

# ICLEI South Asia Annual Report 2013-2014





## From the Secretary General



The year 2013-2014 was another remarkable year for ICLEI – Local Governments for Sustainability; we have successfully implemented projects and held events that truly made a mark in the global sustainability landscape. 414 cities around the world reported more than 4,000 climate actions on ICLEI’s carbonn Climate Registry (cCR); 21 ICLEI members were selected in the first batch of the Rockefeller Foundation’s 100 Resilient Cities Centennial Challenge; ICLEI Mayors were appointed to the White House Task Force on Climate Change; countries decided to advance the engagement of local governments in the global climate regime at the UN Climate Change Conference in Warsaw (COP19/ CMP9) - these are only some of the 2013 achievements that ICLEI is proud of.

ICLEI South Asia has been crucial in contributing to advancing ICLEI’s agenda regionally and at the global level and has successfully ensured the representation, at international fora, of South Asian cities. Seven high-level representatives from India, Nepal, Sri Lanka and Bangladesh attended the Resilient Cities Congress in Bonn, Germany, in May 2013, and signed the Durban Adaptation Charter, proving the commitment of South Asian cities to integrate climate adaptation into urban planning and bolster their resilience against climate risks.

In Nantes, France, in September 2013, the South Asian delegation was the second largest after the European one at the World Mayors Summit on Climate Change. In addition to representatives from India, Maldives, Sri Lanka and Nepal, we had the honour of welcoming for the first time at an ICLEI’s event the City Administrator of a Pakistani city and the mayor of Kabul, Afghanistan. The South Asian delegation signed, together with 100 other mayors and international leaders, the Nantes Declaration on Climate Change, reaffirming ICLEI’s commitment to scale up climate actions and enhance access to climate financing.

In the same month, representatives from South Asia attended also the EcoMobility 2013 Suwon Congress in Korea, which opened the month-long EcoMobility World Festival – a unique real-time social experiment where citizens moved away from cars and realized the possibility of living and traveling green in their neighborhoods.

My colleague Emani Kumar, ICLEI South Asia Executive Director, was also appointed as ICLEI Deputy Secretary General in June 2013 and has, among other tasks, the responsibility of ICLEI’s Asian region, to ensure that our work continues fulfilling the needs of such a diverse continent.

I am sure that these events have inspired South Asian governments leaders to take the lead in building low-carbon, livable cities. After such a rich and successful year, ICLEI – Local Governments for Sustainability – strengthened by the new role of Mr. Emani Kumar - will continue supporting cities in South Asia to become more sustainable, low-carbon, resilient, biodiverse, resource-efficient, healthy and happy, with a green economy and smart infrastructure.

I call upon all cities in this region to join the world’s leading network of over 1,000 cities, towns and metropolises and show their commitment to build, together with us, a sustainable future.

**Gino Van Begin**

Secretary General

ICLEI - Local Governments for Sustainability



## From the Chairperson



Mrs. Hansa Patel, ICLEI South Asia Chairperson since 2005, shares with us some of her fondest memories of her involvement with ICLEI and with the South Asia Secretariat.

*"I was one of the speakers at the Summit and, as I was representing India, I was wearing a sari; when they called me on stage, they asked if the 'lady in a sari' could go up and give her opinion. I went and I said 'Local governments are the strongest body as they are the level closest to the citizens. However, I am not an elected person: can I get my mayor?' and went off to get Mr. Ranjit Chavan, at the time Mayor of Baroda, who represented me and took the floor to reinforce my message."* This is how Hansa Patel's ICLEI adventure started, 24 years ago, at the UN Headquarters in New York where she attended the World Congress of Local Governments for a Sustainable Future, in early September 1990, when ICLEI was founded. At the time, more than 200 local governments from 43 countries came together, adopted the ICLEI Charter, appointed an interim Executive Committee and elected Jeb Brugmann as ICLEI's first Secretary General. The idea was to create an agency that could coordinate local government responses to global environmental problems.

One year later, in September 1991, the World Secretariat was opened in Toronto, Canada, and the European Secretariat in Freiburg, Germany. *"Shortly after ICLEI was created, we saw the need to decentralize our actions, and get things done on the ground in the different regions. This is how the idea of the different regional offices came up. First we established an office in Japan in 1993, then came the one in Australia/New Zealand in 1999 and slowly all the others followed too."*

When asked what her fondest ICLEI's memory is, she has no doubts: *"The founding of ICLEI South Asia in 2005! Cities in the region needed support locally, they were battling mostly with the issues of water and sanitation. So we started with an office in Delhi, and now have many more throughout India"*. According to Mrs. Patel, mayors in South Asia have faith in ICLEI, they have seen the results and the value coming from such a collaboration and this gives them the motivation needed to keep pursuing the goal of a more sustainable future for their constituencies. *"I have always had close relations with many cities in India, and convinced many of them to become members,"* Mrs. Patel adds. Peer-to-peer learning and sharing of good practices are, in her opinion, some of the most concrete benefits that member cities in India gain from their partnership with ICLEI. *"We send them to conferences all over the world, and when they come back, I can see the change in their eyes. They keep talking about what they learnt, how cities somewhere else are facing the same challenges and what they are doing to overcome them, and they are eager to go back to their office and try to do the same."* Participating in international events, partnering with other cities and being exposed to the global scenario are not the only advantages cities see, in being an ICLEI member. *"See, many elected people are working very hard towards sustainable development, but they often lack technical or financial resources, and are not adequately recognized and empowered. ICLEI gives them that: we build capacity within their administration, we channel funds that can help them improve the living conditions in their city, and we give them the acknowledgement and visibility that they deserve"*.

