



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 as well as identifying bankable projects and sharing experiences with other cities in developing and emerging countries.

STUDY TOUR TO EUROPE

In order to enhance the capacities of our city authorities and enable the transfer of knowledge and best practices on integrating climate measures in urban planning and prepare bankable investment projects, a mission to Switzerland was organised in the month of October 2018. The Indian delegation comprised of government officials and engineers from our partner cities and the ICLEI SA team, received by the Swiss partner organizations, South Pole and econcept.

The delegation was welcomed by Ms. Yuka Greiler, Head of Division Global Program on Climate Change, SDC, who provided a brief background of the city's history, economics and initiatives undertaken to tackle climate change.

Following this, the delegation was led to the City Hall where Mr. Gunther Arber, Head City Development and Ms. Martina Blum, Team Member Energy Delegate, Zurich, presented on Zurich's development, energy policy and its journey towards sustainability. At the econcept office, discussions about the European and Swiss Instruments for Communal Energy Policies, European Energy Awards and the four Climate Resilient City Action Plans took place.

The delegation also visited the Energie 360 AG office for a



better understanding of the energy policies of Zurich followed by a workshop at the South Pole Group's office, which focussed on project financing, bankable projects and green bonds.

Site visits were made to the waste incineration plant and waste management plant at Hagenholz and the waste water treatment facility of Werdholzli. The site visit of the waste incineration plant of Zurich included a view of the incoming waste aggregation point, the different units where the waste gets processed for incineration, the incineration unit and the recycling unit.

PROJECT ACTIVITIES



E-RICKSHAW PILOT ANNIVERSARY CELEBRATIONS IN UDAIPUR

A two-day e-rickshaw promotional program was organised on the 13th and 14th of April, 2018. As part of the program, a to and fro e-rickshaw ride to work for the Udaipur Municipal Corporation (UMC) officials was provided. The idea behind this was to generate a buzz about e-rickshaws, and the government support behind it. On day two, a city-wide e-rickshaw rally with various awareness messages pasted on the e-rickshaws was carried out.

CRCAP DISCUSSION IN RAJKOT

Stakeholders in Rajkot convened on the 6th of June, 2018 to discuss the Climate Resilient City Action Plan (CRCAP) 2018-2023 for Rajkot. An overview of the CRCAP was provided by the CapaCITIES team. Officials from the Rajkot Municipal Corporation (RMC), experts, policy makers, academic institutions and various stakeholders reviewed the CRCAP for Rajkot, and deliberated on the several interventions included in the plan.



STUDY ON WATER RESOURCE AUGMENTATION IN RAJKOT

The study on water resource augmentation undertaken in Rajkot was showcased at Government of Gujarat's Sujalam Suflam Jal Abhiyan conservation mission. As part of the study on assessing the potential for augmentation of local water resources through groundwater/aquifer recharge in Rajkot, recurring instances of flooding with rainwater at different locations of the city were analyzed and locations were identified for mitigation.

SUNYA ZERO WASTE PILOT IN COIMBATORE

The CapaCITIES SUNYA project is being implemented in wards 22 and 24 in Coimbatore. With the support of local NGO's, the IEC activities have been organised in these wards for five months in order to achieve source segregation and collection effectively. Safety equipments were handed out to sanitary workers of the wards. To implement on-site composting, places were identified for the treatment of garden waste and the construction work is in progress.



SUNYA ZERO WASTE PILOT IN UDAIPUR

ICLEI SA organised a Jan Choupal (public meeting) in ward 1 of Udaipur on the 2nd and 3rd of September 2018. The initiative was part of the IEC activities that have been done in both ward 1 and 41 to make people aware of waste management and waste segregation. In another interactive session, students actively took part and clarified their doubts about solid waste management. A total of 250 students and 10 teachers participated in the event.

