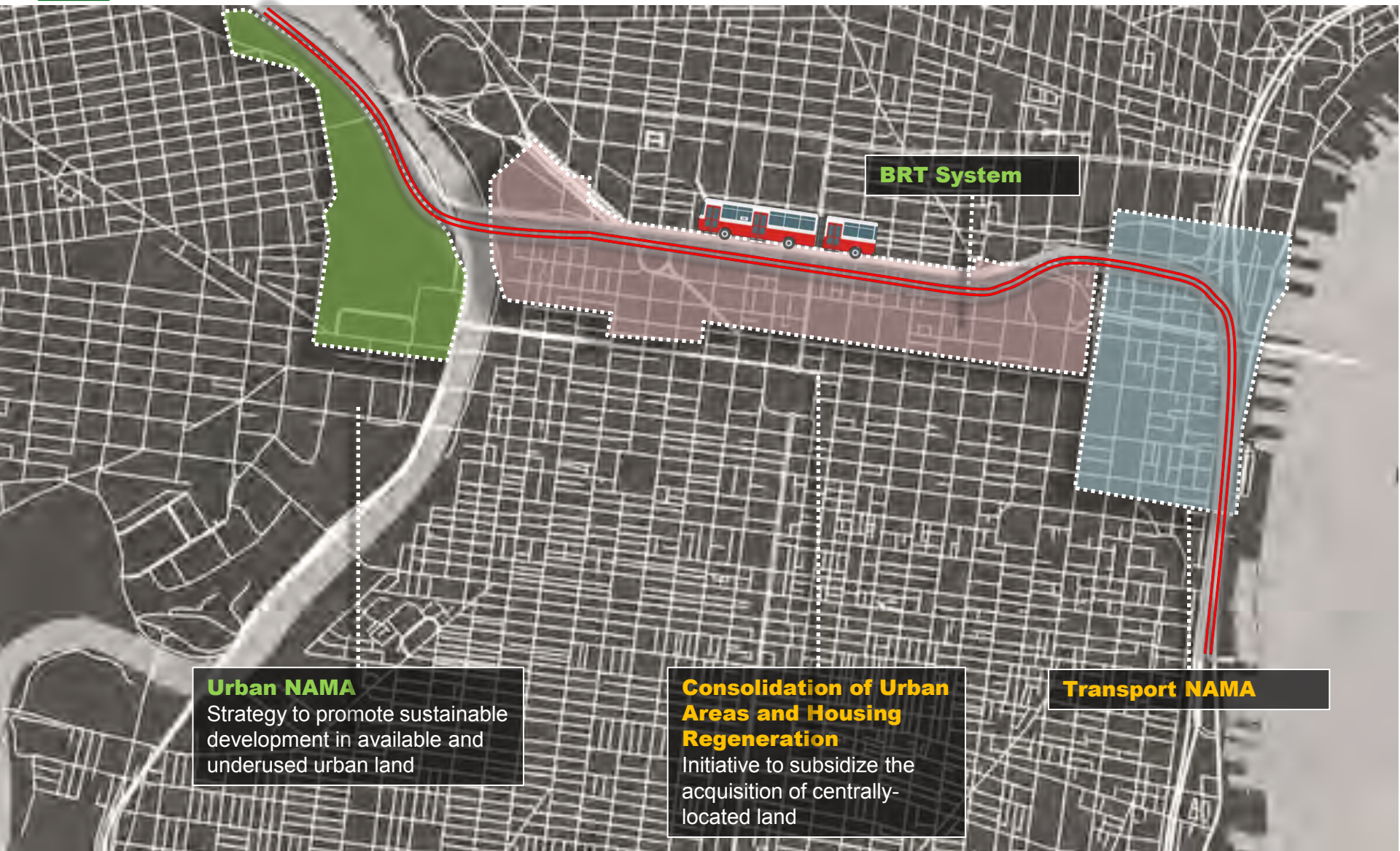


PUBLIC SPACES NETWORK & INTERVENTIONS
11 parks



Instruments for Climate Action

Territorial Vision against Climate Change



