



REPUBLIC OF THE PHILIPPINES

SAN CARLOS CITY, NEGROS OCCIDENTAL

VAMOS! SAN CARLOS! WHERE GREEN IS GO!

Session I: Poverty and climate - Building resilience of the poor and vulnerable to climate risks through climate action (SDGs 1, 13 & 17)

City Overview



- Located in Western Part of PH. Population of approximately 133,000 inhabitants
- 2nd Class Component City
- Land Area: 45,150 ha.
- Has 3 Protected Areas under NIPAS: North Negros Natural Park, Mount Kanlaon Natural Park and Tanon Strait Protected Seascape
- About 17,000 ha. Of Forest Protected Area
- Has 2 Marine Protected Areas (MPA): Covering a total of 312 ha.
- 464 ha. Mangrove Forest

Partners



Why San Carlos?



Emerging Renewable Energy Hub in the Country

Tourism

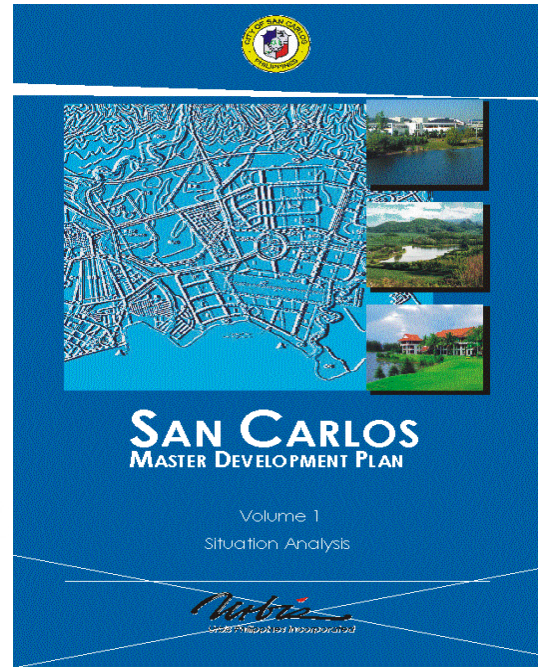


- Strategic Location: Proximity to 4 Visayan Capitals
- Abundant Natural Resources
- Environment Friendly
- Good Peace and Order
- Progressive and Competent Local Government
- 400 Hectares: PEZA-Approved Special Economic Zone



