

The CapaCITIES project aims to strengthen the capacities of Indian cities (Coimbatore, Rajkot, Siliguri & Udaipur), to identify, plan and implement measures for reducing GHG emissions and for enhancing resilience to climate change in an integrated manner. The first phase (2016-19) of the project is focussing on mainstreaming climate change mitigation and adaptation into development policies at the city level, supporting the city authorities in the formulation and implementation of integrated action plans and measures across priority sectors and sharing experiences with other cities in developing and emerging countries.

OFFICIAL LAUNCH EVENT

The CapaCITIES project was officially launched on March 17, 2017 in Udaipur. The event took place in the esteemed presence of His Excellency, The Swiss Ambassador to India and Bhutan, Dr. Andreas Baum, Hon'ble Mayor - Udaipur Municipal Corporation (UMC), Shri. Chandra Singh Kothari, Hon'ble Collector of Udaipur (at the time of the event), Shri. Rohit Gupta, Hon'ble Commissioner - UMC, Shri. Sidharth Sihag, Hon'ble Member Mayor in Council - Siliguri Municipal Corporation, Shri. Mukul Sen Gupta and the Director of the Smart Cities Mission, Ministry of Housing & Urban Affairs (GoI), Shri. Sajeesh Kumar. In a bid to transform the intermediate public transport fleet of the city, the first pilot on e-rickshaws was also launched.





SMART CITIES EXPO

The CapaCITIES project was showcased at the Swiss pavilion of the 3rd Smart Cities Expo held at Pragati Maidan, New Delhi on the 10th, 11th and 12th of May 2017.

The CapaCITIES booth drew a lot of interest from the visitors at the expo, which included Govt. officials and private organisations. They were curious to know how the project fits into the Smart Cities Mission and the overall urban development paradigm.

WORKSHOPS

CLIMATE ACTION PLANNING & FINANCING WORKSHOP

The Workshops were held at Hotel Lakend, a day before the official launch of the project in Udaipur. Mr. Martin Stadelmann from the South Pole Group, through his presentation and interactive session, helped city authorities improve their knowledge on financing climate action projects for their respective cities. Mr. Beat Meier from econcept provided an overview of the European Energy Award (eea) and drew parallels for a similar awarding mechanism that could be initiated in Indian Cities



1ST CLIMATE ACTION PLAN WORKSHOP-COIMBATORE

The first Climate Action Plan Workshop in Coimbatore was conducted on April 12, 2017. This Shared Learning Dialogue (SLD) with the Stakeholder Group and Climate Core Team introduced the adaptation component of the

Climate Resilient CITIES methodology. During the SLD, past climate hazards and their impacts and responses, climate trends and risks and fragile urban systems, were identified. The process of conducting a risk and vulnerability assessment was also discussed.

STRATEGY WORKSHOP

A Strategy Workshop for Solid Waste Management (SWM) in Coimbatore was held on June 13, 2017. This was attended by the solid waste department officials of Coimbatore City Municipal Corporation with Mr. Raphael Fasko, Swiss expert on SWM, facilitating the workshop. During this meeting, the process of solid waste management of the city of Coimbatore, including collection, transportation, treatment, financing and monitoring and evaluation was discussed. Biomethanation and other waste to energy technologies were discussed in detail to outline the feasibility of introducing the same in Coimbatore. Consideration was also given to future increase in waste generation and capacities of treatment facilities were identified on the basis of the same.



1ST CLIMATE ACTION PLAN WORKSHOP-SILIGURI

The first Climate Action Plan Workshop was conducted in Siliguri on July 14, 2017. This Shared Learning Dialogue (SLD) with the Stakeholder Group and Climate Core Team, introduced them to both the adaptation and mitigation components of the ClimateResilientCITIES methodology . This SLD was an introductory meeting and workshop, where the participants were introduced to the concepts of risk identification and vulnerability assessment as well as GHG emissions inventory preparation (through Heat+ tool).

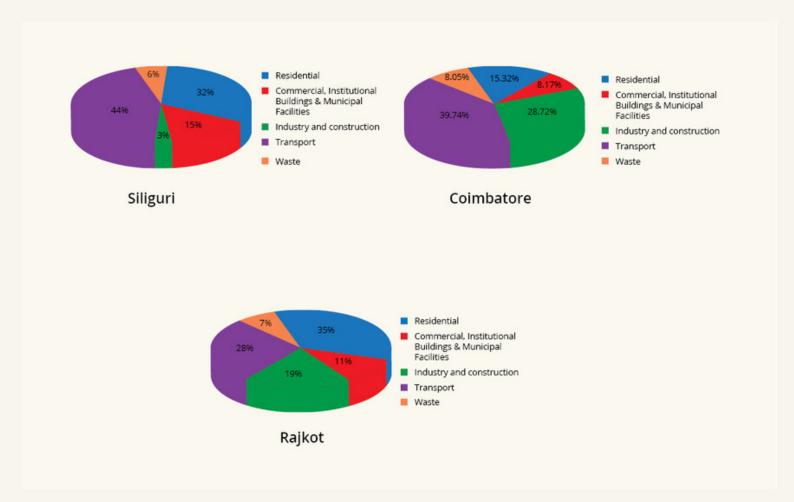
2ND CLIMATE ACTION PLAN WORKSHOP-COIMBATORE