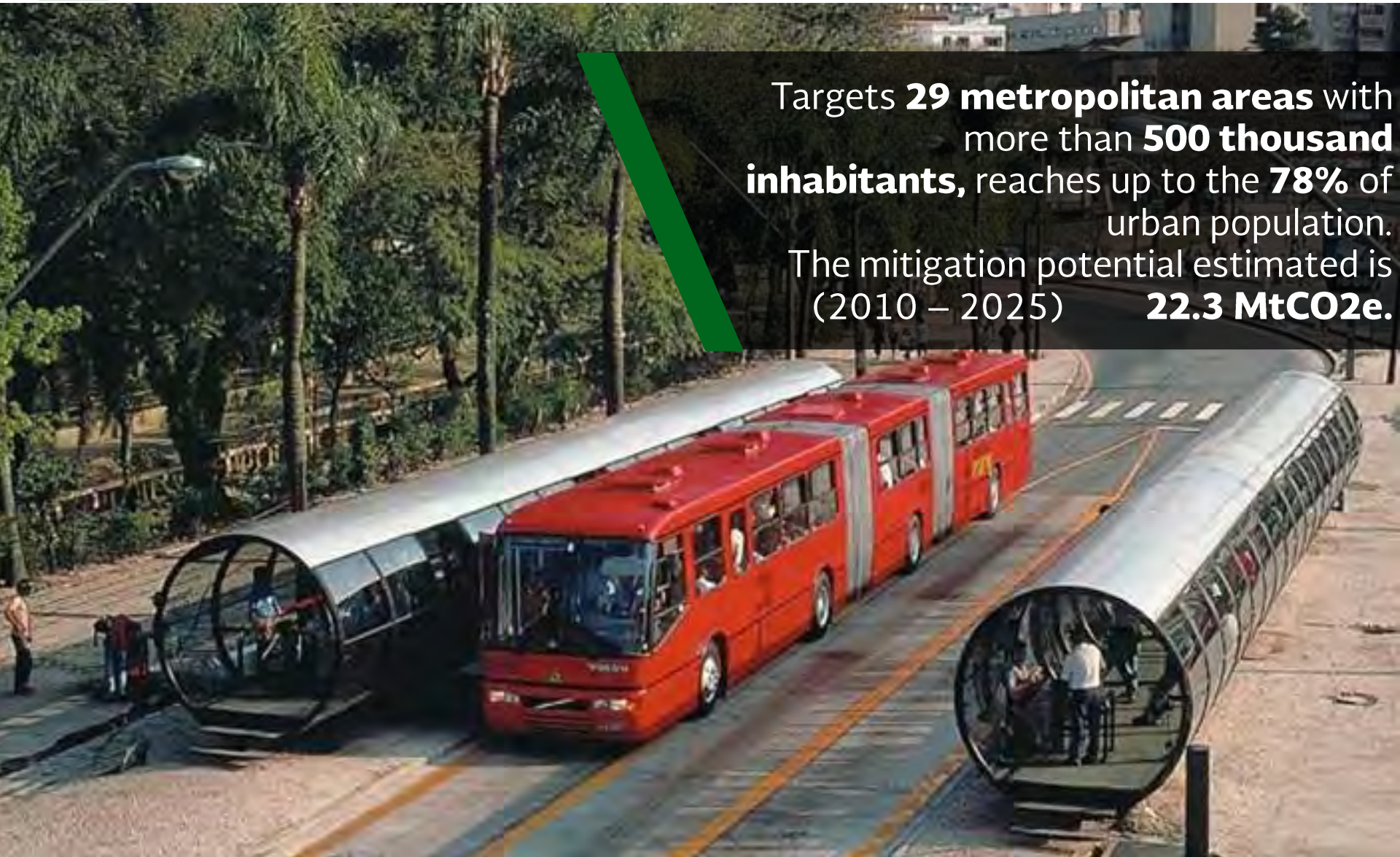
BRT System

Urban NAMA
Strategy to promote sustainable development in available and underused urban land

