

**Swiss Agency for Development** and Cooperation SDC





# Simplified Climate Action Plan, Ahmedabad



Area	480.88 sq.km
Zones	7 (East, West, North, Central, South North-West, South-West)
Wards	48
Population (2021)	7.18 Million
Population Density (2021)	14,934 persons/ sq.km
Total household (2021)	11,79,823
Household Size (2021)	5
Climatic Condition	Hot & Semi-arid
Major Economic Activity	Trade, Commerce and Industries (textiles, chemicals and agro & food processing)



Area	Grade	Result	Grade	Target
Procurement and Finance	2.00	50%	2.50	63%
City Planning	2.75	69%	4.00	100%
Cooperation and Communication	2.83	71%	3.33	83%
Buildings	1.50	38%	3.10	78%
	AreaProcurement and FinanceCity PlanningCooperation and CommunicationBuildings	AreaGradeProcurement and Finance2.00City Planning2.75Cooperation and Communication2.83Buildings1.50	AreaGradeResultProcurement and Finance2.0050%City Planning2.7569%Cooperation and Communication2.8371%Buildings1.5038%	AreaGradeResultGradeProcurement and Finance2.0050%2.50City Planning2.7569%4.00Cooperation and Communication2.8371%3.33Buildings1.5038%3.10

T	opics for Climate Assessment	Grade     Average     Target     Topics for Climate Assessment     Grade		Grade	Average grade	Target		
1	Procurement and Finance		2.00	2.50	5.7 Intelligent Traffic and Transport System	3.5	<b>9</b>	3.5
	1.1 Procurement Guidelines and Bylaws	1		1	5.8 Pollution Management	3.5		4
	1.2 Climate Finance	3		4	5.9 Parking	3.5		4
2	City Planning		2.75	4.00	6 Waste		3.00	3.63
	2.1 Energy Profile and GHG Emission Inventory	3		4	6.1 Solid Waste Management Action Plan/ Strategies	2		3
	2.2 Climate Change Vulnerability and Risk Assessment	1		4	6.2 Waste Collection Systems	3.5		3.5
	2.3 Disaster Resilience	3.5		4	6.3 Waste Recycling and Processing	3		4
	2.4 Climate Resilient Urban Planning	3.5		4	6.4 Disposal	3.5		4
3	Cooperation and Communication		2.83	3.33	7 Water and Sewage		2.83	3.92
	3.1 Education/Research Institutions and NGOs	2.5		3	7.1 Overall Water Resource Management Strategy	3		4
	3.2 Public organisations	3		4	7.2 Water Treatment and Distribution System	3		4
	3.3 Private Sector	3		3	7.3 Storm Water Management	3.5		3.5
4	Buildings		1.50	3.10	7.4 Sewage Management	2.5		4
	4.1 Energy Mangement in Municipal Corporation Owned Existing Buildings	3		4	7.5 Waste Water Recycle and Reuse	2.5		4
	4.2 Green Buildings: Municipality owned buildings and social housing schemes	0.5		3	7.6 Faecal Sludge/ Septage Management	2.5		4
	4.3 Energy Management in existing Private Buildings	2.5		3.5	8 Biodiversity		3.00	4.00
	4.4 Implementation of Green Building Standards in new Private buildings	1.5		2	8.1 Local Biodiversity Strategy Action Plan and Implementation	2		4
	4.5 Dissemination of Best Examples (Public Buildings and Social Housing)	0		3	8.2 Natural areas in the city	4		4
5	Mobility		2.72	3.61	9 Energy / Energy-Infrastructure		1.67	2.00
	5.1 Mobility Planning	3		4	9.1 Public Lighting	4		4
	5.2 Non Motorised Transport	3		4	9.2 City electrical energy derived from renewable sources	1		2
	5.3 Public Transport	3.25		4	9.3 District Energy Systems for Cooling (Revision planned)	0		0
	5.4 Intermediate Public Transport	1.25		2.5	Maximum Points: 15	2 95.5	2.51	131
	5.5 E-Mobility	1		3	Overa	l 63%		86%
	5.6 Urban Freight Movement	2.5		3.5				







Waste Preparation of holistic solid waste management action plan 2000 TPD waste to energy plants 200 TPD plastic waste treatment facility 500 TPD bio-CNG plant