As a last thought, she shared her wish for the future of ICLEI South Asia *"We need to reach out to Pakistan. As the other countries in our region, they are very vulnerable to the current and upcoming changes in climate and there is a lot we can do to support them in becoming more resilient. I hope we will soon have our first Pakistani member!"*

\* Extracts from her recent interview with ICLEI South Asia



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## Look back into 2013 and ahead at 2014



South Asian urban areas and population are growing at a pace never seen before. In India alone, the population increased by 17.64% between 2001 and 2011 and urban areas are expected to accommodate 590 million people by 2030.

This clearly shows how the future of this region, and how our countries will respond to the environmental challenges that we are being faced with more and more, lies largely in the hands of local governments. ICLEI South Asia has worked hard, throughout the past year, to support cities in being better prepared to face these challenges and continue their growth in a sustainable way.

Through our projects, cities are enabled to mainstream sustainable development goals into their planning processes and project design and implementation. Cities benefit from our project based approach, through enhanced access to technical expertise, training, innovative integrated solutions and international best practices from the world over. Our cities tailor these approaches to suit their local contexts and ensure the sustainability of project actions, well beyond the project life, proudly continuing work that ICLEI South Asia has started with them.

In the past year, we have seen significant progress in the involvement of the community, with our cities engaging relevant local stakeholders in their decision-making process and raising awareness among the general public, be it on poverty alleviation, urban farming, waste collection or managing ecosystem services.

Working closely with the local administration, we have assisted them in developing strategies and actions plans, focusing – among others - on resilience, climate change mitigation, solid waste management, and sustainable urban transport. We have also considerably increased our outreach and visibility, ensuring that, through social media and multiple communication channels, the achievements of our cities and our work are known to the region and beyond, hopefully inspiring other cities in South Asia to follow the example of our members.

To better respond to the emerging needs of cities in the region, we have expanded to new areas of work, looking at the Nexus between energy, water and food in urban areas. We are also exploring the green growth paradigm for Indian cities and are looking forward to sharing with you in 2015 the results of this new project

Resilience is another fundamental concern for cities in the region that will determine how successfully they cope with current and upcoming challenges, including climate change impacts. For this reason, we are planning to organise, in early 2015, the first Resilient Cities Asia Pacific Congress, which builds on the success of the series 'Resilient Cities - The Annual Global Forum on Urban Resilience and Adaptation' taking place in Bonn, Germany, since 2010, and which will address the situation, challenges and opportunities of local governments specifically in the Asia-Pacific region.

South Asian cities have come a long way since we started working with them in 2005. As they find themselves having to cope every year with new challenges, we at ICLEI South Asia will continue working closely with local administrations and the community to identify and implement tailored solutions that will enable them to advance on the sustainability path.

### **Emani Kumar**

Executive Director, ICLEI South Asia

Deputy Secretary General, ICLEI - Local Governments for Sustainability

## ICLEI – Local Governments for Sustainability

ICLEI is the world's leading network of over 1,000 cities, towns and metropolises committed to building a sustainable future. By helping our members to make their cities sustainable, low-carbon, resilient, biodiverse, resource-efficient, healthy and happy, with a green economy and smart infrastructure, we impact over 20% of the global population.

ICLEI provides technical consulting, training, and information services to build capacity, share knowledge, and support local governments in the implementation of sustainable development at the local level. Our basic premise is that locally designed and driven initiatives can provide an effective and cost-efficient way to achieve local, national, and global sustainability objectives.

## ICLEI South Asia

The South Asian arm of ICLEI - Local Governments for Sustainability (ICLEI South Asia) aims to build and serve a regional network of local governments to achieve tangible improvements in regional and global sustainability through local initiatives.

We enable cities to contribute to global climate action through a number of local solutions, ranging from developing guidelines on low carbon growth, raising awareness about sustainable sanitation, transport and waste, supporting municipalities in implementing Renewable Energy & Energy Efficiency projects, strengthening South-South cooperation, helping cities become more resilient to climate change and much more.

