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Ahmedabad Climate Resilient City Action Plan

TOWARDS A NET ZERO FUTURE

EXECUTIVE SUMMARY

July 2023



Ahmedabad Climate Resilient City Action Plan - Towards A Net Zero Future

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Ahmedabad Climate Resilient City Action Plan - Towards A Net Zero Future was led by Ahmedabad Municipal Corporation and developed jointly with the implementing partners of the "Capacity Building for Low Carbon and Climate Resilient City Development -phase II (CapaCITIES II)" Project, supported by the Swiss Agency for Development and Cooperation (SDC). Ahmedabad is one of eight partner cities of the CapaCITIES II project, being implemented by ICLEI-Local Governments for Sustainability, South Asia, the South Pole Group, and econcept AG, with the National Institute of Urban Affairs (NIUA) as a knowledge partner.

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Executive Summary

Ahmedabad, a city with a rich architectural heritage, is India's first World Heritage City recognized by UNESCO. It has around 7.1 million citizens and is well-connected through various modes of transportation. Ahmedabad has a thriving economy from its textile industry as well as other industries such as chemicals, pharmaceuticals, and information technology. The city has experienced significant growth in its built infrastructure and is focused on compact and transit-oriented development. Ahmedabad is also an educational hub housing prestigious institutions.

The impacts of climate change, such as rising temperatures, frequent heat waves, and sea level rise, are a concern globally as well as at the local scale, posing significant threats to Ahmedabad's residents, infrastructure, and ecosystems. In response to this climate emergency, over 2,300 jurisdictions have declared a climate crisis, with global frameworks like the Paris Agreement aiming to limit the temperature increase. As a signatory to this agreement, India has pledged to reduce its emissions intensity by 45% in 2030 from 2005 levels and achieve net zero emissions by 2070.

As Gujarat's largest city, Ahmedabad has proactively addressed climate change, promoted renewable energy, deployed sustainable public transportation systems, implemented waste segregation, and undertaken efforts to improve and connect its blue and green spaces. Ahmedabad's 4-star ranking in the ClimateSmart Cities Assessment Framework (CSCAF) is testimony to this. Ahmedabad Municipal Corporation's (AMC) climate action rolls into Gujarat's State Action Plan on Climate Change (SAPCC). The CapaCITIES II project, funded by the Swiss Agency for Development and Cooperation (SDC) and implemented by ICLEI South Asia, the South Pole Group and econcept is

working with Ahmedabad to further support integrated climate action and sustainable city development. Ahmedabad's Climate Resilient City Action Plan (CRCAP) aligns with India's national goals and will transform the city into a climate-resilient, net zero greenhouse gas (GHG) emissions city by 2070.

AMC has outlined a comprehensive vision for transitioning the city towards a net zero emissions future, striving for resilience against climate change impacts. As part of these efforts, AMC aims to enhance urban infrastructure, focusing on environmental well-being and equitable municipal services. Ahmedabad will incorporate greener, energy-efficient building practices to reduce emissions, adopt a zero-waste policy, and promote zero-emission transportation. AMC's collaboration and innovation will foster a resilient community, setting an example for other cities and contributing to a sustainable future.

Despite Ahmedabad's notable achievements, rapid urbanization poses challenges to water supply, sewage management, solid waste management, transportation, urban greening and biodiversity, and disaster management. The city is actively addressing these challenges through various infrastructure projects and initiatives.

India aims to reduce the
GHG emission intensity of
its GDP by 45% by 2030
and further aims to reach
net zero by 2070

- 1. Water Supply and Management:** Ahmedabad faces challenges in water supply due to reliance on surface sources being located far away from the city and excessive groundwater extraction. Efforts include exploring treated sewage water usage, conservation measures, expanding sewerage networks, and rejuvenating lakes.
- 2. Solid Waste Management:** Ahmedabad implements waste segregation and recycling, and addresses legacy waste. It has become a bin-free city
- 3. Transportation:** Ahmedabad faces challenges of traffic congestion, parking infrastructure, and integration between modes of transport. Solutions include road infrastructure improvement, smart parking systems, and promoting cleaner fuel options.
- 4. Urban Greening, Biodiversity and Air Quality:** Ahmedabad aims to enhance green cover, improve park accessibility, address air pollution, and monitor pollution sources
- 5. Disaster Management and Emergency Services:** Ahmedabad emphasizes disaster management with a dedicated cell, ward-specific plans, training, and initiatives like implementing a heat action plan.