**Urban Biodiversity** 

**Sectoral Interventions** 

Preparation of GHG Emissions Inventory Energy & GHG emission forecasting inline with energy profile Preparation of comprehensive

process

power plant at Jamjodhpur Total 161,803 housing units (affordable housing and in-situ climate resilient city action plan in line with existing planning slum rehabilitation in 57 slum areas) are proposed by AMC

under 'Housing for All – 2022'. Social media campaign on use of EE and RE

top solar PV installation on

various municipal buildings

Installation of 8.4 MW wind

Prepare integrated annual transportation work plan Identification of prioritized routes for NMT infrastructure Utilisation of renewable energy to charge electric buses Origin-destination survey to identify the need for IPT and preparation of IPT policy Preparation of action plan to promote electric mobility in the city for private vehicles Develop intra city entry point to be develop as transport hubs to reduce vehicular traffic coming from other cities Preparation of micro action plan for clean air

Parking Demand Assessment

Water augmentation and ground water recharge study Promote development of lakes, ground water reuse and wastewater reuse Construction of water distribution stations, overhead tanks, pipeline network, WTP Developing water meter policy for the city

Storm water drainage improvements to minimise water logging and urban environment

Capacity augmentation and technology upgradation for sewage management Strengthening wastewater reuse and septage management

Prepare detailed Local **Biodiversity Strategy Action** Plan (LBSAP) Plantation of 1 million trees proposed Implementation of urban forest and biodiversity parks

**Implementing Partners** 







Research / Consulting / Evaluation





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# Simplified Climate Action Plan, Vadodara



Area	220.33 sq.km
Zones	4 (East, West, North, South)
Wards	12 (3 wards in each zone)
Population (2021)	2.24 Million
Population Density (2021)	11,502 persons/ sq.km
Total household (2021)	6,13,682
Household Size (2021)	4.78
Climatic Condition	Hot & Dry
Major Economic Activity	Producer of dolomite and fluorspar, Various large-scale industries:
	GSFC,GACL,IPCL,ONGC,



	Area	Grade	Result	Grade	Target
1	Procurement and Finance	1.00	25%	2.00	50%
2	City Planning	1.63	41%	3.38	84%
3	Cooperation and Communication	0.83	21%	2.00	50%
4	Buildings	1.23	31%	2.00	50%



Topics for Climate Assessment		Grade	Average grade	Target	T	Topics fo	or Climate Assessment	Grade		Average grade	Target	
1	Proc	curement and Finance		1.00	2.00		5.7	Intelligent Traffic and Transport System	1.5			3
	1.1	Procurement Guidelines and Bylaws	0		1		5.8	Pollution Management	1.5			3
	1.2	Climate Finance	2		3		5.9	Parking	2.5			3
2	City	Planning		1.63	3.38	6	6 Wast	ie in the second s			1.38	3.00
	2.1	Energy Profile and GHG Emission Inventory	1		4		6.1	Solid Waste Management Action Plan/ Strategies	1.5			3
	2.2	Climate Change Vulnerability and Risk Assessment	1		4		6.2	Waste Collection Systems	2			3
	2.3	Disaster Resilience	3		3.5		6.3	Waste Recycling and Processing	1			3
	2.4	Climate Resilient Urban Planning	1.5		2		6.4	Disposal	1			3
3	Coo	peration and Communication		0.83	2.00	7	7 Wate	er and Sewage			1.60	2.75
	3.1	Education/Research Institutions and NGOs	1		2		7.1	Overall Water Resource Management Strategy	1.33			3
	3.2	Public organisations	0.5		2		7.2	Water Treatment and Distribution System	2			3.5
	3.3	Private Sector	1		2		7.3	Storm Water Management	2			3
4	Buil	dings		1.23	2.00		7.4	Sewage Management	2			3
	4.1	Energy Mangement in Municipal Corporation Owned Existing Buildings	2		3		7.5	Waste Water Recycle and Reuse	1.25			2
	4.2	Green Buildings: Municipality owned buildings and social housing schemes	0.5		1		7.6	Faecal Sludge/ Septage Management	1			2
	4.3	Energy Management in existing Private Buildings	0.5		1	8	8 Biodi	iversity			2.38	2.50
	4.4	Implementation of Green Building Standards in new Private buildings	2.66		3		8.1	Local Biodiversity Strategy Action Plan and Implementation	0.75			1
	4.5	Dissemination of Best Examples (Public Buildings and Social Housing)	0.5		2		8.2	Natural areas in the city	4			4
5	Mob	ility		1.12	2.11	9	9 Energ	gy / Energy-Infrastructure			1.33	2.00
	5.1	Mobility Planning	0		1		9.1	Public Lighting	3			4
	5.2	Non Motorised Transport	1.33		3		9.2	City electrical energy derived from renewable sources	1			1
	5.3	Public Transport	2.25		3		9.3	District Energy Systems for Cooling (Revision planned)	0			1
	5.4	Intermediate Public Transport	0		1			Maximum Points: 152	2 51.07		1.34	92
	5.5	E-Mobility	0.5		1			Overal	I 34%			61%
	5.6	Urban Freight Movement	0.5		1							