Consolidation of Urban Areas and Housing Regeneration
Initiative to subsidize the acquisition of centrally-located land

Transport NAMA

Targets **29 metropolitan areas** with more than **500 thousand inhabitants**, reaches up to the **78%** of urban population. The mitigation potential estimated is (2010 – 2025) **22.3 MtCO₂e.**



Instruments for Climate Action

Urban NAMA

Los puntos claves del acuerdo de París COP21

El pacto histórico, aprobado por 195 países, se llevará a cabo a partir del 2020



<p>Temperatura 2100</p>	<p>Financiamiento 2020-2025</p>	<p>Diferenciación</p>	<p>Objetivos de emisiones 2050</p>
<p>Mantener el calentamiento por debajo de los 2° C</p> <p>Continuar todos los esfuerzos para limitar el aumento de las temperaturas a 1.5° C</p>	<p>Los países desarrollados deben proporcionar 100 mil millones de dólares a partir del 2020 como base</p> <p>Esta cantidad debe ser actualizada para el 2025</p>	<p>Los países desarrollados deben seguir tomando la iniciativa en la reducción de gases de efecto invernadero</p> <p>Se anima a los países en desarrollo para mejorar sus esfuerzos y moverse con el tiempo a los recortes</p>	<p>Apuntar a las emisiones de gases de efecto invernadero a pico lo más pronto posible</p> <p>Desde 2050: reducciones rápidas para lograr un equilibrio entre las emisiones procedentes de la actividad humana y la cantidad que puede ser capturado por los sumideros</p>
<p>Reparto de la carga</p>	<p>Mecanismo de Revisión 2023</p>	<p>Daño climático</p>	
<p>Los países desarrollados deben proporcionar recursos financieros para ayudar a los países en desarrollo</p> <p>Se invita a otros países a apoyar de forma voluntaria</p>	<p>Una revisión cada cinco años</p> <p>Primer revisión mundial : 2.023</p> <p>Cada revisión informará a los países en la actualización y mejora de sus promesas</p>	<p>Los países vulnerables han ganado el reconocimiento de la necesidad de evitar , minimizar y hacer frente a las pérdidas sufridas debido al cambio climático</p>	

As part of the Mexico's Commitments to mitigate and adapt to the effects of Climate Change (CC) , the SEDATU established the " Urban Climate Change Strategy "

Its main components are the **Nationally Appropriate Mitigation Actions (NAMA)**, to contribute to the commitments of our country to mitigate and adapt to CC in the urban sector.

URBAN NAMA / Key components

- Sustainable Public Spaces ,
- Consolidation Program Urban Reserves
- Urban Development Programs
- Infrastructure Program
- Water services
- Solid waste management

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URBANA NAMA

Pilot

Valle Dorado

Nuevo Laredo Tamaulipas

2016

Participation of the private sector in the implementation of the Urban NAMA

The first Urban NAMA Pilot has been designed in coordination with *Hogares SM de Mexico*, pursuing significant goals of **CO₂ emissions mitigation**.

Valle Dorado project is a residential development located in Nuevo Laredo, Tamaulipas. Alongside the border between Mexico and the United States.