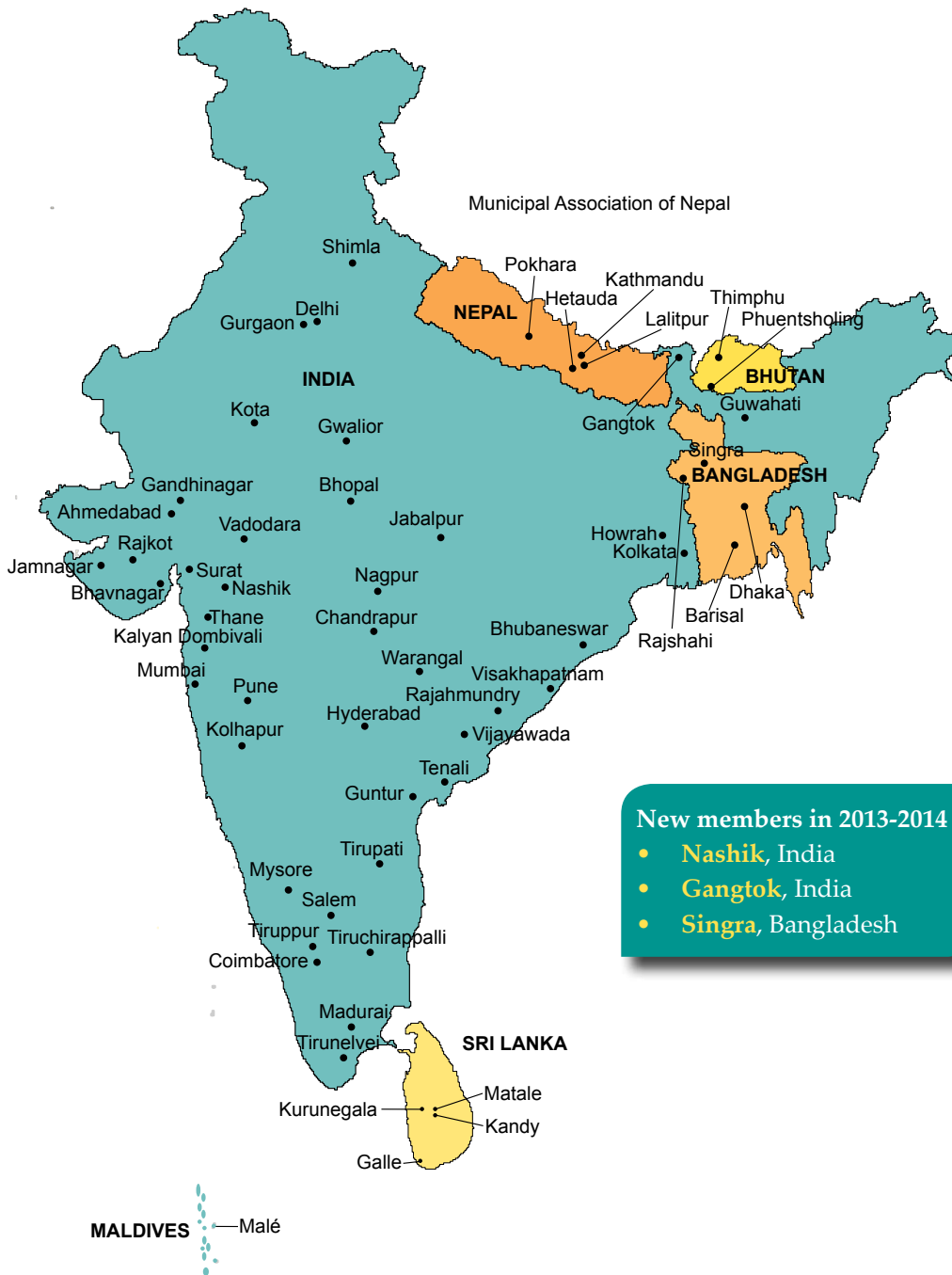
We work with South Asian cities with funding support from various national and international partners by offering various opportunities such as participation in programs and projects, technical inputs, information services, trainings, conferences and workshops. We also share our expertise, reach out to cities, initiate interaction and mobilise funds.

In addition to the regional office in Hyderabad and the project office in Coimbatore, we now have project offices in three more Indian cities - Thane, Rajkot and Kishangarh.

### Mission

**To build and serve a worldwide movement of local governments to achieve tangible improvements in global sustainability with special focus on environmental conditions through cumulative local actions.**

# MEMBERSHIP



**New members in 2013-2014**

- Nashik, India
- Gangtok, India
- Singra, Bangladesh

“ Singra has been facing major climate changes like droughts and change in rainfall pattern since the last few years. Singra’s local administration, through ICLEI’s hand-holding, is in the process of undertaking an analysis of the urban systems and the impacts a changing climate might have on them, as well as identifying the most vulnerable groups and areas in the city. By becoming ICLEI members we will be able to expand to areas other than climate resilience and thus advance towards the path of sustainability.

— Shamim Al Razi, Mayor of Singra, Bangladesh



# MEMBERSHIP

## Become an ICLEI member!

- **Get connected** with the most ambitious and committed cities around the globe advocating for a sustainable future.  
*Be part of the leading global association on sustainability!*
- **Get informed** via exclusive access to all ICLEI publications and get a chance to have your outstanding work featured.  
*Get ahead with the latest news, tools and opportunities on sustainability!*
- **Get expert advice** through our training and consultancy services for developing overall local sustainability strategies.  
*Gain from ICLEI's over 20 years of experience in urban sustainability!*
- **Get engaged** and be the first one to be approached about getting involved in suitable projects to test or develop sustainability measures and tools that further help cities in achieving their sustainability goals.  
*Join around 1000 other cities and take part in the ground breaking programs and campaigns!*
- **Get together** at workshops, webinars and conferences around the world and online.  
*Participate in over 50 international events that ICLEI hosts annually!*

To become an ICLEI member, visit  
<http://www.iclei.org/our-members/join-iclei.html>



# HIGHLIGHTS 2013-2014

- ❖ For the first time, more than 28 cities were surveyed, assessed and sensitized on the need for improving eco-mobility and non-motorized transport; a readiness assessment highlighted significant potential in urban India to provide for non-motorized transport
- ❖ A significant need for building capacities in local authorities for implementing the nationally mandated Energy Conservation Building Codes was identified, when the three largest cities in the State of Tamil Nadu were assessed.
- ❖ ICLEI's GreenClimateCities methodology was developed to accelerate the political ratification and adoption of Low Emission Development Strategies
- ❖ A way forward for multi modal integration and redesigning public spaces through space rationalization in urban commercial centers was defined
- ❖ With ICLEI's support cities are going beyond developing CSPs to adopting integrated urban water management approaches to meet the ever increasing demand for critical water resources
- ❖ Cities in the South Asia region are supported in advancing from zero waste planning to implementing actions for moving towards zero waste management
- ❖ National and local governments were supported in integrating local mitigation and adaptation planning and action, strengthening local resilience to climate change impacts
- ❖ New kid on the block — the nexus approach to urban planning — was piloted at Nashik city, identifying opportunities to mainstream the water-food-wwenergy nexus into urban planning