Waste Preparation of holistic solid waste management action plan including IEC and Capacity building activities under Swatchh Suvekshan 2.0 Awareness and IEC activities for waste segregation and 'Zero Waste Ward' Construction of 50 TPD Plastic waste processing plant Construction of 50 TPD C&D waste processing plant Construction of 1000 TPD Waste to Energy plant (10MW) Construction of new Landfill site phase II at Makarpura with a capacity of 0.42 million MT

Water & Sewerage



**Climate Assessement & Evaluation Results** 

Sectoral Interventions

Prepare GHG Emissions Inventory Energy & GHG emission forecasting inline with energy profile I Ward level vulnerability and risk assessment Prepare Climate Resilient City Action Plan in line with existing planning process sc gr

Total 80kWp rooftop solar PV system for various 16 Urban Health Centers Installation of solar plants on VMC buildings, GWR, STPs etc. Total 22,886 social housing units are proposed by VMC under various state and national schemes. 3% to 5% of proposed

units are proposed by VMC under various state and national schemes. 3% to 5% of proposed social housing units may follow green building norms and apply for green building certification Promote green building concept and awareness drive amongst local architects/ engineers/ builders through workshops Prepare updated comprehensive transport and mobility plan Develop NMT network on 4 identified routes as a part of cycle for change challenge Development of transport hub in north zone and at central bus stand on PPP mode for city and state transportation

Implementation of ITMS

Development of Multi-level parking near RC Dutt Road and Padmavati complex Development of Electric charging stations within the city limit and Procurement of electric buses Preparation of water management action plan Construction of 150 MLD WTP at Sindhrod and 50 MLD new WTP at Nimeta Development of water source for the southern zone of the city from Rameshara main canal Water audit and energy audit under smart water management project for SCADA Phase II Replacing old water supply network with MDPE pipeline network in all four zones Up-gradation of water and waste water pumping stations Construction of New STPs and operationalize Fecal Sludge Treatment Plant (FSTP) Preparation of Local Biodiversity Strategy Action Plan (LBSAP) Development of Biodiversity Park at Govindnagar, Kareli baug Development of Miyawaki based urban forest at 75 locations in the city Development of various gardens to increase the

ize (i.e., biodiversity park at Govindnagar, landscape island near railway station)

### **Implementing Partners**







Research / Consulting / Evaluation





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# Simplified Climate Action Plan, Tirunelveli





Area	108.65 sq.km
Zones	4 (Melapalayam, Pa layamkottai, Tirunelveli, Thatchanallur)
Wards	55
Population (2021)	0.55 Million
Population Density (2021)	5085 persons/sq.km
Total household (2021)	140,584
Household Size (2021)	3.93
Climatic Condition	Warm & Humid
Major Economic Activity	Agricultural products & trading, administrative & educational Services

	Area	Grade	Result	Grade	Target
1	Procurement and Finance	1.50	38%	3.50	88%
2	City Planning	1.50	38%	3.25	81%
3	Cooperation and Communication	0.83	21%	2.00	50%
4	Buildings	0.50	13%	2.00	50%