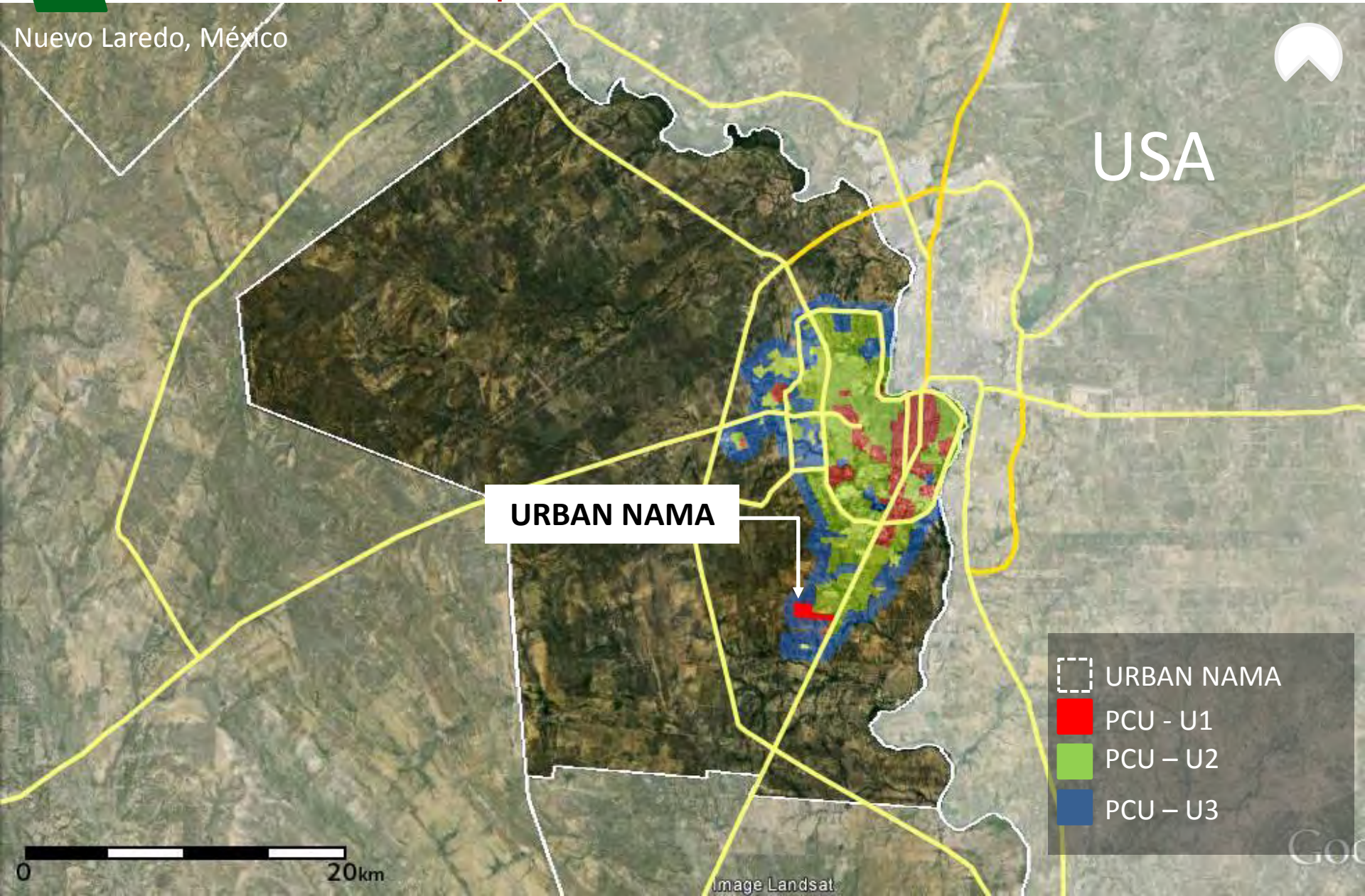
The project includes the following features:

- **209 housing units** with integrated eco-technologies for low energy consumption and grey water treatment
- **Communal laundry facilities** (to promote smart water management and water recycling as well as social cohesion)
- **LED public lighting fixtures**
- **Photovoltaic farm** for clean energy supply in common areas
- **Solid waste management**