# SUSTAINABLE CITY

**A sustainable city is marked by a green economy, a healthy and happy community, smart infrastructure, and is biodiverse, low-carbon, resilient and resource-efficient.**

ICLEI South Asia contributes to creating sustainable cities in the region by empowering local communities to manage natural resources appropriately and removing barriers to sustainable development, by promoting an understanding of the links between poverty and environment, and by mainstreaming and building capacity on the use of appropriate and environment-sensitive management instruments to achieve poverty alleviation.

## Our contribution to building sustainable cities

Through our projects, programmes and initiatives we have helped cities in South Asia to assess what their needs are and what actions they could take to move towards a better, more sustainable future. Using international networking and one-to-one city interaction, ICLEI South Asia has been able to increase *awareness about environmental sustainability and trigger appropriate action* to be taken. The cross learning among cities supported by ICLEI South Asia has not only helped them to learn from each other but also to *critically analyse the other cities' problems and provide concrete solutions*, based on their experience.

Through targeted capacity-building programmes, *cities are now familiar with the Eco-system Services for Poverty Alleviation (ESPA) tool* and are able to link eco-system services and poverty, in addressing their own challenges. We have not only promoted *collaborative, adaptive and reflexive forms of urban planning and governance* in Guntur (India), Thimphu (Bhutan) and Rajshahi (Bangladesh) but also *built capacity* of local officials and the various stakeholders involved, enabling them to continue on the sustainable path, beyond the duration of the projects.

Supported by our team, *cities have identified their priorities and adapted the processes* initiated by ICLEI South Asia to their real needs and local context. Nashik in India has thus promoted agro-tourism and agro-education, leading to *awareness generation and sensitization towards various farming practices* among the public, specially school children; Thimphu, in Bhutan, has launched the *'My tree' initiative* to raise awareness in schools; Guntur, in India, started implementing rainwater harvesting measures to *tackle their declining groundwater levels* and Rajshahi, in Bangladesh, has looked into using *tree-plantation to combine greening and poverty reduction*.

Most importantly, we have managed to bring together various departments, organisations, NGOs and the citizens on a common platform to interact and think about local solutions which are in the interest of the entire city, and to plan the further steps to be taken to carry on the legacy of our projects, towards becoming self-sufficient sustainable cities.

“ In the future, we will try to make use of the ecoBUDGET tool to plan our development activities with time bound targets and proper monitoring of the actions. I am proud of the achievements of my city and I am really thankful for the great work of my staff as well as our partners in the Realizing DReAMS project. Being now able to focus on the specific issue of the protection of buffer zones through the SUS programme will allow us to make an even more concrete contribution to the sustainable future of the city of Thimphu.

— Kinlay Dorjee, Mayor of Thimphu, Bhutan



# SUSTAINABLE CITY

## Our Projects

### Operationalization of “Nexus” Approaches in Metropolitan Regions

**Cities involved:**

Dar es Salaam, Tanzania and Nashik, India

**Funding organisation:**

GIZ Eschborn

### Supporting Urban Sustainability

**Cities involved:**

Guntur (India); Thimphu (Bhutan); Rajshahi (Bangladesh)

**Funding organisation:**

Swedish International Development Cooperation Agency (SIDA)

**N**ashik is the first city in India which successfully showcased the benefits of integrated planning for resource use by considering the water-food-energy nexus



*Scoping for energy and water efficient irrigation systems, Nashik, India*



# SUSTAINABLE CITY

## Story of Change — Nashik, India

Awareness generation on sustainable farming practices, importance of organic farming and sensitisation towards degrading environment was the objective behind the initiative of promoting agro-education among school children in Nashik as part of the 'Operationalisation of Nexus approaches in Nashik city' project. A group of 35 students from primary and secondary schools was taken to an agricultural farm, spread across 87 acres with more than 15 varieties of mangoes, cashew nuts and other fruits.

The students were introduced to important rural-urban interlinkages as well as various types of water conservation techniques like terracing, bunding and their specific usage in the farm. At the organic farming site they also had a chance to learn about the practical and on-field usage of mulching, organic fertilizers and bio-insect trappers. These students will act as agents of change and will pass their learning to parents and society at large.



# RESILIENT CITY

**L**ow-risk cities are relatively less vulnerable to climate change, natural and industrial disasters, and economic shocks.

ICLEI South Asia works towards increasing cities' urban resilience through local adaptation planning, the integration of climate science, policy and practice, the exchange of information among cities in the region and beyond, and the provision of tools, enabling cities to devise and implement resilience strategies that respond to their specific needs and identified vulnerabilities.

## Our contribution to building resilient cities

We have been helping cities in India (Shillong, Panaji, Leh, Nashik) and in Bangladesh (Mongla, Singra, Barisal) to *identify the potential impacts of climate change and areas and social groups in their city most vulnerable to them*. We are working with them towards *developing a city specific Climate Resilience Strategy*, using the ICLEI ACCCRN Process (IAP), an urban climate change resilience toolkit developed by ICLEI. Many more cities are now becoming aware of the rising need to be prepared for climate change related threats and to identify steps to reduce its impacts. Cities like Nashik, where the IAP methodology is being implemented as well, are being guided by our experts *to address climate change by using an integrated approach which brings together mitigation and adaptation strategies* to develop a Sustainable Urban Habitat Action Plan (SUHAP) that is in line with the National Mission on Sustainable Habitat (NMSH) under India's National Action Plan on Climate Change. Capacity-building being an integral part of our projects, we have provided *technical assistance and support to local officials*, empowering them to assess their needs and develop corresponding measures.