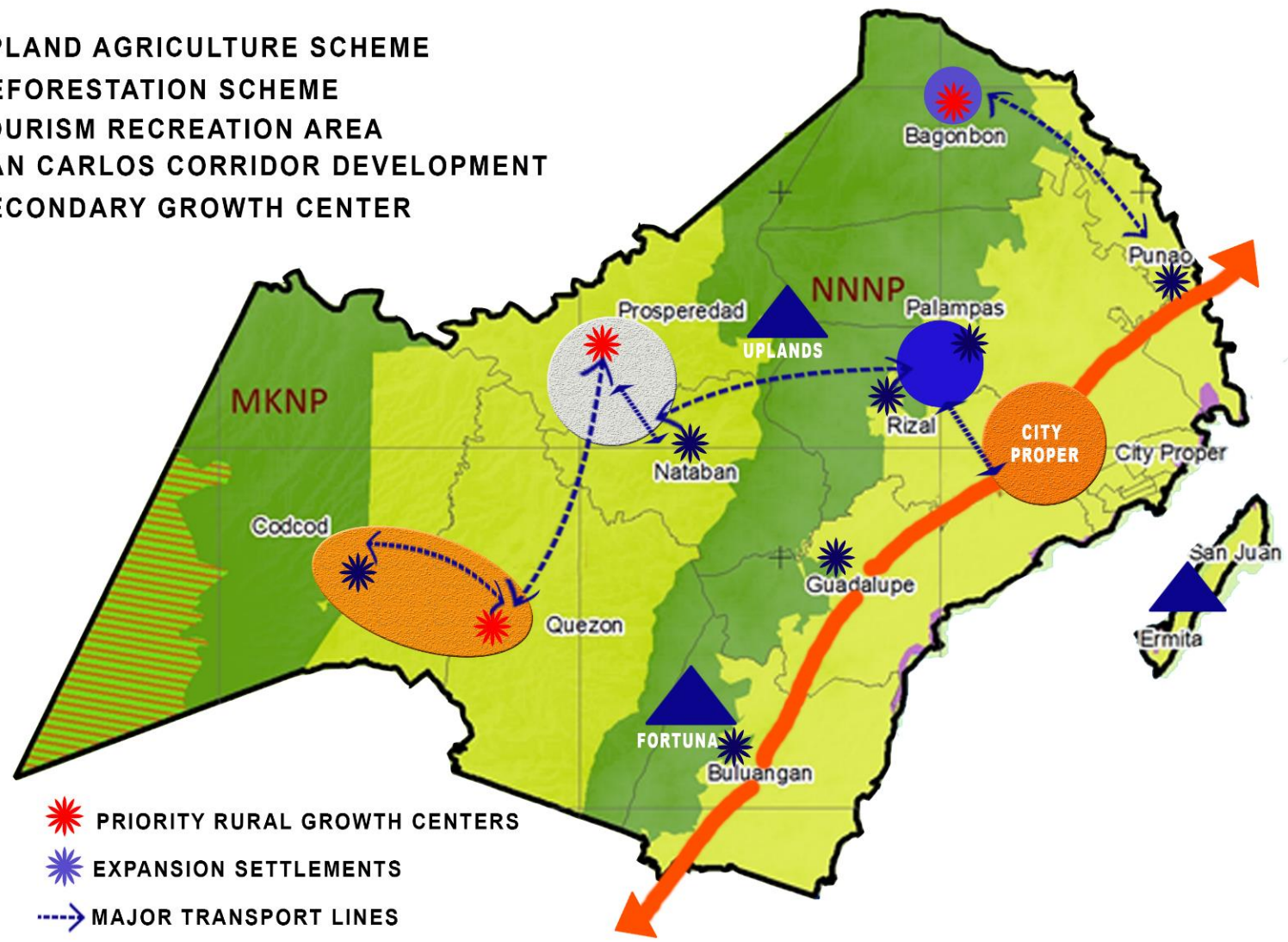
San Carlos Development Board, Inc.

The Sustainable City Programs



- Establishment of key energy-efficient infrastructures
- Economic productivity
- Social development initiatives
- Environmental protection

- UPLAND AGRICULTURE SCHEME
- REFORESTATION SCHEME
- TOURISM RECREATION AREA
- SAN CARLOS CORRIDOR DEVELOPMENT
- SECONDARY GROWTH CENTER



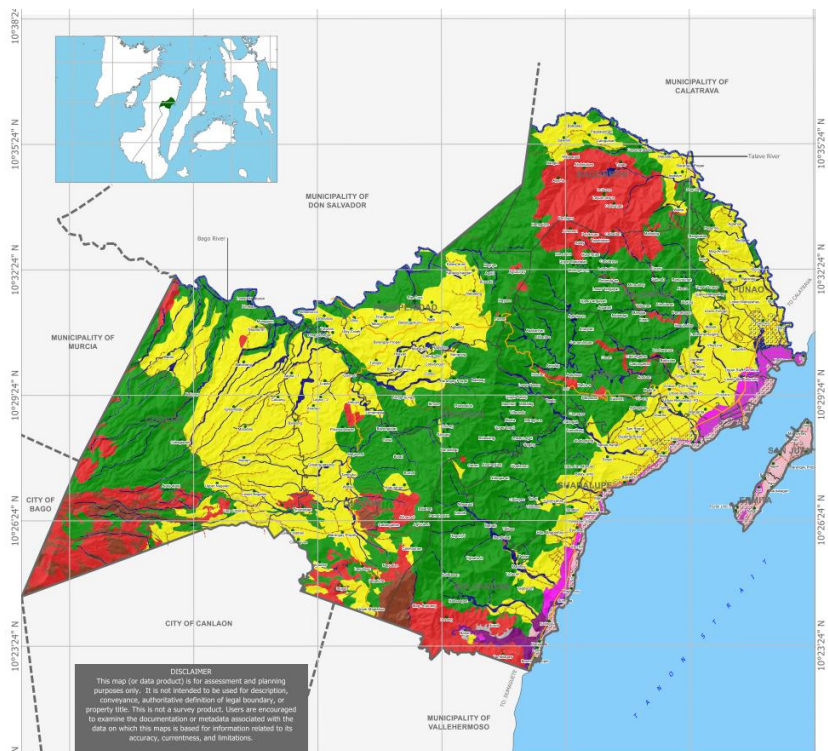
- ★ PRIORITY RURAL GROWTH CENTERS
- ★ EXPANSION SETTLEMENTS
- MAJOR TRANSPORT LINES

