CARBON NEUTRALITY + RESILIENCE

Great Metropolitan Area (GAM) of Costa Rica

Mobility

Increase public transport

Measures:

1)Non-motorised mobility

2)More efficient vehicles

3) Integrated planning with sustainable transport

4)Intermodal transport system

5)Development of an electric rail system for the GAM

Buildings

Adequate landuse

Measures:

1) Bioclimatic design

2) Active design (ecotechnology)

3) Dense and integrated urban centres

4) Reduce waste and value the building waste

5) Building materials Eco-labeling

Energy

Increase renewable energy

Measures:

1) Use of renewable energies for energy consumption

2) Distributed generation

3) Energy distribution linked to urban planning

4) Incentives and regulations

5) Use of biofuels for the energy generation

Waste

Adequate landuse

Measures::

1) Practices to reduce wastewater generation

2) Waste to energy

3) Composting and mechanical biological water treatment

4) Waste Reuse and recycling

5) Methane recovery from waste-water and landfills

Overall difference in the GHG emissions of the mitigation scenarios

Scenario	GHG emissions compared to 2010	Overall difference compared to the baseline scenario by 2030
Pessimist	83,05%	-12,94%
Medium	36,49%	-35,09%
Optimist	-0,16%	-52,36%

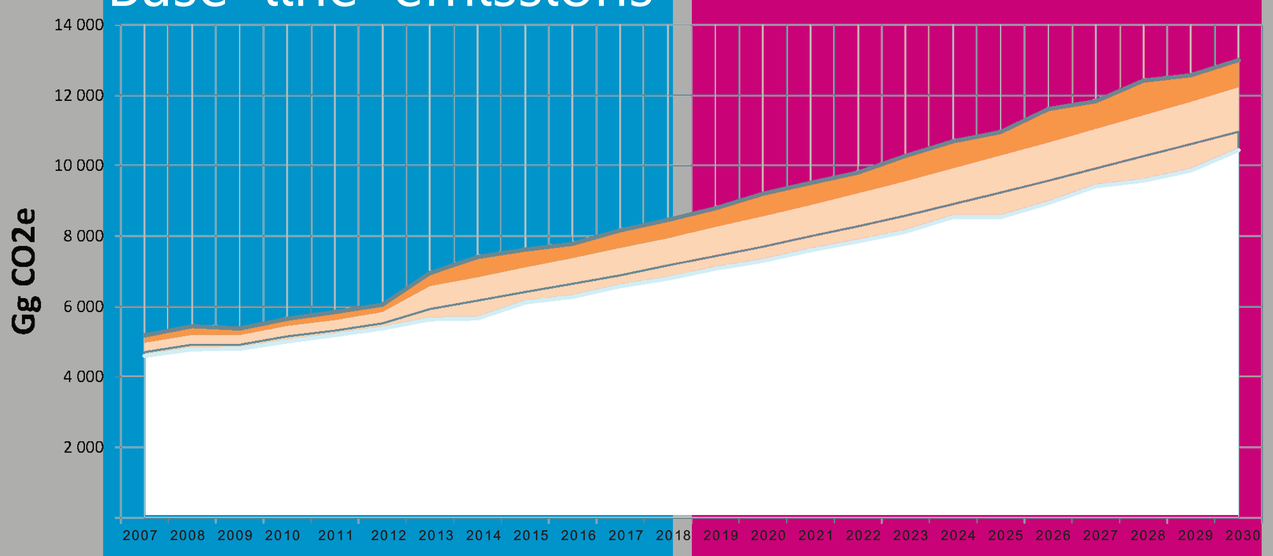
LCDS Vision

"To reach carbon neutrality and resilience for the Greater Metropolitan Area (GAM) of Costa Rica by 2030: to achieve this goal and to improve life quality of citizens, an adequate land use is essential to minimize the transportation of people and goods, increase the use of renewable energies, and build construction systems with lesser carbon footprint and with interlinked green areas".

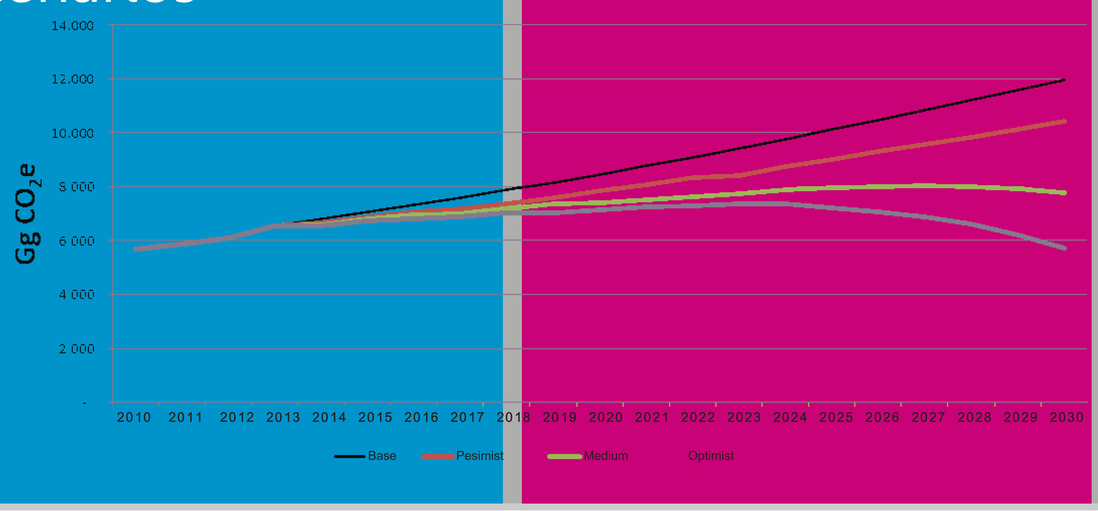
LCDS Aim

To transform the urban pattern of growth of the GAM, ways of mobility of its inhabitants, consumption processes and use of resources in order to reduce the GHG emissions and facilitate the goal of carbon neutrality of Costa Rica

Base line emissions



Scenarios



LCDS Resilience

will be achieved throgh climate smart infrastructure and green public spaces

In the last thirty years the leading pattern of urban growth in the Greater Metropolitan Area (GAM) has been scarcely planned. This has led to a horizontal low density urban expansion model which resulted in long distances between homes and working places or services, due to a diffuse development trend during the last 50 years. Meanwhile, a public transport system that has not been modernised fails to meet the current needs of displacement. As a result, the GAM is heavily congested by private cars. The number of private cars has tripled in the last twenty years. (in 2013 there were 1.5 Million cars in Costa Rica).

Low Carbon Development Strategy

LCDS San Jose Costa Rica

Ministerio de Vivienda y Asentamientos Humanos República de Costa Rica
CONSTRUIMOS UN PAÍS SEGURO

minae

DCC DIRECCIÓN DE CAMBIO CLIMÁTICO

PNUMA

UNEP RISØ CENTRE

Fundecooperación

FUDEU Fundación para el Desarrollo Urbano

FIRM Facilitating Implementation and Readiness for Mitigation