PROJECT ACTIVITIES

E-WASTE BIN INSTALLED IN COIMBATORE

Green Era Recyclers, along with the Coimbatore City Municipal Corporation (CCMC) and ICLEI SA, launched an e-bin initiative in Ward 22, Corporation Park, under the SUNYA Pilot. The e-bin aims to collect electronic wastes which are currently being disposed with regular domestic waste. The Corporation plans to install more of such bins in other locations as well.

Civic body joins hands with NGOs in an effort to tackle e-waste

SPECIAL CORRESPONDENT
COIMBATORE

In what appears to be a move to focus on tackling the mounting e-waste, Coimbatore Corporation has joined hands with a couple of NGOs in a bid to show the way on how to deal with it.

Expo

A bin for collecting e-waste and an expo on the types and nature of e-wastes was organised at Bharathi Park in Ward 22.

It was inaugurated by Corporation Commissioner K. Vijayakarthyayan. The in-



STUDY ON THE IMPACT OF CLIMATE CHANGE ON MIGRATION IN SILIGURI

A study to understand the impact of climate change on migration was carried out by the Indian Institute of Human Settlements in Siliguri. As part of this initiative four wards were identified for detailed studies. Detailed discussions to understand the policy and governance level issues were also carried out with the mayor and other officials of the Siliguri Municipal Corporation (SMC).

SUNYA PILOT GAINS MOMENTUM IN SILIGURI

On the occasion of World Environment Day, the SUNYA pilot was launched in Ward 2 of Siliguri by the Hon'ble Mayor, SMC. ICLEI SA with support from the SMC, carried out a quantification and characterization (both physical and chemical) of the waste, to understand the total amount of municipal waste that is generated in the city and the composition of the waste generated.



As part of the pilot, dustbins for segregation of waste at source were distributed to the residents of ward 2 at the Margaret S.N English School in Siliguri in January 2018. The event was attended by Ms. Marylaure Crettaz & Dr. Shirish Sinha from SDC India, the Mayor, Mr. Asok Bhattacharya, Commissioner, Mr. Sonam Bhutia, Secretary, Mr. Saptarshi Nag, Member Mayor in Council, Mr. Mukul Sengupta of SMC and the CapaCITIES team.

The city of Siliguri held an awareness rally wherein common citizens walked alongside the elected representatives and city officials to raise awareness regarding a "Clean and Green Siliguri" on the 15th of April, 2018. The walk and its huge participation can be attributed to the CapaCITIES project, through which intensive capacity building activities and awareness generation meetings have been undertaken in schools and societies, for the SUNYA pilot.



PROJECT ACTIVITIES

VISIT TO COIMBATORE

His Excellency Dr. Andreas Baum, Ambassador of Switzerland to India and Bhutan visited Coimbatore, on the 15th of March, 2018. Along with the Municipal Commissioner Dr. K. Vijayakarhikeyan, IAS, he inaugurated the AAQMS in the city. They also laid the foundation stone for the 1 TPD Biomethanation Plant at the farmers market. The Ambassador planted a tree at an open dumping site which has been cleared under the project. He also handed over the keys of an organic storage bin procured under the project to the sanitary inspector of ward 22. He also interacted with the Women's Association of ward 22 where the SUNYA pilot is being implemented.



VISIT TO RAJKOT

Ms. Marylaure Crettaz, Dr. Shirish Sinha and Mr. Andrin Fink from SDC India, visited Rajkot on the 13th & 14th of August, 2018 to inaugurate some of our projects and meet with the officials of the RMC.

Ms. Marylaure Crettaz, Head of SDC in India, Ms. Binaben Acharya, Mayor of the RMC and Mr. Banchinidhi Pani, Commissioner of the RMC, inaugurated the ground water recharge system on the Race Course Road where two bore wells, 5 feet apart and 200 feet deep, have been constructed. The team visited the 145 kWp Solar PV installation at the Aji Water Treatment Plant and planted a few saplings to mark the occasion. A visit was made to the Smart Ghar 3 affordable housing scheme site, where the Building Energy Efficiency Project (BEEP) is implementing energy efficient cooling systems through shaft assisted ventilation.