ssessment

•	Topics for Climate Assessment	Grade	Average grade	Target	Topics for Climate Assessment G		Grade	A	verage grade	Target
•	1 Procurement and Finance		 1.50	3.50		5.7 Intelligent Traffic and Transport System	0.5			2
	1.1 Procurement Guidelines and Bylaws	0.5		3		5.8 Pollution Management	1			2
	1.2 Climate Finance	2.5		4		5.9 Parking	0.5			2
	2 City Planning		 1.50	3.25	6	Waste			1.38	3.00
	2.1 Energy Profile and GHG Emission Inventory	3		4		6.1 Solid Waste Management Action Plan/ Strategies	0.5			2
	2.2 Climate Change Vulnerability and Risk Assessment	1		4		6.2 Waste Collection Systems	1.5			3
	2.3 Disaster Resilience	2		3		6.3 Waste Recycling and Processing	1.5			3
	2.4 Climate Resilient Urban Planning	0		2		6.4 Disposal	2			4
	3 Cooperation and Communication		0.83	2.00	7	Water and Sewage			0.50	2.00
	3.1 Education/Research Institutions and NGOs	1.5		3		7.1 Overall Water Resource Management Strategy	1			3
	3.2 Public organisations	1		2		7.2 Water Treatment and Distribution System	1.5			3
	3.3 Private Sector	0		1		7.3 Storm Water Management	0			2
4	4 Buildings		0.50	2.00		7.4 Sewage Management	0.5			2
	4.1 Energy Mangement in Municipal Corporation Owned Existing Buildings	2		4		7.5 Waste Water Recycle and Reuse	0			1
	4.2 Green Buildings: Municipality owned buildings and social housing schemes	0		1		7.6 Faecal Sludge/ Septage Management	0			1
	4.3 Energy Management in existing Private Buildings	0		1	8	Biodiversity			0.25	1.00
	4.4 Implementation of Green Building Standards in new Private buildings	0.5		3		8.1 Local Biodiversity Strategy Action Plan and Implementation	0.5			1
	4.5 Dissemination of Best Examples (Public Buildings and Social Housing)	0		1		8.2 Natural areas in the city	0			1
	5 Mobility		0.67	1.61	9	Energy / Energy-Infrastructure			1.67	2.33
	5.1 Mobility Planning	1		2		9.1 Public Lighting	4			4
	5.2 Non Motorised Transport	1		2		9.2 City electrical energy derived from renewable sources	1			2
	5.3 Public Transport	0.5		1		9.3 District Energy Systems for Cooling (Revision planned)	0			1
	5.4 Intermediate Public Transport	0		1		Maximum Points: 152	34		0.89	83.5
	5.5 E-Mobility	0.5		1		Overall	22%			55%
	5.6 Urban Freight Movement	1		1.5						







Waste 



**Urban Biodiversity** 

**Climate Assessement & Evaluation Results** 

Sectoral Interventions	Energy & GHG emission         forecasting inline with energy         profile	PV plant at Ramayanpatti for captive consumotion by municipal facilitiesSocial media campaign on EE measures and REBenefits in property tax for installation of roof top solar PV	Plan Identification of prioritized areas for NMT infrastructure Utilisation of renewable energy to charge electric buses Battery Operated Vehicles for Municipal Uses Identification of sites for electric charging infrastructure Promote electric mobility in the city for private vehicles	<ul> <li>management action plan</li> <li>Preparation of local policies for</li> <li>managing plastic waste, C&amp;D waste</li> <li>and e-waste</li> <li>Encouraging Source Segregation of Zero-</li> <li>waste wards</li> </ul>	<ul> <li>water source augmentation to interfect definition and construction of water distribution stations, overhead tanks, pipeline network</li> <li>Watershed Assessment and Ground water recharge study</li> <li>Promote rejuvenation of lakes within city owned by corporation</li> <li>SCADA for improving efficiency of water supply</li> <li>Storm water drainage network improvements to minimise water logging issues</li> <li>UGSS Coverage area and wastewater treatment Capacity augmentation</li> <li>Technology upgradation for existing infrastructure and improved sewage management</li> </ul>	Improvement Plan Implementation of urban forest and biodiversity parks Planting of tress in developed parks with minimal vegetation
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### **Implementing Partners**







Research / Consulting / Evaluation





**Swiss Agency for Development** and Cooperation SDC





# Simplified Climate Action Plan, Tiruchirappalli







Area	167.23 sq.km
Zones	4 (Abishekapuram, Srirangam, Ariyamangalam & Ponmalai)
Wards	65
Population (2021)	1.02 Million
Population Density (2021)	6,144 persons/ sq.km
Total household (2021)	2,28,312
Household Size (2021)	4.5
Climatic Condition	Hot & Dry
Major Economic Activity	Trade, Commerce and Industries and Transport Hub

	Area	Grade	Result	Grade	Target
1	Procurement and Finance	1.50	38%	3.50	88%
2	City Planning	1.75	44%	3.50	88%
3	Cooperation and Communication	1.67	42%	2.67	67%
4	Buildings	0.80	20%	2.40	60%