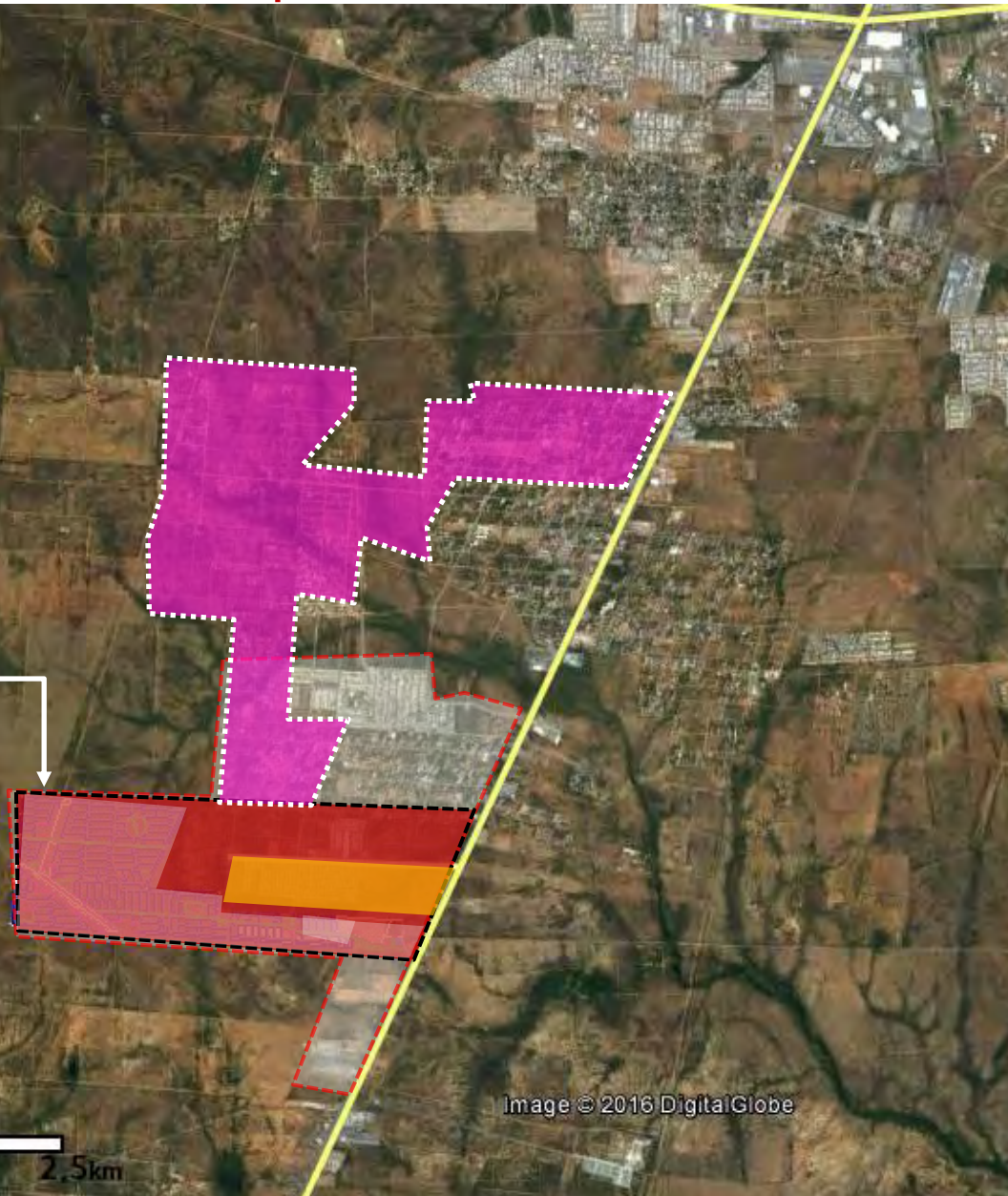
Instruments for Climate Action

Urban NAMA Location



Nuevo Laredo, México

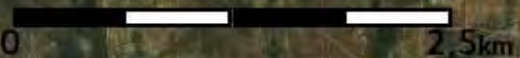
Valle Dorado



SIMBOLOGÍA

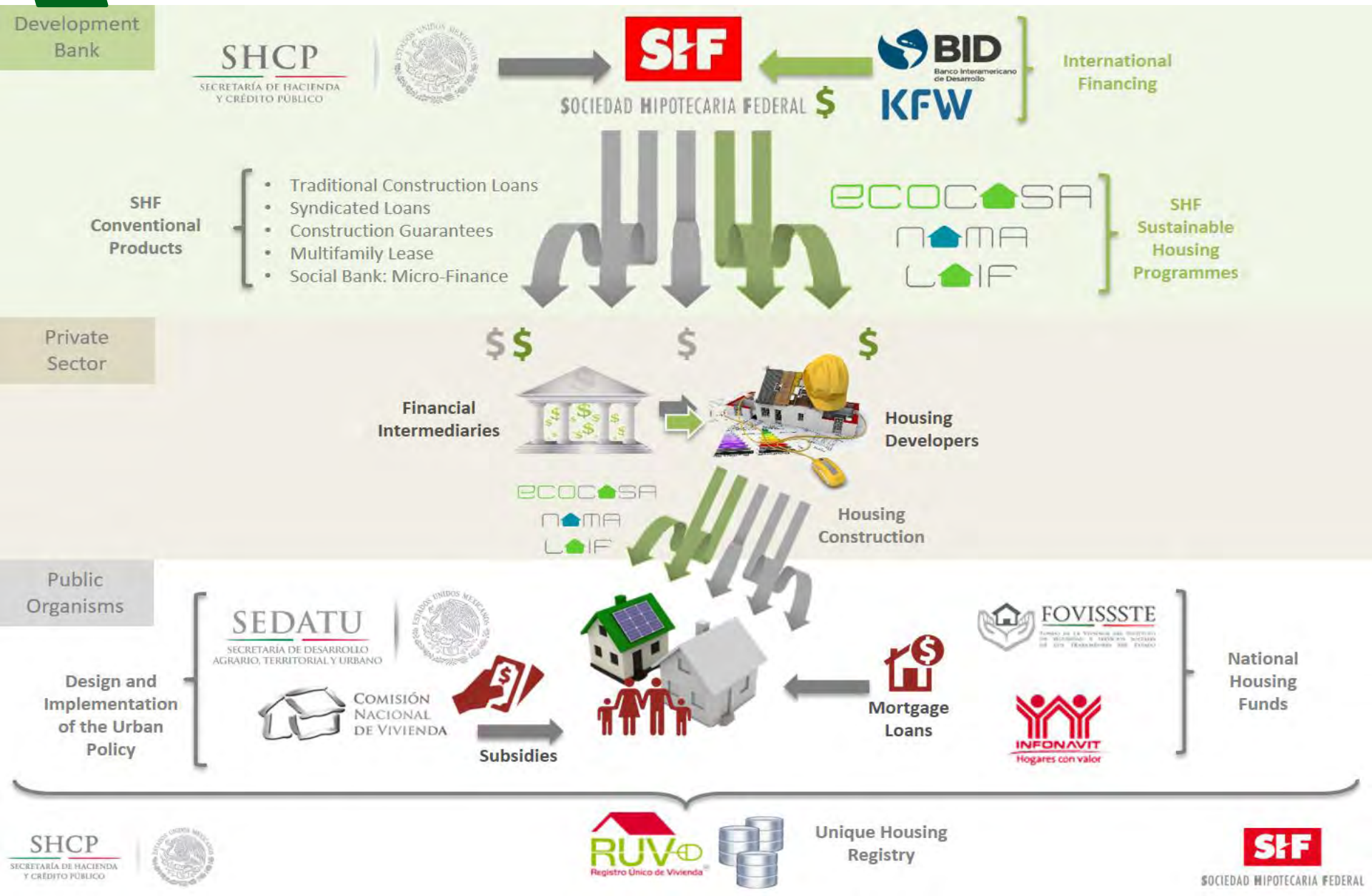
-  NAMA URBANA
-  Z. U. MARGINADA
-  ÁREA DE IMPACTO
-  RESERVA TERRITORIAL

Image © 2016 DigitalGlobe