By tackling challenges related to urban growth and climate change, Ahmedabad strives to become a model city for effective urban management and sustainable development in India.

Climate Risk & Vulnerability Assessment

Ahmedabad is highly vulnerable to climate hazards like extreme heat, urban flooding, and air pollution, according to its comprehensive climate risk and vulnerability assessment. This study applied the 'Net Zero ClimateResilientCITIES' methodology and analysed historical weather data, future climate projections, and vulnerability data collected from local departments, spatial analyses, and stakeholder discussions.

Key findings include:

Climate Trends and Projections: Analysis of temperature and rainfall trends from 1970 to 2020, using data from Indian Meteorological Department (IMD) and Gujarat SAPCC (2021), reveal an increase in average and extreme temperatures and rainfall intensity. Climate scenarios for Ahmedabad indicate escalating climate events.

- **Air Temperature Trend Analysis:** Annual average air temperature increased by 0.15°C per decade from 1970 to 2020, resulting in more hot days and nights.
- **Rainfall Trend Analysis:** Annual rainfall increased by 12 mm per decade from 1970 to 2020, with fewer rainy days. Extreme rainfall events increased, causing urban flooding in certain areas.
- **Climate Projections and Scenario Statements:** Climate projections (RCP 2.6, RCP 4.5, RCP 8.5 scenarios) from the Gujarat SAPCC (2021) indicate increasing temperatures and precipitation for near and mid-term periods (up to 2070).
- **Projected Climate Scenarios for Ahmedabad:** Climate projections indicate a temperature increase of 1°C - 3°C, hotter days and nights, and 20 mm - 60 mm increase in rainfall by 2070. The frequency of extreme heat and rainfall events is also expected to rise.

Extreme Heat

- **Heat Index Analysis:** The city's 'feels-like' temperature, a combination of air temperature and humidity, indicates potential risk areas experience a high 'feels-like' temperature of more than 43°C.
- **Heat Wave Events and Trend:** Ahmedabad has seen increased heat wave events with significant health impacts.
- **Urban Areas Vulnerable to Extreme Heat Risk:** The city's most vulnerable areas are those with high land surface and 'feels-like' temperatures including industrial estates, open areas with more built-up spaces and low green cover, and waste dumpsites spread over 11 wards.

- **Population Groups Vulnerable to Extreme Heat:** The elderly, children, women, differently abled, uneducated, and low-income groups are the most vulnerable to extreme heat conditions.

Urban Flooding

- **Population Groups Vulnerable to Urban Flooding:** The elderly, children, women, and those with special needs are most impacted by urban flooding.
- **Urban Areas Vulnerable to Air Pollution:** Areas most impacted by high PM10 and PM2.5 concentrations include Jamalpur, Danilimda, Maninagar, Baherampura, Lambha, and Vatva GIDC.

Climate Vulnerability of Urban Systems:

- **Water Supply Vulnerability:** Extreme heat and flooding pose threats to water supply, impacting 12 wards in the city.
- **Wastewater Management System Vulnerability:** Urban flooding risk threatens the wastewater management system, affecting 11 wards.
- **Solid Waste Management Vulnerability:** Urban flooding exacerbates solid waste related issues in 14 wards.
- **Transport System Vulnerability:** Transport systems, particularly public transport, face risks from extreme heat and urban flooding.
- **Emergency Services Vulnerability:** Climate events can hamper accessibility to essential services, like fire and health services.

Actor Analysis and Adaptive Capacity: The adaptive capacities of vulnerable groups and supporting actors to tackle climate risks and vulnerabilities are assessed, helping identify key improvement areas.

The climate risk and vulnerability assessment provides critical information for Ahmedabad's climate-sensitive urban planning and resilience policies.

Approximately **4.3%** of **Ahmedabad's total** area is **affected** by urban flooding or waterlogging, **impacting** around **9.5%** of the **city's population**

Ahmedabad's total baseline **GHG emissions** for 2021-22 amount to **15.1 million tonnes of CO₂e**

Baseline GHG Emissions

The GHG emissions inventory reflecting Ahmedabad's baseline emissions has been developed for the five-year period from 2017-18 to 2021-22. The city-scale emissions inventory has been prepared following the Global Protocol for Community Scale GHG Emissions using ICLEI's HEAT+ Tool.