Topics for Climate Assessment	Grade	Average grade	Target	То	bics for Climate Assessment	Grade	Average grade	Target
1 Procurement and Finance		1.50	3.50		5.7 Intelligent Traffic and Transport System	1.5		2.5
1.1 Procurement Guidelines and Bylaws	0.5		3		5.8 Pollution Management	2		4
1.2 Climate Finance	2.5		4		5.9 Parking	2		3
2 City Planning		1.75	3.50	6	Waste		1.50	4.00
2.1 Energy Profile and GHG Emission Inventory	3		4		6.1 Solid Waste Management Action Plan/ Strategies	2		4
2.2 Climate Change Vulnerability and Risk Assessment	1.5		4		6.2 Waste Collection Systems	2		4
2.3 Disaster Resilience	1.5		4		6.3 Waste Recycling and Processing	1		4
2.4 Climate Resilient Urban Planning	1		2		6.4 Disposal	1		4
3 Cooperation and Communication		1.67	2.67	7	Water and Sewage		0.75	2.42
3.1 Education/Research Institutions and NGOs	3		4		7.1 Overall Water Resource Management Strategy	1		3
3.2 Public organisations	1.5		3		7.2 Water Treatment and Distribution System	1		2
3.3 Private Sector	0.5		1		7.3 Storm Water Management	0		4
4 Buildings		0.80	2.40		7.4 Sewage Management	2		3.5
4.1 Energy Mangement in Municipal Corporation Owned Existing Buildings	2.5		4		7.5 Waste Water Recycle and Reuse	0		1
4.2 Green Buildings: Municipality owned buildings and social housing schemes	0.5		3		7.6 Faecal Sludge/ Septage Management	0.5		1
4.3 Energy Management in existing Private Buildings	0.5		1	8	Biodiversity		0.25	2.00
4.4 Implementation of Green Building Standards in new Private buildings	0.5		3		8.1 Local Biodiversity Strategy Action Plan and Implementation	0.5		3
4.5 Dissemination of Best Examples (Public Buildings and Social Housing)	0		1		8.2 Natural areas in the city	0		1
5 Mobility		0.94	1.94	9	Energy / Energy-Infrastructure		1.83	2.67
5.1 Mobility Planning	1		2		9.1 Public Lighting	4		4
5.2 Non Motorised Transport	0.5		2		9.2 City electrical energy derived from renewable sources	1.5		3
5.3 Public Transport	0.5		1		9.3 District Energy Systems for Cooling (Revision planned)	0		1
5.4 Intermediate Public Transport	0		1		Maximum Points: 152	44	1.16	101
5.5 E-Mobility	0.5		1		Overall	<b>29</b> %		66%
5.6 Urban Freight Movement	0.5		1					







Waste Preparation of holistic solid waste management action plan 370 TPD legacy waste treatment 20 TPD plastic waste treatment facility through (Resource Recovery Center) RRC 16 TPD bio-gas plant



**Urban Biodiversity** 

**Sectoral Interventions** 

Prepare and regularly update on various municipal buildings **GHG** Inventory 9.6 MW Ground Mounted Solar Energy & GHG emission Power plant at Panchappur forecasting inline with energy profile Total 14,095 housing units (affordable housing and in-situ slum Prepare Climate Resilient City rehabilitation in 39 slum areas) are Action Plan in line with the proposed by TCC under 'Housing for existing planning process

Social media campaign on use of EE and RE

All – 2022'.

Prepare integrated bus Terminal – Panjappur (Green Building Adaptation) Identification of prioritized routes

for NMT infrastructure Preparation of action plan to promote electric mobility in the city for private vehicles

Preparation of micro action plan for clean air under NCAP Parking Demand Assessment -UMTA

Water augmentation and ground water recharge study Promote development of lakes, ground water reuse and wastewater reuse Construction of water distribution stations, overhead tanks, pipeline network, WTP SCADA for improving efficiency of water supply Storm water drainage improvements to minimise water logging and urban environment Capacity augmentation and technology upgradation for sewage management Strengthening wastewater reuse and septage management UGSS Coverage area and wastewater treatment

Capacity augmentation

Estimation of Carbon Sequestration Potential for existing Miyawaki forests in 4 locations Prepare detailed Local Plan (LBSAP)

**Biodiversity Strategy Action** Implementation of urban forest

and biodiversity parks Prepare detailed Natural Asset Mapping

**Implementing Partners** 







Research / Consulting / Evaluation