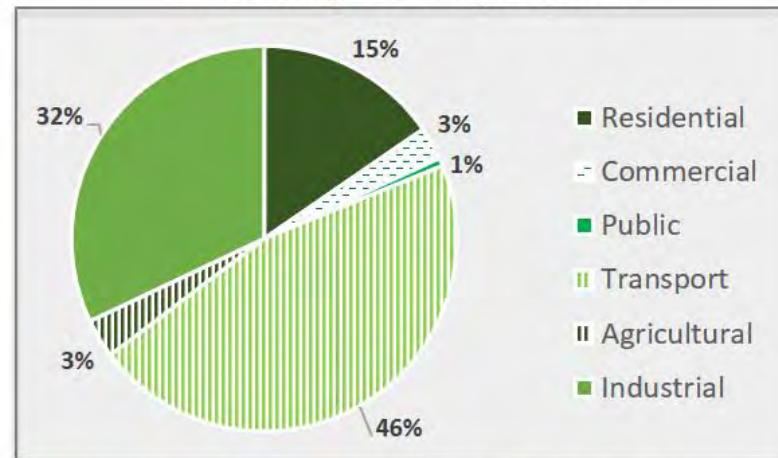
Instruments for Climate Action

Mexican NAMA Initiative





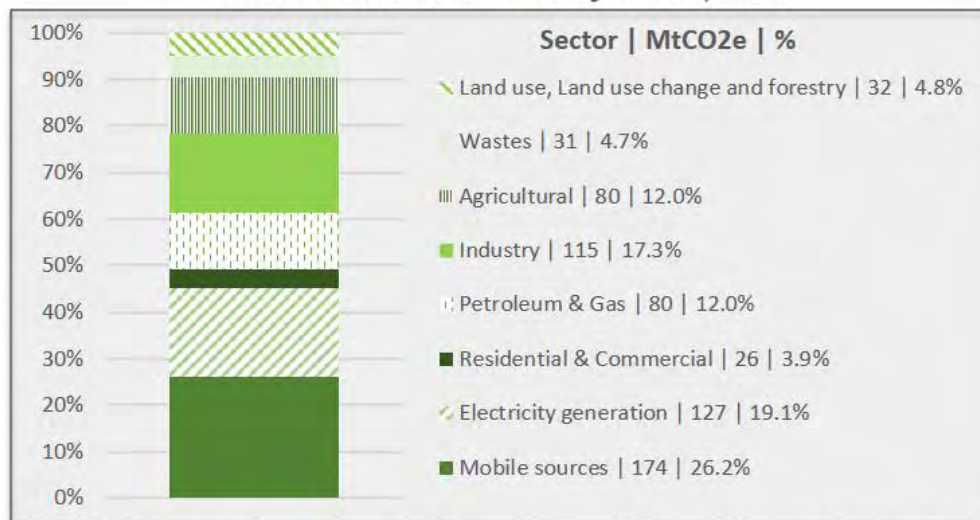
Total energy consumption, 2014



Source: Energy Information System (Sistema de Información Energética), Ministry of Energy (SENER).

- In 2014, the Mexican Housing Sector consumed 15% of the total energy (754.14 PJ).
- In 2013, national greenhouse gases¹ (GHG) emissions were **665 MtCO₂e**, from which **26 MtCO₂e** corresponded to the Residential and Commercial Sector, a **3.9% of the total national GHG emissions**.
 - According to its final use, CO₂ represented 75.1% of the total national GHG emissions, from which Residential Sector accounted for 7.4%.

