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Swiss Agency for Development  
and Cooperation SDC

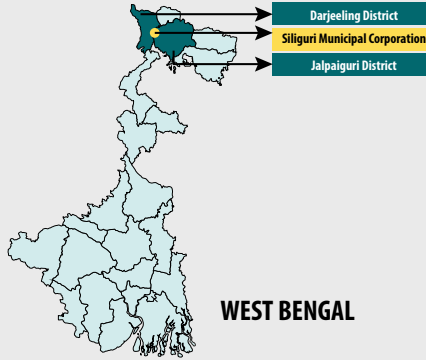


**CapaCITIES**  
LOW CARBON • CLIMATE RESILIENT • CITY DEVELOPMENT

## Siliguri



INDIA

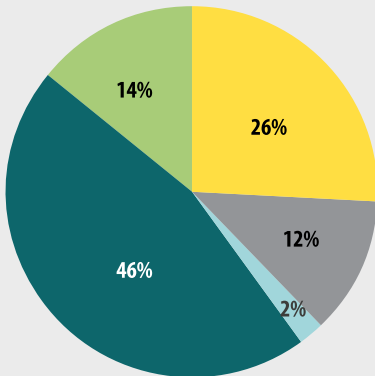


WEST BENGAL

 <b>Area</b> 41.9 sq.km	 <b>Population</b> 0.68 Million
 <b>Total Household</b> 155,332	 <b>Climatic Condition</b> Subtropical humid

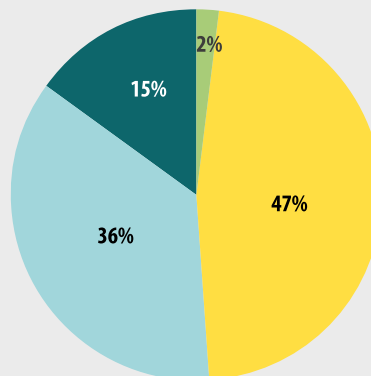
## GHG Emissions (2020-21)

### Community-wide Sectors



- Waste
- Transport
- Agriculture, forestry and fishing activities (i.e. mainly agriculture)
- Manufacturing Industry and Construction (i.e. Industrial sector)
- Commercial and Institutional Buildings/Facilities
- Residential Buildings

### Municipal Facilities



- Transport
- Street Lighting
- Water Supply
- Buildings



**1.66**

Million Tonnes  
CO<sub>2</sub>e



**2.43**

Tonnes CO<sub>2</sub>e  
Per Capita

CapaCITIES

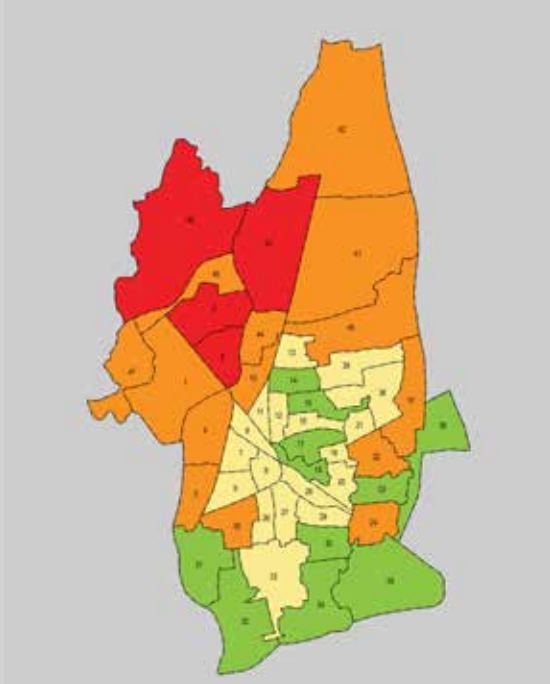
addressing

SUSTAINABLE  
DEVELOPMENT  
GOALS



# Vulnerability Assessment

## Four Wards Highly Vulnerable



- Wards impacted by Four Fragile Urban Systems
- Wards impacted by Three Fragile Urban Systems
- Wards impacted by Two Fragile Urban Systems
- Wards impacted by One Fragile Urban Systems



## Critical Urban Systems



**Solid Waste Management**  
Behavioural change for source segregation



**Water Supply**  
NRW and limited supply

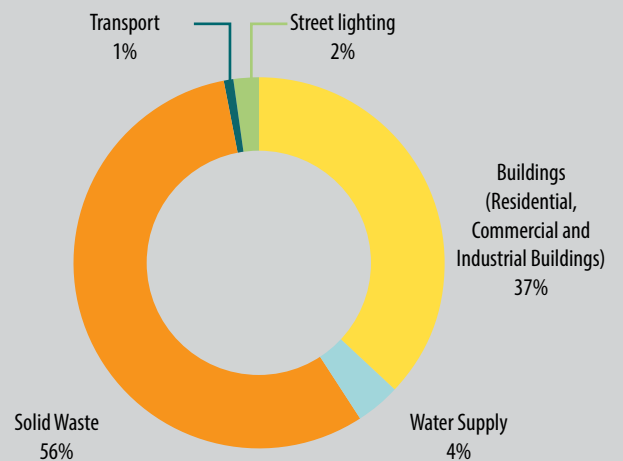


**Transport**  
Dependence on private transport



## Climate Action Plan Potential by Sectors (2018-19 to 2022-23)

Estimated annual mitigation potential of 0.15 million tCO<sub>2</sub>e over the 2015-16 baseline




