



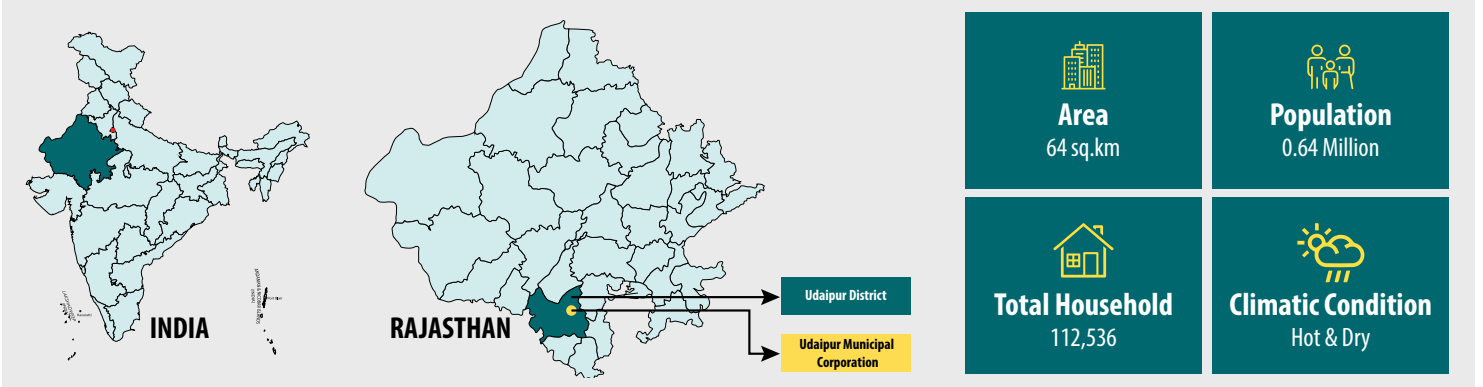
Schweizerische Eidgenossenschaft
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Swiss Agency for Development
and Cooperation SDC



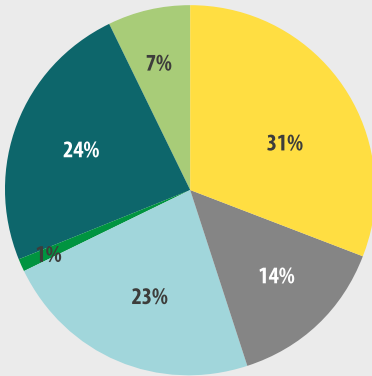
CapaCITIES
LOW CARBON • CLIMATE RESILIENT • CITY DEVELOPMENT

Udaipur



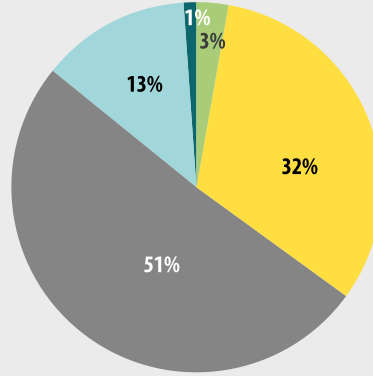
GHG Emissions (2020-21)

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 Sector
- Waste water treatment
- Buildings