Through our projects, we have *brought together science and policy to support local governments in developing responses to climate change* that are tailored to the local context and based on scientific assessments of expected climate change impacts. Using *communication strategy guidelines developed* specifically for their city, Cochin, Visakhapatnam, Mysore and Howrah are *now better prepared to communicate the impacts of climate change to their community and engage them in undertaking climate adaptation actions*. The importance of localizing climate change and connecting it to the current challenges that a specific city is facing, was highlighted through numerous dialogues, workshops and stakeholder meetings, which *brought together different departments and stakeholders of the city to work in harmony towards achieving one common goal*. Guided by the ICLEI South Asia team, city officials and community representatives could *learn about and share* their views on the potential impacts of climate change, and *discuss and devise strategies* on how to work together to prevent or avoid them.

Supported by our experts, and building on the knowledge acquired during our capacity building programmes and based on the city-specific context and needs, Shimla, Bhubaneswar and Mysore (India) have already developed their own City Resilience Strategy. They have now moved from the assessment and planning phase to the implementation one – further *prioritizing resilience interventions* and developing bankable projects that will allow them to *access finances and investment opportunities* – thus *completing the adaptation pathway*.

We have also helped in *promoting learning* among policy makers, development practitioners and academics working on urban related issues by facilitating the documentation of *'Inside stories'* from the South Asian region. These stories analyse lessons learned from cases of Climate Compatible Development planning and practice at the sub-national level.



# RESILIENT CITY

## Our projects

### Asian Cities Climate Change Resilience Network

**Cities involved:**

India - Shillong, Panaji, Leh, Nashik; Bangladesh - Mongla, Singra, Barisal

**Funding organisation:**

The Rockefeller Foundation

### Nashik Sustainable Urban Habitat Action Plan

**Cities involved:**

Nashik, Maharashtra

**Funding organisation:**

GIZ – IGEP (Indo-German Environment Partnership)

### AsianCitiesAdapt - Impacts of Climate Change in Target Cities in India and the Philippines and Local Adaptation Strategies

**Cities involved:**

Howrah, Vishakhapatnam, Madurai, Cochin

**Funding organisation:**

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

### Climate Change Adaptation Project Preparation and Financing in Urban India

**Cities involved:**

Bhubaneswar, Mysore and Shimla (the first three Indian cities to have tested the ICLEI ACCCRN Process)

**Funding organisation:**

USAID ADAPT Asia-Pacific



*A much closer relationship between climate and social scientists and urban planners is needed, so that urban and economic development takes into account upcoming climate changes.*

– **Tikender Singh Panwar**, Deputy Mayor, Shimla

**F**or the first time a Sustainable Habitat Action Plan is being developed by a city (Nashik), integrating climate mitigation and climate adaptation planning, in line with the recommendations of the National Mission on Sustainable Habitat.

# RESILIENT CITY

## Story of change — Barisal, Bangladesh

The old port town of Barisal, Bangladesh made a political commitment in December 2011 to strengthen local resilience to climate change by being one of the cities to have signed the Durban Adaptation Charter at the United Nations Framework Convention on Climate Change (UNFCCC) Conference of the Parties (COP) 17 held in the City of Durban (eThekweni Municipality), South Africa. Soon after, the city joined ICLEI in 2012, and began implementing two adaptation initiatives — Urban Vulnerability Assessment and Asian Cities Climate Change Resilience Network — with support from ICLEI South Asia, and are now developing climate resilience strategies.

Due to their continuous efforts and willingness to make their city more resilient, Barisal has now been identified in a first selection process as the appropriate target city for the implementation of a pilot programme under the new Climate Change Adaptation in Urban Areas initiative by KfW Development Bank, Germany. This support is expected to help the city to develop climate resilient infrastructure as a key element of urban development. Barisal is indeed a perfect example of cities dedicated to making their cities more liveable and resilient.





# LOW CARBON CITY

**L**ow-carbon, low-emission or even carbon-neutral cities, are signposts to sustainability and global climate change mitigation.

Through capacity building programmes, partnerships with the National and State Governments, expertise and technology transfer, and various tools and guidelines, ICLEI South Asia helps cities measure their energy consumption and assess their carbon emissions, supports the preparation of low carbon action plans, facilitates the leveraging of finances for low carbon actions and encourages the use of sustainable, renewable and efficient energy technologies.

## Our contribution to building low-carbon cities

We have supported cities in implementing the “GreenClimateCities” methodology to assess the carbon intensity of their activities and *develop politically ratified mitigation plans, which are implemented and monitored through a well defined MRV (Measurement, Reporting and Verification) framework*. Cities have prepared their Greenhouse Gas Emissions (GHG) inventories and have identified *significant potential for energy savings, ultimately resulting in emission reductions*. Based on priority areas identified by the city, we are supporting the *implementation of multiple low carbon pilot projects* in our cities. For instance, in Thane, we are providing lead services to structure and develop an Energy Service Company (ESCO) project for installing and maintaining 10,000 LED street lights, *ensuring large scale energy efficiency in municipal street lighting and reducing the energy burden of the service*. Street lighting accounts for a significant percentage of any Local Government’s energy consumption for service provision. Through international study tours and workshops, we have promoted *exchange of knowledge, ideas and experiences* between cities and within cities themselves, facilitating a meaningful and result oriented dialogue between local officials and other relevant stakeholders. Cities have also, through our support, have committed to and started *adoption of RE&EE technologies (Rajkot and Coimbatore), preparation of integrated mitigation and adaptation plans and measures (Panaji), shifting to energy efficient street lighting (Thane and Panaji) and more*.