Establishing the baseline status of GHG emissions helps identify key sources of emissions, set emissions reduction targets, and develop appropriate evidence-based strategies and actions in different sectors.

Table i: Key indicators – city-scale energy consumption and GHG emissions (2021-22)

| | |
|--|---------------------------------|
| Ahmedabad's Total Energy Consumptionⁱ in 2021-22 | 98.5 million GJ |
| Ahmedabad's Total GHG Emissions in 2021-22 | 15.1 million tCO ₂ e |
| Per Capita GHG Emissions in 2021-22 | 2.1 tCO ₂ e |

i. Includes direct energy use (from combustion of fuels such as kerosene, LPG, petrol, diesel) and indirect energy use (due to consumption of grid electricity)

City-scale: Energy Consumption and GHG Emissions

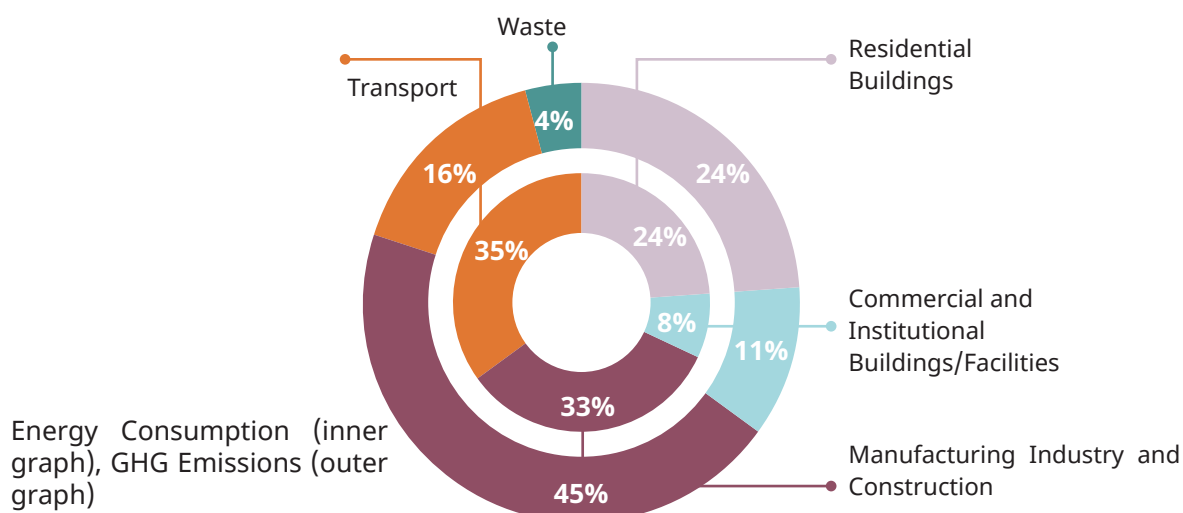


Figure i: Sector wise share of energy consumption and GHG emissions, 2021-22

Highlights



Energy intensive sectors: Transport (35%), Manufacturing Industry and Construction (33%) and Residential Buildings (24%)



Sectors with significant GHG emissions: Manufacturing Industry and Construction (45%), Residential Buildings (24%) and Transport (16%)



GHG emissions trend (2017-18 to 2021-22): 13.4% increase at 2.7% annuallyⁱⁱ



Predominant energy sources: Electricity (48.6%), Diesel (13.9%), Petrol (13.8%) and Natural Gas (13.6%)



Energy sources with significant GHG emissions: Electricity (76.6%), Diesel (7.1%), and Petrol (6.6%)