SUSTAINABLE DEVELOPMENT GOALS

1 NO POVERTY	2 ZERO HUNGER	3 GOOD HEALTH AND WELL-BEING
4 QUALITY EDUCATION	5 GENDER EQUALITY	6 CLEAN WATER AND SANITATION
7 AFFORDABLE AND CLEAN ENERGY	8 DECENT WORK AND ECONOMIC GROWTH	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
10 REDUCED INEQUALITIES	11 SUSTAINABLE CITIES AND COMMUNITIES	12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION	14 LIFE BELOW WATER	15 LIFE ON LAND
16 PEACE, JUSTICE AND STRONG INSTITUTIONS	17 PARTNERSHIPS FOR THE GOALS	



Local Climate Change and Disaster Plans



Republic of the Philippines
Province of Negros Occidental
City of San Carlos

GEOHAZARD MAP

Universal Transverse Mercator - Zone 51 (N)
World Geodetic 1984 (WGS84)
1:44000
Meter

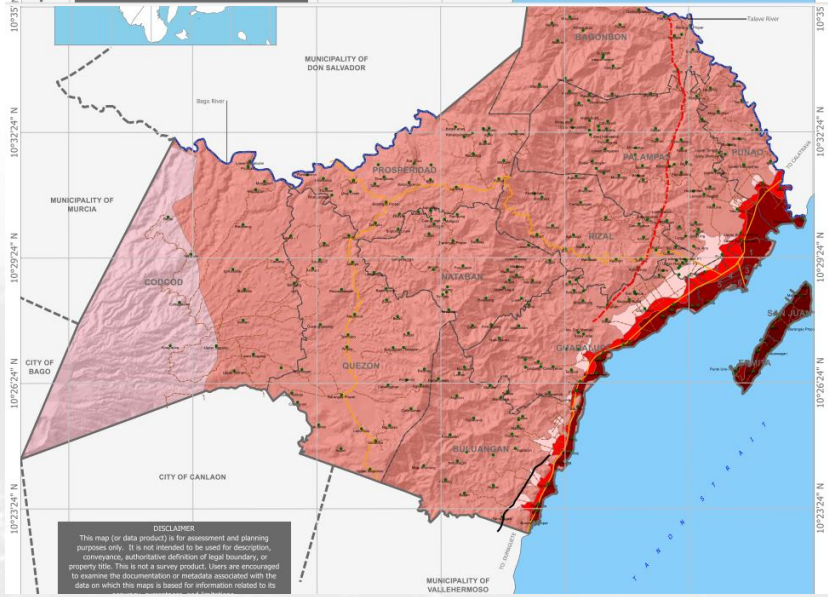
Legend:
National Boundary
Barangay/Hacienda Boundary
Municipal Boundary
River Boundary
City Boundary
Barangay Boundary
Very High Susceptible to Landslide
High Susceptible to Landslide
Moderate Susceptible to Landslide
Low Susceptible to Landslide
Very High Susceptible to Flooding
High Susceptible to Flooding
Moderate Susceptible to Flooding
Low Susceptible to Flooding
1.5 Meter Storm Surge
No Data
Negros Island
Municipal Water