The second Shared Learning Dialogue was conducted in Coimbatore on July 27, 2017. The workshop was attended by representatives from the Core Team in Coimbatore Corporation, as well as from the Stakeholder Group, that included representatives from NGOs like WWF, Residents Awareness Association of Coimbatore (RAAC), No Dumping, institutes like Salim Ali Centre for Ornithology and Natural History (SACON), professors from colleges and universities, as well as individual experts. Participants identified resilience interventions for the water, waste water and solid waste management sectors and for land use planning. These interventions are now prioritised and are included in the City's Climate Resilient City Action Plan.

GHG EMISSION INVENTORIES

GHG Emission Inventories, compliant with the Global Protocol for Community Scale GHG Emissions Inventories (V2.0), were developed for Coimbatore, Rajkot and Siliguri. They account for greenhouse gas emissions from combustion of fossil fuels for stationary and transport uses, electricity consumption in the city for various activities, from municipal solid waste management activities and from sewage treatment.

GHG emissions are reported in terms of tonnes of CO2 equivalent (tCO2e). The GHG inventory is prepared for the period 2011-12 to 2015-16 to analyse the overall trend of GHG emissions in each city. The transportation sector in Siliguri and Coimbatore accounts for the maximum GHG emissions while in Rajkot, the maximum contribution is from the residential buildings sector.



MEETING WITH STATE GOVERNMENT OFFICIALS

Mr. Daniel Ziegerer, ex-Head, Swiss Cooperation Office and Counselor, Embassy of Switzerland in India and Mr. Emani Kumar, Executive Director, ICLEI South Asia met officials of the Government of Rajasthan and Government of Gujarat on April 5, 2017 and April 19, 2017, respectively. Mr. Shirish Sinha, Deputy Head, Swiss Cooperation Office in India, also met officials from the Government of Tamil Nadu on June 12, 2017 along with representatives of the Implementation Agency of the CapaCITIES project. Insights on various components, objectives, timelines and framework of the project were given . Discussions were also held on cooperation and better implementation.

PROJECT ACTIVITY

E-RICKSHAW PILOT IN UDAIPUR

Eighteen electric rickshaws (load carrying and passenger carrying) were introduced in Udaipur with an aim to evaluate their performance and recommend feasible options to scale up the project. They will also be used to test the workability of advanced Lithium ion batteries. The strategy to promote e-rickshaws is based on replacing over a longer term, all conventional fossil fuel rickshaws (small, large as well as freight rickshaws) with electric units.





VISIT TO WASTE MANAGEMENT FACILITY IN GOA

ICLEI South Asia organised a site visit to the Salegaon municipal solid waste biomethanation plant in July 2017, with the support of the Goa State Infrastructure Development Corporation (GSIDC). Officials from Coimbatore, Rajkot, Siliguri and Udaipur engaged with officials of the GSIDC and the operators of the plant to understand the plant operations and the provisions and structure of the contract.

SOURCE SEGREGATION OF WASTE IN UDAIPUR

Source segregation of waste was initiated in two municipal wards (Ward 1 and Ward 41) in Udaipur. The two wards with approximately 3500 households and commercial entities have been chosen in discussion with the UMC. As a first step in the initiative, ICLEI South Asia conducted a recee and preliminary discussion with citizens regarding general practices of waste management in their areas. Following that, a quantification and characterization study of the two wards to assess the quantity of waste being generated and the composition of waste, was undertaken. Intensive dialogues with citizens and one-to-one meetings in the two wards regarding segregation practices were conducted over the last five months by officials and field staff from ICLEI South Asia. By end of December 2017, 100% doorstep segregation was achieved in Ward 41 and 65% segregation of waste in wet and fry fraction was achieved in Ward 1.







WASTE ASSESSMENT IN RAJKOT

In order to support Rajkot City in its larger objective of implementing sustainable waste management practices, with a focus on the reduction of GHG emissions from waste disposal, ICLEI South Asia quantified and characterised municipal solid waste generated in three zones of the city. Samples were collected from three representative municipal wards viz. 10, 14 and 15 over a period of 1 week and also from secondary collection points, waste transfer stations, processing plants and the landfill, with the support of municipal staff of Rajkot. This baseline assessment is now informing the strategy that is under preparation.