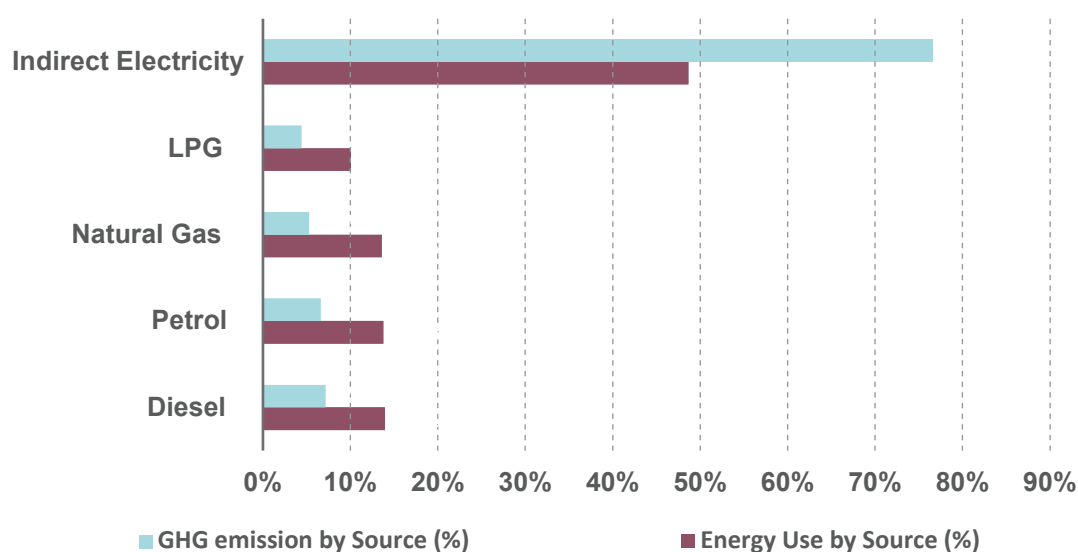


Figure ii: Energy consumption and GHG emissions by energy source, 2021-22

ii. All annual growth rates are Average Annual Growth Rates (AAGR).

Municipal Operations: Energy Consumption and GHG Emissions

Energy consumption and emissions from AMC's operations have been assessed to help take targeted low-carbon action in municipal infrastructure and urban service delivery.

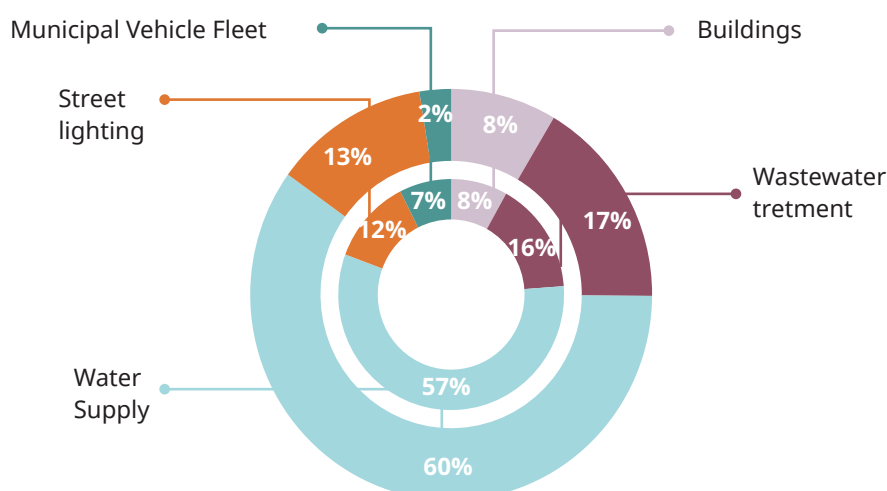


Figure iii: Energy consumption and GHG emissions from municipal operations, 2021-22

Highlights



Predominant energy consumers: Water Supply (57%), Wastewater Treatment (16%) and Street Lighting (12%)



Main contributors to GHG emissions: Water Supply (60%), Wastewater Treatment (17%) and Street Lighting (13%)



Trend of GHG emissions (2017-18 to 2021-22): 9.9% increase at 1.99% annually

Scenario Planning for Future GHG Emissions Reductions

Ahmedabad's CRCAP aims to make the city climate-resilient and reach net zero GHG emissions by 2070. This will be achieved by promoting energy efficiency, increasing renewable energy use, adopting sustainable water and waste management, and encouraging low-carbon transportation.

Scenario Planning is a critical step in the process of developing an ambitious climate action plan. It establishes the business-as-usual (BAU) future emissions trajectory, helps to identify emissions reduction targets and scale of climate action, helping to define pathways to advance towards net zero emissions.