Sectorwise GHG Mitigation Potential

## Proposed Climate Actions (short term and medium term)




**Buildings (Residential, Commercial, Institutional)**

Solar PV systems, energy efficient fixtures, green building designs




**Water Supply**

Reduction of non-revenue water and installation of captive solar PV plants at water pumping stations




**Streetlights**

Replacement of existing street lighting with LED lamps through and installation of solar PV Systems




**Transport**

Solar PVs, Introduction of electric vehicles, traffic decongestion, and introduction of public transport systems, energy efficient fixtures, green building designs



**Solid Waste Management**

Scaling up Sunya to whole Siliguri and improved waste processing at end point



**Biodiversity**

Carbon sequestration, urban forestry, Local Biodiversity Strategy and Action Plan

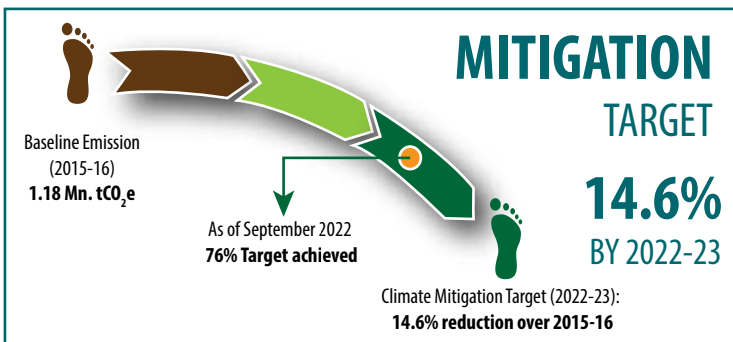


**CARBON FOOT PRINT**

**Target**

**14.6%**  
less by 2022-23

## Implementation Status of Climate Resilient City Action Plan (September 2022)




Baseline GHG emission 2015-16	1,182,542
CRCAP target (2022-23) (14% of 2015-16 baseline)	154,174
Emission reductions achieved until September 2022	117,377
% of target achieved as of September 2022	76%


## Implementation Status of Climate Resilient City Action Plan (Sep. 2022)

**Energy Efficiency in Street lighting**

Conversion of traditional streetlights to LED lights (21,042 streetlights converted)




**GHG Mitigation per year**  
3,661 tCO<sub>2</sub>e




**Source of Funding**  
Smart City Mission

**Renewable Energy in Municipal Facilities**

100 kWp Solar PV for municipal buildings



**GHG Mitigation per year**  
152 tCO<sub>2</sub>e



**Source of Funding**  
Smart City Mission

## Climate Friendly Solid Waste Management

### CapaCITIES supported projects:

- IEC and awareness activities in 2 wards under Sunya
- Waste quantification and characterisation study
- 1 TPD organic waste processing facility

### Replication by the city:

- IEC and awareness in 24 wards
- 20 TPD organic waste processing facility
- Legacy waste management



### GHG Mitigation per year

113,483 tCO<sub>2</sub>e



### Source of Funding

Swachh Bharat Mission;  
Nirmal Bangla Mission



### Adaptation Benefits

Avoided rainwater clogging due to waste lying on roads, enhanced quality of life, reduced vector borne diseases

## Renewable Energy in Municipal Facilities

### CapaCITIES supported projects:

- Two sensor based water leak detection instruments provided to the city
- Leaks in water distribution network assessed in 9 wards

### Replication by the city:

- Leaks in water distribution network assessed in all 47 wards



### GHG Mitigation per year

82 tCO<sub>2</sub>e



### Source of Funding

Municipal Budget



### Adaptation Benefits

Reduced NRW, improved water management

## Air Quality

### CapaCITIES supported projects:

- Installation of sensor based ambient air quality stations at 3 locations & LCD screens for dissemination



### GHG Mitigation per year

152 tCO<sub>2</sub>e



### Adaptation Benefits

Data based planning for air pollution for priority areas, awareness amongst citizens

## CapaCITIES contribution to India's Nationally Determined Contribution (NDC) by

enabling a 'Lifestyle for Environment', ensuring a climate friendly and cleaner path; contributing to a reduction in emissions intensity of GDP; enhancing renewable energy capacity; enhancing investments in key vulnerable sectors such as water resources; mobilizing domestic and international funds for climate action and building capacities and frameworks for quick diffusion of cutting edge climate technology in India'

## Building CapaCITIES Beyond Climate Actions

### National and Global Reporting:

- CSCAF 2.0
- CDP- ICLEI Track
- Global Covenant of Mayors for Climate and Energy
- National Green Tribunal

### CSCAF 2.0



**Mitigation Badge**  
Awarded as soon as one of the steps (i.e. Inventory, Target, or Plan) is accomplished



### CapaCITIES support to sustainable Urban Development

- Atal Mission for Rejuvenation and Urban Transformation (AMRUT)
- Swachh Bharat Mission (SBM)
- Support during COVID

## Implementing partners



## Knowledge Partner



For more information, please contact

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