Ms. Marylaure Crettaz and Mr. Banchinidhi Pani also inaugurated the 30 kWp grid connected solar PV system at the Krantiveer Khudiram Bose social housing complex. Finally, the team met with Ms. Binaben Acharya and her associates. The team from the RMC expressed their gratitude and continued support.



VISIT TO KOLKATA

A round of meetings were held with officials in the State Government in Kolkata in order to appraise them about the work that is being carried out in the city of Siliguri, through the project. A delegation comprising of Ms. Marylaure Crettaz & Dr. Shirish Sinha, SDC India, Mr. Emani Kumar, Dr. Monalisa Sen and Mr. Souhardhya Chakraborty, ICLEI South Asia carried out these meetings. Discussions were held with Sri Subrata Gupta, IAS, Principal Secretary, Urban Development and Municipal Affairs Department; Sri N.S. Nigam, IAS, Secretary, Department of Transport; Mr. D. P. Gopalika, IAS, Principal Secretary, Department of Transport; Shri Indevan Pandey, IAS, Additional Chief Secretary, Department of Environment and Sri Arnab Roy, IAS, Principal Secretary, Public Works Department.

AMBIENT AIR QUALITY MANAGEMENT SYSTEM (AAQMS)



INAUGURATION OF THE AAQMS IN SILIGURI

The AAQMS was inaugurated by Ms. Marylaure Crettaz, Head, SDC India and Mr. Asok Bhattacharya, Mayor of the SMC, on the 29th of January, 2018, in Siliguri. The event was attended by Dr. Shirish Sinha, the ex-Deputy head of SDC in India, CapaCITIES team members and the staff of the SMC. Four measurement devices have been placed across the city along with a display screen at the SMC head office.

INAUGURATION OF THE AAQMS IN COIMBATORE

The AAQMS was inaugurated by His Excellency Dr. Andreas Baum, Ambassador of Switzerland to India and Bhutan and the Municipal Commissioner Dr. K. Vijayakarhikeyan, IAS, on the 15th of March, 2018, in Coimbatore. Air quality monitoring stations are installed at four places in the city and the one located at the Town Hall, where a display board is projecting the air quality results from all the four stations, was inaugurated.



INAUGURATION OF THE AAQMS IN UDAIPUR

The AAQMS was inaugurated at the Sukhadiya Circle Location in Udaipur on the 30th of May, 2018. The AAQMS was flagged off by Mr. Chandra Singh Kothari, Mayor of Udaipur, Mr. Keshar Singh Sisodiya, Ward Councilor, and Mr. Shirish Sinha, ex-Deputy Head, SDC India. Three other sensors were installed at Hadi Rani Circle, Police Station near Pratap Nagar Circle, and Suraj Pol Circle in the city.

COMMISSIONERS SPEAK

"Coimbatore city has been working with ICLEI South Asia for a long time and through the SDC supported CapaCITIES project, we have been able to develop a holistic climate resilient plan for the city. The project has also supported us technically through Swiss experts in preparing solid waste management plans, waste water management plans and is implementing pilots on waste segregation and management and air pollution."

The best part of the project was that the experts have taken into account ground realities to develop realistic plans that can be implemented in the city and included regular discussions with local stakeholders in the process to build transparency within our work. CCMC is very happy to collaborate with SDC and we are hopeful that we can continue our relation beyond the project duration".



Dr.K.Vijayakarhikeyan
Commissioner, CCMC



FIRST CITY LEVEL DIALOGUE IN COIMBATORE

His Excellency Dr. Andreas Baum, Ambassador of Switzerland to India and Bhutan, attended the 1st City Level Dialogue in Coimbatore on the 16th of March, 2018. The event consisted of an inaugural session and two technical sessions. This was followed by a group workshop where the audience were allotted separate sectors and had to reflect on the identified adaptation and mitigation measures through the CRCAP.