The CRCAP proposes two scenarios: the '**Progressive Action**', improving the current situation considering local and national policies, and the '**Net Zero Pathway**', aligning with

India's 2070 net zero goal, defined by ambitious climate actions that is required to meet net-zero targets. Both scenarios are developed using ICLEI South Asia's Net Zero GHG Emissions Tool, which considers local data, demographic and economic growth projections, and sector-specific assumptions.

The BAU (Business-as-Usual) Projection serves as a reference point, representing the GHG emissions that would occur without additional efforts. **As per the BAU Projection, Ahmedabad's GHG emissions are expected to increase nearly seven-fold to 99.5 million tCO₂e in 2070 from 15.1 million tCO₂e in 2021-22.**

The Progressive Action Scenario uses national and local policies and sets targets for energy efficiency and renewable energy adoption, transition to electric and zero-emission mobility, and sustainable waste management. The Net Zero Pathway Scenario illustrates the significant effort required, beyond that in the Progressive Action Scenario, to achieve the

2070 net zero target, building on various national and state plans.

By implementing the strategies from the Progressive Action Scenario and moving towards the Net Zero Pathway Scenario, Ahmedabad will become a climate-resilient city with net zero GHG emissions by 2070.

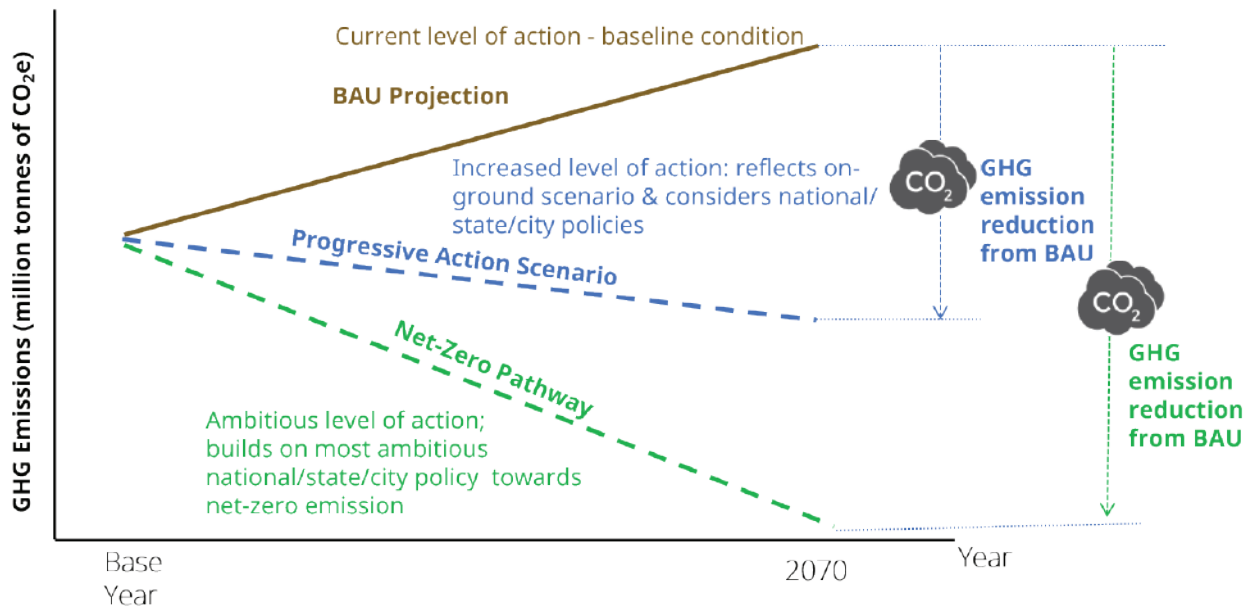


Figure iv: Illustrative depiction of Progressive Action Scenario and Net-Zero Pathway compared to BAU Projection

Ahmedabad's Goals and Strategies for Climate Resilience

Ahmedabad's Vision for a Net Zero Climate Resilient Future: To address the climate emergency by leading a bold transition towards a net zero emissions future; fostering resilience in the face of rising urban heat, flooding, and natural resource challenges, while considering the principles of equity and gender justice

Adaptation Goal: Ahmedabad aims to enhance water, flood, and heat resilience for all, through policy, infrastructure, and nature-based solutions, and by adopting circular economy principles.