Cities like Coimbatore, which are at an advanced stage of sustainable development also got the opportunity, under the Local Renewables program, to become role models and *provide appropriate guidance and leadership to cities in other countries* such as Ekurhuleni in South Africa and Yogyakarta in Indonesia. This would enable these two cities to implement the Local Renewable process and achieve similar commendable results.

We have also encouraged Indian cities to promote *climate-friendly lifestyles* by supporting their participation in the globally recognised Earth Hour City Challenge. Winning cities gain immense recognition and acknowledgement on a global platform, thus incentivising them to continue their low carbon work. Through city visits, stakeholder meetings, one-to-one interactions with city officials and webinars we have supported cities in *reporting their climate performance, low carbon measures, environmental performance, commitments and action plans* on the carbonn Climate Registry (cCR), an internationally recognised Greenhouse Gas Emissions reporting platform for local governments, managed by ICLEI.

# LOW CARBON CITY

## Our projects

### Promoting Low Emission Urban Development Strategies in Emerging Economy Countries (Urban-LEDS)

**Cities involved:**

Thane, Rajkot, Gwalior, Shimla, Panaji, Pimpri Chinchwad, Coimbatore, Nagpur

**Funding organisation:**

European Commission

“ One of the key priorities for us is energy efficiency in street lighting, and presently under Urban-LEDS we are planning to develop a Street lighting policy for a phase-wise implementation of LED Street lights in each of the three zones of RMC. I am thankful to ICLEI, UN-Habitat & the European Commission for giving us this opportunity to be a part of this project and guiding us on the path of low carbon development.

— Rakshaben Boliya, Mayor of Rajkot, India

### Earth Hour City Challenge

**Cities involved:**

Ahmedabad, Cochin, Coimbatore, Dehradun, Gandhinagar, Gwalior, Kota, Nashik, Panaji, Pune, Rajkot, Shimla and Thane

**Funding organisation:**

WWF (World Wide Fund for Nature)

### Local Renewables & Model Communities Network: South - South Cooperation between India, Indonesia & South Africa

**Cities involved:**

Coimbatore, India; Yogyakarta, Indonesia and Ekurhuleni, Africa

**Funding organisation:**

Renewable Energy and Energy Efficiency Partnership (REEEP)

Model cities Thane and Rajkot are poised to develop Low Emission Urban Development Strategies, ratified by their Councils and budgeted for in their municipal budgets

# LOW CARBON CITY

## Story of change — Thane, India

Thane City has been a pioneer in taking innovative steps towards low carbon development. The city has implemented renewable energy and energy efficiency initiatives in buildings, street lighting and water supply. The city has already developed small scale Waste to Energy plants and is in the process of promoting large scale Waste to Energy initiatives. Implementation of the solar city master plan is also an important initiative that the city is undertaking.

Thane is also, with support from ICLEI South Asia, revising its GHG emissions inventory for the year 2013-14. With support from the Urban-LEDS project, ICLEI South Asia is providing lead services in helping Thane define an ESCO project for replacing 10000 conventional streetlights with LED street lights. GIS based mapping of all streetlights is also being undertaken to ensure ease of future maintenance. This mitigation activity will improve illumination levels, result in large-scale energy efficiency and system modernization for better operation and maintenance of street lighting, thus reducing the energy demand, resultant GHG emissions and higher costs of service delivery.

Thane also is also developing a localized green building policy. The existing building approval process has been documented to support this work. Planning is also underway to substitute 15-20% of the existing conventional energy demand of the Thane municipal hospital with renewable energy, supported by design expertise from ICLEI South Asia and project funds from the Urban-LEDS project.



# RESOURCE EFFICIENT CITY

**A** resource-efficient city goes beyond minimizing the use of natural resources, and is productive, competitive and sustainable.

ICLEI South Asia works with the Government of India (Ministry of Urban Development), local governments, the private sector and civil society groups to plan and promote efficient urban services, such as efficient water and waste water use, sustainable waste management and sustainable sanitation, thus improving health conditions, alleviating poverty and fostering the local economy.

## Our contribution to building resource efficient cities

Through the involvement in our projects, Ichalkaranji and Solapur in Maharashtra and Kishangarh and Jaisalmer in Rajasthan have become *aware of the benefits of an integrated urban water management approach* to overcome their water related challenges. We have facilitated stakeholder meetings in cities, highlighting the *importance of coordination between various state level and city level organisations*. We have assisted cities in the *identification of a long term vision with respect to water management* including water supply, waste water and storm water management. Our teams have *built capacity* at the city level and helped city officials *gain exposure to the various technological options* available in water and allied sectors through trainings and attendance in international events, where they had the opportunity to share their issues with other cities and solution providers. Through workshops and awareness-raising initiatives we have *sensitized the local officials* and concerned stakeholders towards water quality monitoring and water resources management.