Maps and Data Source:
CPD/CDO San Carlos City,
National Government Agencies

LOCAL CLIMATE CHANGE ACTION PLAN
SAN CARLOS CITY, Negros Occidental

Local Climate Change Action Plan

- Conservation & Protection of Protected Areas (MKNP, NNNP & TSPS)
- Resettlement with livelihood Programs outside protected areas
- Training on Renewal (RE) crop production
- Erosion/Flood control with bio-engineering application
- Ecological Sanitation & Protection Program
- Repair & Maintenance of existing irrigation facilities
- Dev't. of New Irrigation Facilities
- Dev't. of Farm to Market Roads



Universal Transverse Mercator - Zone 51 (N)
World Geodetic 1984 (WGS84)
1:44000
Meter

Legend:
National Boundary
Barangay/Hacienda Boundary
Municipal Boundary
River Boundary
City Boundary
Barangay Boundary
Potentially Active Fault
Active Fault
PEIS - Intensity I
PEIS - Intensity II
High Susceptible to Liquefaction
Moderate Susceptible to Liquefaction
Low Susceptible to Liquefaction
No Data
Negros Island
Municipal Water

EARTHQUAKE MAP

Maps and Data Source:
CPD/CDO San Carlos City,
National Government Agencies

2016 LOCAL DISASTER RISK REDUCTION & MANAGEMENT PLAN

Local Disaster Risk Reduction & Management Plan

- Resettlement to higher areas
- Reduce the impact of flooding incidence caused by hydro-meteorological hazards
- Mitigate the impact of landslide caused by ground shaking or precipitation
- Mitigate the impact of earthquake (seismic or tectonic)
- Prevent fire and mitigate its impact