GHG Emissions Mitigation Target: Achieving city-scale net zero GHG emissions by 2070



The Foundation Pillar of
United Science City unveiled by
Shri L. K. Advani
Hon. Union Home Minister
on Wednesday, 26th May 2011
10:00 AM (IST) at Science City
In a function Presided by
Shri Karanbir Singh
Hon. Minister, Punjab
In the presence of Shri L. K. Advani
Hon. Union Minister for Home and Law
Shri Brijendra Singh
Hon. Minister for
Information Technology, Punjab



The figure below summarises the thematic goals, targets, and strategies identified to help realise Ahmedabad’s vision, its overarching adaptation goal, and GHG emissions reduction target.





| Sector | BUILT ENVIRONMENT & ENERGY  | TRANSPORT  | WATER  | WASTEWATER  |
|-----------------|---|---|--|---|
| Goals & Targets | <p>Resilience Goal: Transition to a Heat Resilient and Sustainable Energy City</p> <p>Mitigation Targets:</p> <ul style="list-style-type: none"> • 100% of new buildings adopt green building principles by 2050 • 100% energy efficient appliances in new and existing buildings • Up to 85% of energy demand met by renewable energy | <p>Resilience Goal: Adopt Clean, Zero-Emission Mobility</p> <p>Mitigation Targets:</p> <ul style="list-style-type: none"> • 80% motorized trips shift to NMT & public transit • 90% of all vehicles are electric and renewable powered | <p>Resilience Goal: Enhance Water Resilience</p> <p>Mitigation Targets:</p> <ul style="list-style-type: none"> • 100% facilities adopt energy efficiency and renewable energy • 15% lower non revenue water levels by 2030 | <p>Resilience Goal: Promote Circular Economy through 100% Wastewater Treatment and Reuse</p> <p>Mitigation Targets:</p> <ul style="list-style-type: none"> • 100% facilities adopt energy efficiency and renewable energy • 100% new plants use anaerobic treatment with methane capture |
| Strategies | <ul style="list-style-type: none"> • Strategy 1 Promote green building concepts to mitigate urban heat risk • Strategy 2 Promote energy efficient and green buildings • Strategy 3 Transition to clean renewable energy sources to meet energy demand | <ul style="list-style-type: none"> • Strategy 1 Enable non-motorized movement of people and promote shift to public transport • Strategy 2 Accelerate transition to electric mobility powered by renewables • Strategy 3 Strengthen management of traffic and decongest roads | <ul style="list-style-type: none"> • Strategy 1 Reform policy and regulatory frameworks for water resilience • Strategy 2 Provide efficient, equitable and safe access to water • Strategy 3 Protect and revitalize urban lakes • Strategy 4 Ecological restoration of Sabarmati riverfront • Strategy 5 Efficient water supply networks powered by clean renewable energy | <ul style="list-style-type: none"> • Strategy 1 100% efficient sewage collection and treatment • Strategy 2 Achieve 100% sludge and septage management • Strategy 3 Adopt low carbon technology and improve operational and energy performance of wastewater management systems |

Figure v: Snapshot of sectoral goals, targets and strategies

STORM WATER



Resilience Goal:
Enhance Urban
Flood Resilience

- **Strategy 1**
Adopt green city planning approaches to minimize runoff and urban flooding
- **Strategy 2**
Improve stormwater management and rehabilitate natural drains

SOLID WASTE



Resilience Goal:
Transition to a Zero
Waste City

Mitigation Targets:

- 100% segregated waste collection
- 100% scientific processing, treatment and disposal of waste

- **Strategy 1**
Minimize solid waste generation and maximize reuse and recycling
- **Strategy 2**
Ensure 100% source segregation and implement effective primary and secondary waste collection
- **Strategy 3**
Augment sustainable waste processing and disposal infrastructure

URBAN GREENING & BIODIVERSITY



Resilience Goal:
Enhance Blue-Green
Infrastructure for
Climate Resilience

Mitigation Targets:

- Increase green cover by 90 sq. km to meet WHO norms (9 sq. m per person) by 2070

- **Strategy 1**
Increase urban green cover using native plantation
- **Strategy 2**
Develop micro habitats for local biodiversity management
- **Strategy 3**
Increase carbon sink through urban greening

AIR QUALITY



Resilience Goal:
Enhance Liveability
by Achieving
National
Clean Air Program
Targets (2025)

- **Strategy 1**
Adopt measures to reduce vehicular air pollution
- **Strategy 2**
Manage construction activities and debris
- **Strategy 3**
Reduce air pollution from industrial activities

Advancing towards Net Zero GHG Emissions through the Net Zero Pathway

Ahmedabad's mitigation target underscores its ambition to achieve net zero GHG emissions by 2070 and contribute to India's net zero emissions goal. As noted earlier, the climate action planning process considers two emissions reduction scenarios, the 'Progressive Action' scenario and the 'Net-zero Pathway' scenario, to determine the level of GHG emissions reduction possible with progressively higher scale of action respectively.