Targeted cities in South Asia have considerably *advanced towards zero waste management through adoption of the 3R* (Reduce, Re-use and Recycle) principles. We are actively supporting cities to reduce the amount of waste that is to be managed by *enhancing resource recycling and recovery (material and energy) practices*. We have helped in the *creation of an inclusive society* and have contributed to *poverty alleviation by involving the informal waste collectors in the waste collection system of the municipal corporation*. We have also organized capacity building workshops and programs on waste management for city officials, rag pickers, NGO's and other concerned stakeholders. The cities of Tansen and Hetauda in Nepal, Shimla in North India and Coimbatore in South India, Phuentsholing in Bhutan, Dhaka in Bangladesh and Matale in Sri Lanka had the opportunity to travel to Europe and *observe waste management systems as well as different initiatives based on the 3R Principles of Solid Waste Management* being implemented in the cities of Belgium and Austria. Through city visits and tailored consultations, our experts helped cities *assess their waste management systems* and have given specific inputs to develop appropriate waste management action plans focusing on minimization of waste disposal. Capacity building training workshops have been organised and pilot interventions have also been initiated to promote zero waste and enhance waste management in these cities. We have inspired and guided cities in the development and implementation of several initiatives, from *zero waste wards, environment clubs, public awareness-raising campaigns, source segregation of waste, community level composting, to educational activities in schools* involving all sectors of the society for sustainable municipal solid waste management.

ICLEI South Asia, in the role of a national expert, is also assisting the Ministry of Urban Development (Government of India), through the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, under their Indo-German Environment Partnership (IGEP) Program, in *revising the existing CPHEEO (Central*



# RESOURCE EFFICIENT CITY

*Public Health and Environmental Engineering Organisation) manual on municipal Solid Waste Management (SWM) in order to better support political decision-makers, administrative staff, supervisors and service providers in implementing integrated municipal solid waste management systems in the country.*

## Our Projects

### AdoptIUWM : Adopting Integrated Urban Water Management in Indian Cities

**Cities involved:**

Jaisalmer and Kishangarh (Rajasthan); Solapur and Ichalkaranji (Maharashtra)

**Funding organisation:**

European Commission

### SUNYA: Towards zero waste in South Asia

**Cities involved:**

Hetauda and Tansen (Nepal), Matale (Sri Lanka), Shimla and Coimbatore (India), Phuentsholing (Bhutan), North Dhaka (Bangladesh).

**Funding organisation:**

European Commission

“ With rapid urbanization and changes of lifestyles, MSW has become a pressing problem resulting in severe environmental deterioration and aesthetic concerns. The estimates show that approximately 80% of the waste is being dumped in open spaces, posing a serious health hazard to citizens. The need of the hour is to adopt a financially sustainable and economically viable model for managing solid waste.

— Pramod Kumar, Director, Ministry of Urban Development, India

### Revision of the CPHEEO Manual on Municipal Solid Waste Management

**Funding organisation:**

GIZ Indo-German Environment Partnership Programme

**Partners:**

GIZ Indo-German Environment Partnership Programme

Over 2200 zero waste generation households in Coimbatore are showing the way in Coimbatore for the city to move towards zero waste.

# RESOURCE EFFICIENT CITY

## Story of change — Coimbatore, India

The city of Coimbatore is working towards becoming a Zero Waste city, as part of a European Commission funded programme called SUNYA – Towards Zero Waste in South Asia. Under the project, the city corporation is piloting a programme for better segregation, processing and decentralized disposal of solid waste in RS Puram in Ward No 23.

A strong awareness campaign was conducted to motivate the households to segregate waste at source. The recyclable waste is sold to Indian Tobacco Corporation (ITC) who is processing it. The wet waste is composted and the compost distributed to the residents. As a result of this initiative, Ward No 23 is now a bin-free ward. About 30 residents were presented with gifts and certificates from the Coimbatore City Municipal Corporation, as a token of appreciation segregating their household garbage.

Due to active citizen participation from the beginning and championship of the local ward councillor, the initiative is now running on its own steam. The sanitary workers themselves work as messengers to spread the good word to other workers of other wards, generating interest in some other wards for replication. Decentralizing waste management has reduced costs of transport and fuel for the corporation, has reduced stress on landfill and also supports livelihood of the waste collectors.



# SMART URBAN INFRASTRUCTURE

**S**mart Urban Infrastructure is eco-efficient, low-carbon and resilient. It is the key to developing greener cities and economies.

ICLEI South Asia is helping cities in the region develop and create smarter urban infrastructure through an integrated approach that looks at reducing emissions and increasing the use of local renewables, at raising awareness on the implementation of green buildings, and at laying the ground for a shift to Non- Motorised Transport.

## Our contribution to building smart urban infrastructure cities

Working closely with the State government, we have helped Tamil Nadu take considerable steps in *promoting sustainable urban transport*. Together with a larger team of experts, through visits and surveys, we have assessed the base-line scenario in five cities in the state — Coimbatore, Madurai, Trichy, Salem and Tiruppur, helping them *identify gaps and requirements for sustainable transport solutions*. These cities have prepared proposals for the Government of Tamil Nadu, to concretely improve their transport system, from providing facilities for non-motorised transport (NMT), to planning for efficient parking management and developing a Bus Rapid Transit system network. Coimbatore, resulting from the outcome of the surveys our team conducted, has now begun the process of an *on-street parking pricing strategy*, wherein people will be charged for on-street parking. We have also helped in increasing awareness about the importance of non-motorised transport by preparing NMT Master Plans for the cities and specific designs for implementation.