Homelot Program

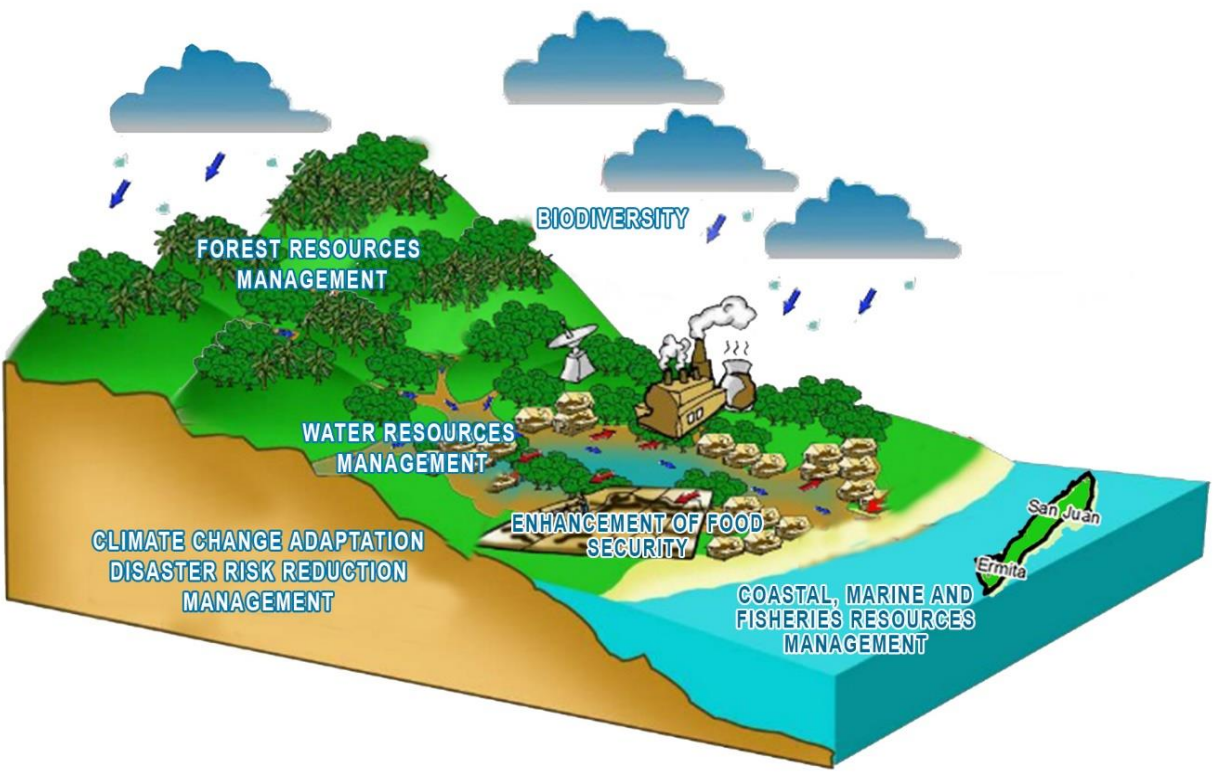


Homelot for the Poor (Phase I – VI)

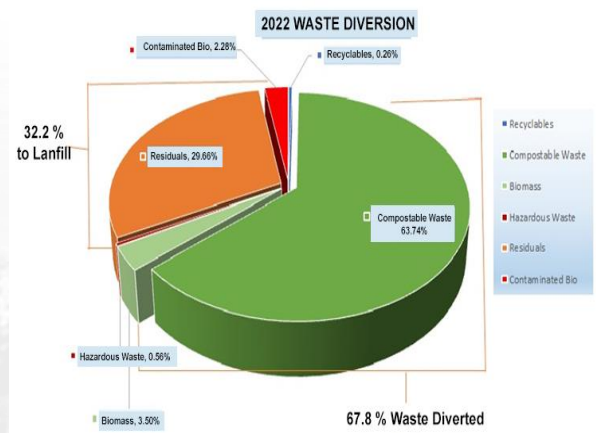
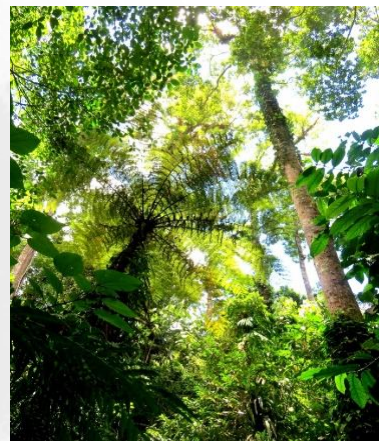




Environmental Protection Programs



- Integrated Waste Management
- Coastal Resource Management
- Forest Protection Management
- Biodiversity Program
- Climate Change Program
- Mineral Regulation
- Pollution Control Management
- Enforcement





Water Levy for Watershed Development Project



Water Levy for Watershed Development Project

- For each cubic meter of water, the city government charges 1.00 Peso which goes to a trust fund for watershed development and protection
- Has reforested more than 900 hectares of idle and marginal lands
- Providing 1,000 individuals with additional source of income in seedling production and forest establishment activities

Promote Agro Forestry



- Help farmers maintain their livelihoods, increasing family income and enhancing the crop diversity
- Ensured environmental stability
- Prevent soil erosion
- Mitigation of Carbon Dioxide
- Increase in Biodiversity
- Prevent Climate Change
- Increase soil fertility