Implementation of all actions in the Progressive Action scenario are estimated to achieve emissions reduction of 76% from the BAU in 2070. This falls short of meeting the target of 100% reduction towards net zero emissions.

Thus, Ahmedabad will be required to take more ambitious climate action to address the residual emissions of 24% from BAU by 2070.

Hence, to advance towards net zero emissions, the Net Zero Pathway is recommended for Ahmedabad.

Implementing the strategies and actions in the Net Zero Pathway will help Ahmedabad achieve deep GHG emissions reduction at the city-scale, as much as 91% as compared to BAU and move closer to the net zero target.

Strategies and actions identified in the Net Zero Pathway are considered feasible with the contribution of various types of policy and financial support from the city, state, and national governments. Significant financial impetus is required to achieve net zero emissions by 2070.

Key Highlights of GHG Emissions Reduction

The Net Zero Pathway helps to reduce Ahmedabad's GHG emissions by 91% in 2070 compared to BAU. This corresponds to a GHG emissions reduction of 90.5 million tCO₂e by 2070.

The Net Zero Pathway yields the following levels of emissions reduction compared to BAU:

- GHG emissions in 2030: 55.7% lower than BAU
- GHG emissions in 2050: 79.2% lower than BAU
- GHG emissions in 2070: 91.0% lower than BAU

Table ii: GHG emissions reduction by sector for Net Zero Pathway

| SECTOR | GHG EMISSIONS REDUCTION COMPARED TO SECTORAL BAU EMISSIONS | | |
|--|--|------|------|
| | 2030 | 2050 | 2070 |
| Residential Buildings | 58% | 84% | 89% |
| Commercial and Institutional Buildings and Facilities | 56% | 80% | 97% |
| Manufacturing Industries and Construction | 55% | 77% | 92% |
| Transport | 30% | 41% | 45% |
| Wasteⁱⁱⁱ | 93% | 192% | 216% |

iii. GHG emissions reduction exceeds 100% for Waste sector in 2050 and 2070 as it also accounts for GHG emissions reduction from potential electricity generation from waste-to-energy facilities and anaerobic wastewater treatment with methane recovery. This additional GHG emissions reduction corresponds to and reflects the avoided use of grid electricity that would otherwise be needed in the absence of waste-to-energy in solid waste and methane recovery from domestic wastewater treatment.

Note: Additionally, the carbon sequestration potential of proposed green cover is 0.60, 1.24 and 1.52 million tCO₂e in 2030, 2050 and 2070, respectively.

Table iii: Estimated costs of climate actions in the Net Zero Pathway

| SECTOR/THEMATIC AREA | ESTIMATED COST OF MITIGATION ACTIONS ^{iv} (2070) (MILLION INR) | ESTIMATED COST OF ADAPTATION ACTIONS ^v (MILLION INR) | TOTAL |
|--|---|---|-----------|
| Built Environment and Energy | 2,963,087 | Not estimated | 2,963,087 |
| Transport | 649,500 | Not estimated | 649,500 |
| Water | 9,925 | 4,85,538 | 495,462 |
| Wastewater | 2,946 | 46,387 | 49,333 |
| Storm Water | Not estimated | 30,221 | 30,221 |
| Solid Waste | 24,904 | 113,301 | 138,205 |
| Urban Greening and Biodiversity | Not estimated | 80,800 | 80,800 |
| Air Quality | Not estimated, as sectoral actions may improve air quality as well. | | |
| Total | 3,650,362 | 756,247 | 4,406,608 |

The ambitious efforts and targets outlined in the Net Zero Pathway can help achieve a decrease of 91% in the BAU emissions by 2070. Residual or remaining emissions (9% of BAU emissions) are to be addressed for Ahmedabad, to meet the net zero target. Ahmedabad City intends to achieve net zero ahead of time by working towards adoption of progressive policies and actions to decarbonize the grid and incentivize consumption of green power, particularly for electric mobility; and leverage advanced technologies such as green hydrogen, carbon capture, usage, and storage (CCUS), natural climate solutions, and material circularity^v. Ahmedabad will work with other key departments and stakeholders to achieve the net zero vision ahead of time.