FIRST SHARED LEARNING DIALOGUE (SLD) IN UDAIPUR

The SLD aimed at identifying the vulnerable urban systems of the city and the impact that climate change will have on the same. This highly interactive discussion was attended by a wide array of stakeholders ranging from municipal staff, officials of other government departments, NGOs, researchers and academia. The meeting led to the identification of three vulnerable urban systems – transportation, sewerage and SWM.



CITY LEVEL DIALOGUE IN SILIGURI

The City Level Dialogue on the CRCAP for was held on the 17th of December, 2018 in Siliguri. The CRCAP elaborates on the different mitigation and adaptation solutions in the urban services/sectors, towards making Siliguri a climate resilient and low carbon city. Siliguri is the first city in India to adopt the CRCAP prepared under the CapaCITIES project.

EXPERT VISITS

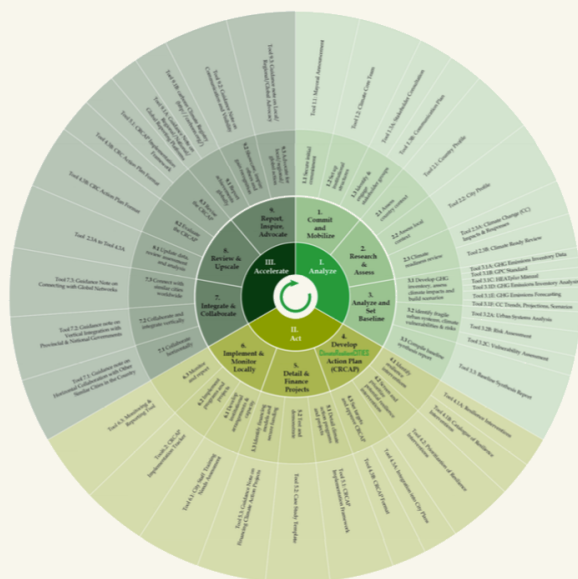
Mr. Stephan Textor from Textor Engineering Ltd. visited Coimbatore from 30th of April to 5th of May, 2018. ICLEI South Asia team facilitated the expert visit to the city. During his visit, he conducted a status review of the project on movement of openly dumped waste at the landfill site, measured the landfill gas emissions from Vellalore site and designed a master plan for the Vellalore waste treatment and disposal site. He also had a six day visit to Siliguri to understand the situation of the dumpsite in the city, and help the city in better management of the same. The visit comprised of meetings with the mayor and other officials of the SMC and carrying out gas estimations at the landfill site.

Mr. Martin Stadelmann from the South Pole Group visited Rajkot and Udaipur in June 2018. He conducted a technical session on business models for identified bankable projects and green bonds in Rajkot.

Mr. Martin Buck and Mr. Nicolas Muhlich, Swiss experts, from SNZ Engineer and Planner AG with National team members from SGA Architects Pvt. Ltd visited Rajkot on the 5th and 6th of February, 2018. They conducted a pre-feasibility study of the last mile connectivity and electrification of the Bus Rapid Transport System (BRTS) corridor. A workshop on the technical specifications of electric buses and electrification experiences from Switzerland and Europe was organised where the experts explained the types of electric buses, charging infrastructure, success story of European cities, initial findings and feasibility for Rajkot in the workshop.

CRCAP

In this year, the CapaCITIES project focused on the preparation and finalization of the Climate Resilient City Action Plans (CRCAP) for all four cities. Rajkot and Coimbatore shared the action plans with local stakeholders and city officials, sought their feed-back and finalised the action plans. The final action plan in Coimbatore is awaiting ratification by the Special Officer of the City (in the absence of an elected municipal council) and RMC has set a date in S2 2018, for a presentation to the Council for ratification. The Standing committee chairman and the mayor have already provided their inputs. Udaipur would conduct stakeholder consultations to finalize the CRCAP's in S2 2018. The CRCAP was adopted by Siliguri in September 2018, making it the first city in India to do so.