1.10

Million Tonnes CO₂e



2.24

Tonnes CO₂e Per Capita

CapaCITIES

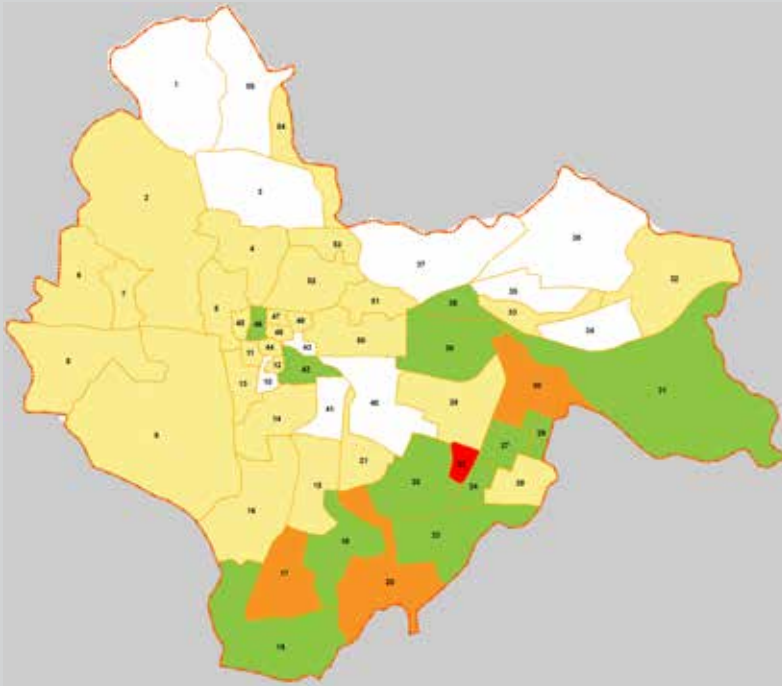
addressing

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
- 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



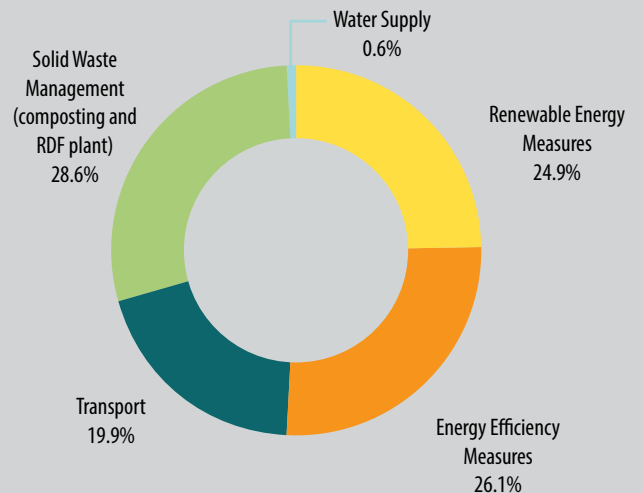
Transport

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



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

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



Sectorwise GHG Mitigation Potential



Proposed Climate Actions (short term and medium term)

Buildings (Residential, Commercial, Institutional)

RE and EE appliances, Adoption of green buildings, PNG supply network

Municipal Buildings

RE and EE appliances, use of EV in transportation

Water Supply

RE and EE pumps for water supply

Smart City Initiatives

RE for newly build SLWM plants under SCM

Streetlights

Energy Efficient Street Lighting

Transport

RE based E-PT, E-IPT, E-garbage vehicle

Solid Waste Management

Composting and RDF integrated plant, biomethanation plant (electricity/CNG) and sanitary landfill

Sewerage

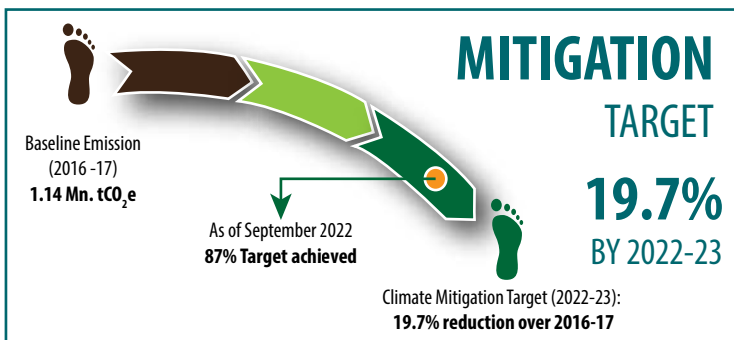
SCADA and EE pumps, use of RE at STPs and use of Anaerobic Digestion - Biogas to electricity for FSM

CARBON FOOT PRINT

Target

19.7%
less by 2022-23

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



Baseline GHG emission 2015-16	1252856
CRCAP target (2022-23) (14% of 2015-16 baseline)	225,195
Emission reductions achieved until September 2022	195,417
% of target achieved as of September 2022	87%

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

Renewable Energy Deployment

CapaCITIES supported projects:

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



GHG Mitigation per year

2,178 tCO₂e



Source of Funding

Municipal Budget & Smart Cities Mission

Replication/ Implementation by the city:

- Rooftop solar on Municipal buildings (450kW, decentralised)
- 1 MWp captive solar plant for institutional municipal consumption

Improvement in Water Supply

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

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 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:

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

CSCAF 2.0
★★★

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

Implementing partners



Knowledge Partner



For more information, please contact

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