Promote Eco-Tourism



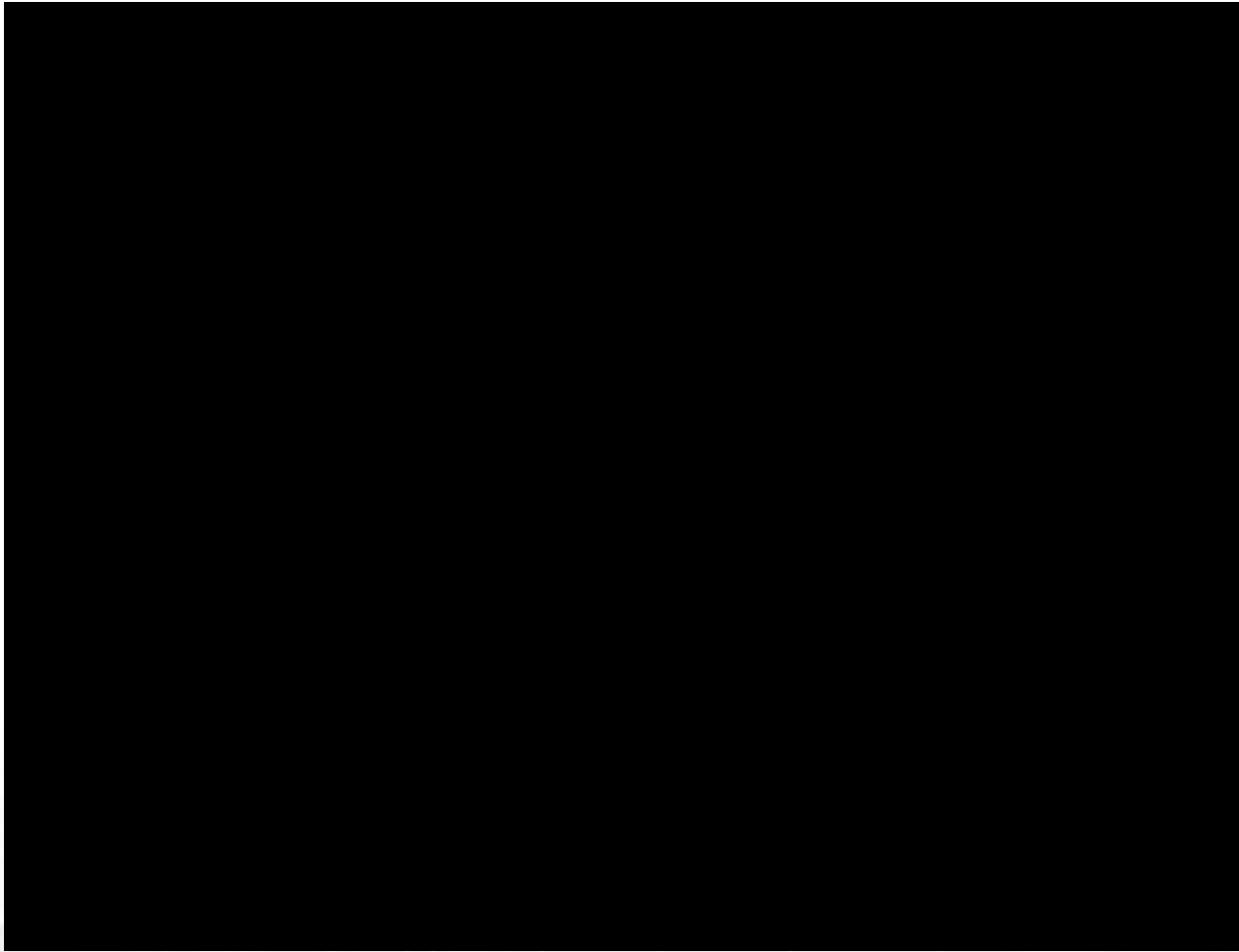
Increased in Tourist Arrival from 20,053 in 2021 to 75,685 in 2022



Fish Forever Program



Marine Protected Areas



- Ecological Improvements:
 - Increased in hard coral cover to 55.4%
 - Increased in biomass inside MPA (100MT)
- Socio-Economic and Cultural Benefits
 - Increase in fish catch to 169%
 - Increase in tourist arrival
 - Increase in User's Fee
- Governance
 - Increased awareness
 - Increased community participation
 - Increased job opportunities for local residents



Establishment of Renewable Energy Projects

Various Renewable Energy Sources



- Ethanol Plant
 - Produces 125,000 liters of biofuels daily
- San Carlos Solar Power
 - 45MW
- San Carlos Sun Power
 - 59MW
- Biomass Power Plant
 - 19MW
- Other Benefits
 - Provides more than 400 regular jobs
 - Provides 4,000 jobs during peak of construction stage
 - Generates more than \$2,000,000 annually through the 1% share, real property tax, development and livelihood, etc.

