Udaipur

Area 64 sq.km
Population 0.64 Million
Total Household 112,536
Climatic Condition Hot & Dry

GHG Emissions (2020-21)

Community-wide Sectors
- Waste 24%
- Transport 23%
- Agriculture, forestry and fishing activities (i.e. mainly agriculture) 14%
- Manufacturing Industry and Construction (i.e. Industrial sector) 13%
- Commercial and Institutional Buildings/Facilities 7%
- Residential Buildings 31%

Municipal Facilities
- Transport 32%
- Street Lighting 51%
- Water Sector 13%
- Waste water treatment 3%
- Buildings 7%

GHG Emissions:
- tCO₂e 1.10 Million Tonnes CO₂e Per Capita
- Tonnes CO₂e 2.24
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
- Wards not impacted by any Fragile Urban Systems

**Critical Urban Systems**

- **Solid Waste Management**
  - Lack of planning, segregation is not up to the mark, feasibility of treatment plants.

- **Water Supply**
  - NRW, Stress on water sources, insufficient drinking water supply

- **Sewerage**
  - Absence of sludge treatment at STPs, 40% city is still not covered by under ground sewerage network

- **Transport**
  - ICE based PT and IPT system, unorganized IPT, shortage of PT, dependence on private mode


Estimated annual mitigation potential of 0.22 million tCO₂e over the 2016-17 baseline

- **Energy Efficiency Measures**
  - 26.1%

- **Solid Waste Management**
  - (composting and RDF plant) 28.6%

- **Renewable Energy Measures**
  - 24.9%

- **Transport**
  - 19.9%

- **Water Supply**
  - 0.6%
Implementation Status of Climate Resilient City Action Plan (September 2022)

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**Carbon Footprint**

**Target**

19.7% less by 2022-23

**Example of Implemented Climate Actions (2019 to 2022)**

**Climate Smart Solid Waste Management**

**CapaCITIES supported projects:**
- 2 TPD Biomethanation plant
- Methane gas assessment for Teethardi landfill
- Implemented SUNYA approach towards zero waste management in 2 wards

**Replication/ projects implemented by the city:**
- SUNYA approach towards zero waste management implemented in all wards
- Landfill capping, Teethardi (Scientific Land Capping of 83000 CUM solid waste)
- 20 Tonne per Day (TPD) Biomethanation plant on public private partnership (PPP) basis
- Integrated Compost Plant and MRF plant (60 TPD and 30 TPD capacity)
- 50 TPD MRF plant
- Legacy waste management, Bioremediation at Balicha dumping yard (Total Quantity of Waste - 450000 CUM, Total bio remediated waste: 1,66,000 Cubic Meter till now)

**GHG Mitigation per year**

191,254 tCO₂e

**Source of Funding**

Municipal Budget & Smart Cities Mission

**Adaptation Benefits**

Reduction in urban flooding due to reduced littering of waste;
Reduction in vector borne diseases and environmental contamination
Implementing partners

Knowledge Partner

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.

CapaCITIES supported projects:
- Technical assessment, financial feasibility and bankability report: 1MWp captive solar plant for institutional municipal consumption

Replication/Implementation by the city:
- Rooftop solar on Municipal buildings (450kW, decentralised)
- 1 MWp captive solar plant for institutional municipal consumption

Renewable Energy Deployment

CapaCITIES supported projects:
- Technical assessment, financial feasibility and bankability report: 1MWp captive solar plant for institutional municipal consumption

Replication/Implementation by the city:
- Rooftop solar on Municipal buildings (450kW, decentralised)
- 1 MWp captive solar plant for institutional municipal consumption

GHG Mitigation per year
2,178 tCO₂e

Source of Funding
Municipal Budget & Smart Cities Mission

24x7 water supply scheme for Walled City Area (Under Smart Cities Mission)

Source of Funding
Municipal Budget & Smart Cities Mission

Adaptation Benefits
Reduction in Non Revenue Water, thereby enhancing overall water supply coverage and reducing water stress, especially during summer months

Improvement in Water Supply

Low Carbon Transport

Development of walled city into Udaipur Green Mobility Zone (GMZ) for promotion of e-mobility adoption and non motorised transport

GHG Mitigation per year
1,200 tCO₂e

Source of Funding
Municipal Budget, Smart Cities Mission, State Schemes and Public Private Partnership

Adaptation Benefits
Reduction in air, noise pollution, reduction in traffic congestion, decrease in heat sources and associated health benefits in the walled city area

Biodiversity

Local Biodiversity Strategy and Action Plan, Urban Forest Development at Mohta Park

GHG Mitigation per year
Not assessed

Source of Funding
Municipal Budget & Smart Cities Mission

Adaptation Benefits
Improvement in biodiversity, reduction in air pollution and reduction in surface temperature and urban heat island effect

CapaCITIES Beyond Climate Actions

National and Global Reporting:
- Climate Smart Cities Assessment Framework 2.0
- Urban Outcomes Framework
- CDP-ICLEI Track
- Global Covenant of Mayors for Climate and Energy
- National Green Tribunal

Support for sustainable urban development like planning support for
- National Clean Air Action Plan
- Cycles 4 Change Challenge
- Streets for People Challenge
- Atal Mission for Rejuvenation and Urban Transformation
- Swachh Bharat Mission
- Support during Covid pandemic

CSCAF 2.0

Building CapaCITIES Beyond Climate Actions

Improvement in Water Supply

GHG Mitigation per year
1,200 tCO₂e

Source of Funding
Municipal Budget & Smart Cities Mission

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Reduction in air, noise pollution, reduction in traffic congestion, decrease in heat sources and associated health benefits in the walled city area

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