National GHG emissions by sector, 2013



Source: National Inventory of Greenhouse Gases and Compounds Emissions, Ministry of the Environment and Natural Resources (SEMARNAT).

NAMA Facility

The **objective of the NAMA FC** is to facilitate the progressive incorporation of small and medium developers to the market of low-carbon housing, by removing investment barriers and improving access to finance for the construction of low emissions homes.

Financial Mechanisms



Loan Guaranties for Financial Intermediaries.



Direct subsidies for small and medium developers to cover the additional cost of the technologies.



Technical Assistance for small and Medium developers.

Status November 2015

- Study: Eligibility Criteria for Developers and Financial Intermediaries
- Study: Analysis of materials and eco technologies
- Implementation Plan
- Bidding Process to select the Company that will Implement the Project.
- Project Implementation (2016-2019)

Financing for **8,000 energy efficient houses** → 20% CO₂ emission reductions
Eligibility Criteria = EcoCasa

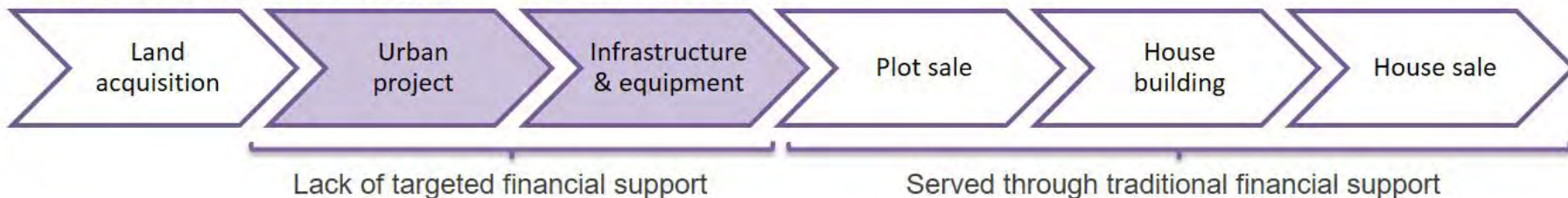
SHF is developing a programme to finance the necessary infrastructure and equipment that boost the sustainability of the new housing developments in the country. Aiming to raise the quality of life of the population and the productive capacity of cities and regions under a sustainable development.



Designing smart cities

- Major challenges to tackle:
 - Housing, jobs and services are unlinked.
 - Lack of transport oriented development.
 - Urbanization of areas unsuitable for development.
 - Lack of urban infrastructure and equipment, related to high costs for their provision and maintenance.

Stages of the Housing Production Process



As a result of the New National Urban Policy, it is crucial promoting a model of sustainable Urban Development under a holistic approach.

Such model must be guided by an adequate growth scheme, efficient use of urban land, vertical development and the integration of a broader offer of housing units, infrastructure, urban equipment, services and accessible networks of transport



A total of 23 Development Certificates have been promoted and are being implemented in Mexico. This strategy accounts for a total of 631,202 housing units that will benefit approximately 2,523,000 inhabitants in comprehensive and sustainable communities



Further steps

New Approaches for Climate Finance

Certified
Developments



Urban NAMA

New Approaches for Climate Finance at
Subnational Levels to Build Resilient, Inclusive
and Sustainable Growth in Cities

- 1 The initiative will allow the penetration of the Urban NAMA to all Mexican cities
- 2 It will strengthen investment in low-carbon technologies
- 3 Accountability through MRV system
- 4 Broader range of components (eg. Transport, water services, solid waste, non-residential buildings, etc.)
- 5 Creditable NAMA for creating Carbon Bonds and potential opportunities in the Carbon Markets



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Regenerating the
Social Fabric



Effective government and
Legislations instruments



Effective Public
investment



Upgrading Urban
Infrastructure



Attracting investment
for Urban Development