GHG Inventory



SAN CARLOS CITY -COMMUNITY LEVEL GHG INVENTORY (Base Year:2015)

GHG Emissions Summary		
Emission Source	GHG Emissions (tonnes CO ₂ e)	Proportion of Total Emissions
Scope 1 Emissions (Net of Forestry and Land Use)		
GHG Emissions from Community-Level Residential Stationary Fuel Use	215.16	0.25%
GHG Emissions from Community-Level Commercial Stationary Fuel Use	736.51	0.86%
GHG Emissions from Community Mobile Combustion	3721.54	4.35%
GHG Emissions from Solid Waste Disposal - IPCC FOD Method*	0.00	0.00%
GHG Emissions from Other Solid Waste Treatment (ICLEI)*	0.00	0.00%
GHG Emissions from Solid Waste Open Burning (ICLEI)*	0.00	0.00%
GHG Emissions from Wastewater Treatment and Discharge	0.00	0.00%
GHG Emissions from Community-Level Agriculture (Crops)	17959.20	20.97%
GHG Emissions from Community-Level Agriculture (Livestock)	45466.68	53.08%
GHG Emissions from Solid Waste Disposal - Inside LGU Geopolitical Boundaries (ICLEI)	9.45	0.01%
GHG Emissions from Wastewater Treatment and Discharge (Other Sources)	0.00	0.00%
GHG Emissions from Industrial Processes and Product Use	0.00	0.00%
Scope 1 Emissions/Removal (Forestry and Land Use)		
GHG Emissions from Forestry and Land Use	0.00	0.00%
GHG Removal from Sink	-172655.19	-201.58%
Total Scope 1 Emissions	68,109	79.52%
Scope 2 Emissions		
GHG Emissions from Purchased Electricity at Community-Level Residential Sites	8442.74	9.86%
GHG Emissions from Purchased Electricity at Community-Level Commercial Sites	4651.89	5.43%
GHG Emissions from Purchased Electricity at Community-Level for All Other Sources	4445.93	5.19%
Total Scope 2 Emissions	17,541	20.48%
Scope 3 Emissions		
GHG Emissions from Solid Waste Disposal - Outside LGU Geopolitical Boundaries (ICLEI)	0.00	0.00%
Total Scope 3 Emissions		
Total Emissions	85,649	100.00%

I.C.L.E.I. GHG Team conducted community-level green house gas inventory and accounting

TOTAL OF SCOPE 1 EMISSIONS :	68, 109 TONNES
TOTAL OF SCOPE 2 EMISSIONS:	17, 541 TONNES
COMBINED EMISSIONS :	85, 649 TONNES
EMISSIONS REMOVAL (FORESTRY)	-172,655.19 TONNES

TOTAL EMISSIONS:	-87, 006.19 TONNES
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Awards



Hall of Fame: Best City Award



Award for Continuing Excellence

PARA EL MAR 2015, 2017 & 2023 Marine Protected Area Awards and Recognition FINALIST



Awarded as the 2011 2nd Most Liveable City in the World

International



ASEAN Environmentally Sustainable Cities (ESC) Award 2014 and 2017



ASEAN Clean Tourist City Standard 2018-2020, 2019-2021



2016 Most Lovable City



Finalist One Planet City Challenge 2016 & 2018



Formula

$$\begin{aligned} & \text{POLITICAL WILL} \\ & + \\ & \text{SELF-RELIANCE} \\ & + \\ & \text{INNOVATIVENESS} \\ & + \\ & \text{PEOPLE PARTICIPATION /CONSULTATION} \\ & + \\ & \text{TRANSPARENCY} \\ & + \\ & \text{UNITY \& CONTINUITY} \\ & = \\ & \text{San Carlos City} \\ & \text{TODAY} \end{aligned}$$

Thank You!