PROJECT ACTIVITY

WATER QUALITY ASSESSMENT IN COIMBATORE

In Coimbatore, the possibility of improving water quality in the lakes within the city that are currently polluted due to the release of untreated waste water from neighbouring areas, is being assessed. For this, a detailed assessment is ongoing for one lake – the Singanallur Tank. A household level survey for 10% of the households (around 3000 households) in a portion of the catchment area of the Singanallur tank in Coimbatore was conducted to assess the situation of the sewerage connections and disposal of waste water into the natural drains that finally lead to thelake. In addition, waste water and lake water samples were analysed for physical and chemical quality. An appropriate treatment plant for polluted inflows is being designed by a Swiss Expert.

ACOUSTIC WATER LEAK DETECTION IN SILIGURI

Water supply in Siliguri is characterised by 78 % of unaccounted for water. Water leak detection is critical to enhance the resilience of the city, especially considering the projected rise in temperature by 2.20 C by 2050 and also the corresponding GHG emissions from power used for pumping this excess water. Consequently, in order to enhance the efficiency in isolating leaks, two acoustic water leak detection equipment were procured and handed over to Siliguri Municipal Corporation in August 2017. This equipment will help isolate leaks, even before visible indications such as puddle formation and will increase the quantum of water supplied from 70 lpcd and will also result in reducing water pumping costs.

A training (of three days) for officials of SMC was conducted in the use and handling of the equipment by the suppliers. Water leak detection was also carried out in 1 water zone in the City. Final recommendations are being drafted.





SUNYA PROJECT LAUNCH IN COIMBATORE

The official launch of the SUNYA project, focusing on segregated waste collection and decentralised solid waste management was held on December 29, 2017 at Coimbatore. The Commissioner briefed the citizens of ward 22, local NGOs, Coimbatore City Municipal Corporation (CCMC) Officials, sanitary workers and stakeholders about the project. The Commissioner and Deputy Commissioner then commenced the door to door awareness campaign along with CCMC officials, local NGOs, Ladies Association of ward 22 and ICLEI staff.

WARD LEVEL MEETINGS AND AWARENESS GENERATION ACTIVITIES FOR THE SUNYA PROJECT IN SILIGURI

ICLEI South Asia in coordination with SMC has initiated a pilot project on moving Towards Zero Waste (SUNYA) in ward 2 and 17. An awareness generation activity was conducted in Ward 17 in the Siliguri Girls' High School on December 19, 2017. Detailed ward level meetings were also carried out. These meetings were attended by the SWM committees in both the wards, along with the local councillor, borough chairperson and borough officer. In the meeting, ICLEI staff discussed the activities planned under the SUNYA initiative in detail.



EXPERT VISITS

UDAIPUR

Ms. Simone Bützer, Environmental Engineer, Hunziker Betatech AG from Switzerland, visited Udaipur from November 19 to November 24, 2016. The expert was accompanied by Ms. Soumya Chaturvedula from ICLEI South Asia. The expert visit led to assessment of information available in the DPR prepared by the city cooperation, site visits to the walled city area, the pump station and the existing STP located in Manwa Kheranear Kaladwas village, operated by the Hindustan Zinc Limited. Other key activities accomplished in the visit included analysis of the present situation of the city with regard to the key sectors of sanitation and sewerage and storm water drainage; evaluation of different measures which can be taken to improve the current situation; identification of different climate mitigation, adaptation and resilience actions; and categorization of the measures in categories of short/long-term projects.

COIMBATORE

In order to develop a detailed understanding about the issues related to waste management in the city of Coimbatore, a three-member team of subject matter experts visited the city in December 2016. The team comprised of Mr. Raphael Fasko and Mr. Stephan Textor from Rytec AG, Waste Technology, Energy & Resource Concepts, Switzerland, and Ms. Soumya Chaturvedula from ICLEI South Asia. A solid waste management strategy is now drafted for the City.

RAJKOT

Mr. Nicolas Muhlich from SNZ Engineers and Planners AG visited Rajkot on November 17 & 18, 2017 to understand the existing public transportation infrastructure and on ground situation for conducting a prefeasibility study of electrification of Bus Rapid Transport System (BRTS) corridor in Rajkot.