Way Forward

The CRCAP proposes various interventions across governance, data management, and monitoring and reporting.

Summary of Actions on Governance

- Outline and formalize the operational framework and specific functions of the Climate Core Team.
- Consider expanding the scope of the Climate Core Team to form a Climate Change Cell or Department within AMC with dedicated budgetary provisions throughout its budget.
- Create a High-powered Steering Committee with the broader state government departments and public institutions for better alignment and strategy.

iv. Cost estimation is limited to actions where it was possible to provide an estimate. Actual budget requirement will be higher than this estimation

v. [McKinsey Sustainability](#)

- Mainstream CRCAP into the Development Plan and Development Control Regulations being prepared by Ahmedabad Urban Development Authority (AUDA).
- Undertake climate responsive budgeting in AMC.
- Align with other projects and policies of the Government of Gujarat and Government of India.

Summary of Actions on Data Collection & Management

- Develop a Climate Data Policy Guideline.
- Leverage the Integrated Command and Control Center (ICCC) to establish SOPs.
- Create a guideline for aligning administrative boundaries for data capturing across all the departments and disaggregated data reporting.

Summary of Actions on Monitoring & Tracking Progress

- The Climate Core Team will track the progress of key sectoral actions and their performance.
- The Climate Core Team will conduct periodic reviews and submit progress to established national and international platforms.
- The Climate Core Team shall meet at least quarterly, and the High-powered Steering Committee and Stakeholder Committee will meet bi-annually.
- Leverage the capacities of agencies like Space Applications and Geo-informatics (BISAG), ICCC of AMC, and other departments like the Gujarat Pollution Control Board to use technology and analytics.

Other Supporting Actions for Fast-tracking Climate Action:

- Capacity Building: AMC can involve experienced practitioners in short-term capacity improvement and organize training programs, workshops, and hands-on training for climate professionals for the longer-term.

- Procurement: Consider implementing a green public procurement policy to facilitate using pro-climate goods and services in public contracts.
- Communication for Public Awareness: Target public knowledge gaps and enhance climate literacy through public education campaigns while encouraging public participation in decision-making.
- Financing Climate Action: Identify funding opportunities and tap into climate finance mechanisms such as Renewable Energy Service Company (RESCO) / Energy Service Company (ESCO) models and ICLEI's Transformative Actions Program. Explore innovative financing models like voluntary carbon credits, green bonds, and public-private partnerships to secure financial support and incentives for implementing climate actions

Conclusion:

Ahmedabad's Net Zero CRCAP serves as a comprehensive roadmap to address the local impacts of climate change. Aligned with Gujarat's SAPCC, global commitments under the Paris Agreement and the SDGs, the plan will help Ahmedabad in its transition to a net zero, climate-resilient and sustainable future.

The plan focuses on key objectives of reducing GHG emissions, enhancing urban adaptive capacities, planning for climate resilient infrastructure, and promoting circularity and resource efficiency. To achieve these objectives, it proposes a range of strategies including promoting energy efficiency in buildings, increasing the adoption of renewable energy sources, encouraging sustainable mobility options, implementing effective waste management practices, and providing guidance for developing climate-resilient infrastructure, among others.

Ahmedabad's CRCAP is driven by local considerations. Its successful implementation offers numerous benefits to the city and its residents. Improved air quality, enhanced public health, increased economic opportunities through innovation and clean technologies, strengthened energy and water security, and the creation of green jobs are few of the positive outcomes expected to be achieved. It is estimated that the proposed actions will generate 479,690 green jobs through renewable

energy implementation in buildings, electric mobility, and municipal facilities^{vi}. Working together with public and private sector actors, Ahmedabad can promote economic investment that aligns with the goals of its CRCAP, which will help leverage opportunities, support locally driven implementation, and realize associated benefits.

vi. Estimated based on "[Future skills and job creation with renewable energy in India – Assessing the co-benefits of decarbonising the power sector](#)" Report, October 2019