ClimateResilientCities Methodology*

The climate action plans, if implemented, will require an investment of CHF 795.96 million and will result in a reduction of 2 million tCo2e GHG emissions annually. CCMC has allocated approx. CHF 24 million while the RMC has allocated approx. CHF 72 million, in their municipal budgets (2018-19) for implementation of some of the CRCAP actions.

*The ClimateResilientCities Action Plan (CRCAP) methodology is tailor-made for Local Governments (LGs), providing step by step guidance for the development of a climate resilient city action plan. The 9-step process comes in three phases: Analyze, Act and Accelerate – each unfolding into three steps – outlining how climate fragility can be assessed and climate resilient options (to achieve low emissions development and climate adaptive development) can be identified and integrated into urban development policies, plans and processes. It consists of a wide range of tools and guidance notes to support LGs to deliver effective local climate action.

BANKABLES

Identification of 8+ projects that look promising in terms of potential bankability, but need further support, has been completed by the South Pole Group. They include

Rajkot: E-rickshaws (integrated with last-mile connectivity project), Bike sharing scheme + NMT improvements project & Rooftop Solar PV in Residential buildings (expanding on the quickwin project for affordable housing)

Siliguri: RDF Pelletization at existing dump-site

Udaipur: Extension of SUNYA - bio-methanisation plant for market bio-waste & Based on the e-rickshaw pilot, develop financing proposal for large scale financing of e-autos

Coimbatore: e-waste Management including collection and disposal and micro-composting center at Vegetable Market at Ward no. 23

Pre-feasibility assessment of 3 of the 8 projects has been completed. CapaCITIES will now assist the cities on improving core project risks and finding the right financial structures along with support on finding the right finance sources for the projects.

ICCA

The constitution of an Indian Cities Climate Award (ICCA), similar to the European Energy Award (EEA) is being planned under CapaCITIES. Continuing with the stakeholder outreach from the previous year, meetings were held with representatives of the Bureau of Energy Efficiency (Mr. Saurabh Didi, Director, BEE), the World Business Council on Sustainable Development (Mr. Joe Phelan, Director, India) and with Quality Council of India (Mr. S K Mishra, Director, Research, QCI) in July 2018. The concept for ICCA has been presented and strong interest is expressed by all.



LOCAL RENEWABLES CONFERENCE

Officials from our partner cities participated in the Local Renewables Conference 2018 in Freiburg, Germany during the study tour to Europe. A session dedicated to the project was organised in the conference which emphasised on discussing initiatives focusing on renewable energy and circular economy that have been implemented by the project cities.

Mr. Asok Narayan Bhattacharya, Hon'ble Mayor of Siliguri and Mr. Udaykumar Prabhatbhai Kangad, Chairperson, Standing Committee, Rajkot Municipal Corporation were the speakers while Mr. Hans-Peter Egler from the South Pole Group was part of the panel discussion. The officials also had detailed discussions with Mr. Martin Horn, Hon'ble Mayor of Freiburg, during the conference.

WORLD URBAN FORUM 9

The CapaCITIES project was presented by Mr. Emani Kumar, Executive Director at ICLEI SA & Co-Team Leader of CapaCITIES at a session organised by the NIUA, at the World Urban Forum 9 in Kuala Lumpur, Malaysia on 13th of February 2018.

CONSORTIUM



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IMPACT

- 3 of the 4 cities are ranked in the Swachta Sarvekshan, which is an assessment of cleanliness and sanitation in cities, under the Clean India Mission. Udaipur improved from being ranked at 310 to being ranked at 85 in India; the improvement is a result of CapaCITIES technical assessment and quick-win project implementation in the city.
- Rajkot was selected as the Earth Hour Capital in India in a competition conducted by WWF, wherein cities are ranked for their actions addressing climate change. The CapaCITIES project interventions and technical support enabled this achievement.

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.)