SILIGURI

A visit to Siliguri was undertaken by Mr. Bruno Hoesli of PLANAR, a consultant for spatial development from Switzerland, from November 21 to 25, 2016. He was accompanied by Mr Ramiz Khan and Mr Souhardhya Chakraborty from ICLEI South Asia. Analysis of the situation in key sectors – Transportation, Solid Waste Management, Drinking Water Supply, Sanitation & Sewerage and Storm Water Drainage was carried out.









A team comprising of Mr Nicholas Muhlich from SNZ Engineers and Planners AG and Mr Utpal Deka, national expert, visited Siliguri from November 19-24, 2017 in relation to conducting a technical prefeasibility assessment for a viable Mass Transit System in the City of Siliguri. The experts were accompanied by Dr Monalisa Sen, City Coach, Siliguri, Mr Souhardhya Chakraborty, City Associate, Siliguri and Mr Vijay Saini, Senior Project Officer, ICLEI.



RAJKOT CITY DIALOGUE

The first City Level Dialogue in Rajkot was held on October 6, 2017. The dialogue was inaugurated by Ms. Marylaure Crettaz, Head of Swiss Cooperation Office and Counsellor, Embassy of Switzerland, in presence of Mr. Jaiman Upadhyay, Mayor, Rajkot Municipal Corporation; Mr. Banchhanidhi Pani, Municipal Commissioner, Rajkot Municipal Corporation; Mr. Emani Kumar, Executive Director, ICLEI South Asia and Mr. Anand Iyer, Chief Project Manager, NIUA.

It brought together experts, policy makers, academic institutions and various stakeholders to deliberate on the key challenges and help in identifying viable solutions for city of Rajkot. Around 60 people from diverse background took part in the workshop and provided their views on climate change related challenges and potential solutions for Rajkot. The workshop offered a unique platform to discuss and highlight features of various initiatives already taken by Rajkot Municipal Corporation, financial and policy level implications, and led to a discussion on the potential of various mitigation and adaptation related interventions for Rajkot in line with existing planning process of city.

CONSORTIUM







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(on behalf of the implementing agency)

COMPLEMENTARY RESEARCH STUDIES

- Low Carbon Resource Efficient
 Affordable Housing in Rajkot by Ashok
 Lall Architects and Greentech
 Knowledge Solutions Pvt. Ltd.
- 2. Climate Exposure: Projections and Scenarios for Coimbatore, Rajkot, Siliguri and Udaipur
- 3. Climate Action Case Study for Rajkot by the Centre for Policy Research
- 4. Study on energy usage in Rajkot by the Centre for Policy Research
- 5. Gender Mainstreaming in Urban Infrastructure by Dr. Anvita Arora

SDC IN INDIA



Schweizerische Eidgenossenschaft Confédération suisse Confederazione Svizzera Confederaziun svizra

Swiss Agency for Development and Cooperation SDC

The Swiss Agency for Development and Cooperation (SDC) has been a partner of India for more than fifty years. Since 2011, SDC's programme focuses specifically on the issue of climate change. This programme is part of SDC's Global Programme on Climate Change (GPCC), which actively engages in multilateral climate change policy processes, supports innovative climate change and mitigation projects in targeted partner countries and facilitates the generation and dissemination of knowledge.)

CLIMATE ACTION PLANNING SESSION AT RCAP IN VIETNAM

A session on Climate Action Planning was organized in the 3rd Resilient Cities Asia Pacific Forum on 7th December 2017 at Ho Chi Minh city, Vietnam.

The session aimed at discussing the vulnerable urban systems in each CapaCITIES project city and focus on the climate action plan that is being developed in each of the project cities. The cities were represented by Mr Asok Narayan Bhattacharya, Mayor, Siliguri; Mr Chandra Singh Kothari, Mayor, Udaipur; Mr Baskar Srinivasan, Smart City Project, Coimbatore and Ms Soumya Chaturvedula, City Coach, Rajkot.

Mr Emani Kumar, Executive Director, ICLEI South Asia moderated the session and provided a project overview presentation about CapaCITIES. The city based presentations focused on the present situation of urban systems in each city, impacts of climate change in each city, City Climate Action Plan – Vulnerability assessments and GHG emission inventories in each city and solutions being implemented in each city through CapaCITIES project. The key issues discussed during the session focused on steps that cities should take to build resilience. Transport sector was identified as the main contributor to GHG emissions in all the cities.

Discussions focused on efforts being undertaken in the project cities and other cities in the audience on efforts to improve public transport. Cities also emphasized on the need for knowledge sharing and capacity building of the local authorities. Discussions also focussed on the other initiatives that the project cities are undertaking with support from other schemes of Government of India. The session witnessed active participation from the audience who wanted to know about the projects and studies being undertaken through the CapaCITIES project.

RCAP 2017 BANNER SHOWING PARTNERS INCLUDING SDC