Carrying on the work in Tamil Nadu, our team of experts has been supporting cities in the state in assessing their capacity building needs to implement the national *Energy Conservation Buildings Code (ECBC)*. A number of tailored trainings for city governments were thus carried out, enabling them to enforce the ECBC, in line with the Energy Conservation Act of 2011 by the Government of India. We have also helped in identifying existing gaps and *possible opportunities for synergy between the multiple existing policies and current governance structures* applicable to the built environment across various levels. Based on the same, we have also helped in redefining the scope of efficiency in the built environment for addressing the larger urban efficiency goal in Indian cities. ICLEI South Asia has also rendered support in *developing water-energy baselines and quantifying transportation related low-carbon interventions* for few cities in India.

Through our support, Cochin, India and Matale, Sri Lanka, will be availing the opportunity to *participate in several knowledge-sharing and capacity-building workshops*, focusing on successful examples of innovative sustainable mobility solutions from Europe, Asia and Latin America, and will also get to be a part of *bilateral and multilateral exchanges and technical visits* that will be organized.

Many more cities in India are now aware of the need to *make use of renewable energy and the benefits of energy efficient lighting systems*, thanks to the numerous workshops, city visits and awareness activities at the school level undertaken by our team. We have assisted the cities of Bhubaneswar, Howrah, Cochin, Coimbatore, Gurgaon, Imphal, Nagpur and Rajkot to *develop their Solar City Master plan*, including solutions and financial and technical feasibility, providing cities with a roadmap to implement renewable energy and energy efficiency measures in a phase wise manner.

# SMART URBAN INFRASTRUCTURE

In an effort to make *pilgrimage cities more sustainable*, our team has prepared environmental assessments for Ujjain, Nanded and Rishikesh, developing *recommendations on energy efficiency/ renewable energy initiatives, sustainable SWM practices and conducive traffic management plans*. A guidebook on 'Financing opportunities in India' has been prepared to enable the city administrations or pilgrimage authorities to access funds to carry out on-ground implementation work.

We are also providing expert guidance and support in the *preparation of a rejuvenation and reclaiming plan for one of Delhi's prime commercial district centres, Nehru Place* for Unified Traffic and Transportation Infrastructure Planning and Engineering Centre, Delhi Development Authority.

## Our Projects

### Development of Solar Cities

**Cities involved:**

Coimbatore, Imphal, Nagpur, Rajkot, Gurgaon, Cochin, Howrah.

**Funding organisation:**

Ministry of New and Renewable Energy, Government of India.

### Green Pilgrimage Network - Indian Chapter

**Cities involved:**

Munni ki Reti and Rishikesh (as supporting city), Ujjain, Nizamuddin area in Delhi, Leh, Old Goa, Nanded and Panjim

**Funding organisation:**

Alliance of Religions and Conservation

### Status review of efficiency in Urban Built Environment

**Cities involved:**

Desktop review involves all cities in India but no formal interaction as such.

**Funding organisation:**

Climate Works Foundation

### Framework for Tamil Nadu state urban transport policy

**Cities involved:**

Coimbatore, Madurai, Trichy, Salem and Tiruppur

**Funding organisation:**

Climate Works Foundation



# SMART URBAN INFRASTRUCTURE

## ECBC Capacity Needs Assessment in Tamil Nadu cities

**Cities involved:**

Chennai, Coimbatore, Madurai

**Funding organisation:**

Climate Works Foundation

## Mobility Status Assessment of Non-motorized transport (NMT) in Coimbatore

**Cities involved:**

Coimbatore

**Funding organisation:**

Commissionerate of Municipal Administration, Government of Tamil Nadu

## Ecomobilty Readiness Assessment

**Cities involved:**

28 Indian cities

**Funding organisation:**

Climate Works Foundation

## Sharing Opportunities for Low carbon Urban transporTation (SOLUTIONS)

**Cities involved:**

Cochin, India; Matale, Sri Lanka

**Funding organisation:**

European Commission



*Cities are busy building new roads, rather than re-introducing the concept of Non Motorised Transport, However, there are few citizens who have started making use of non motorised ways to move in the city! What still lacks is the institutionalization of this kind of sustainable mobility and its integration in the city's planning .I am happy the process has begun!*

— **Ajay Yadav**, Joint Commissioner, Municipal Administration of the Government of Tamil Nadu

# SMART URBAN INFRASTRUCTURE

**PEER Project - Developing water-energy baselines and quantifying transportation related low-carbon interventions Under (Partnerships for Enhanced Engagement in Research (PEER) Science) program**

**Cities involved:**

Delhi, Coimbatore, Mysore, Indore and Rajkot

**Funding organisation:**

USAID through National Science Academy US

**Nehru Place District Centre Demonstration Project**

**Cities involved:**

New Delhi

**Funding organisation:**

Climate Works Foundation

City of Coimbatore aims to have, for the first time in India, a mobile application based on-street parking management system.

A multipartner pilot project focusing on accessibility issues of Nehru Place District Centre (second largest in Delhi) is currently in progress, analysing its current status and suggesting a way forward through place making and multimodal integration. This is the first time such documentation was presented to the authorities and may be relevant for similar district centres across the region.

# SMART URBAN INFRASTRUCTURE

## Story of Change — Coimbatore, India

Parking is considered one of the major transport issues in urban areas. To overcome this challenge, Coimbatore City Municipal Corporation has taken steps towards effective management of on-street parking in order to reclaim the road space - which is currently over utilised by motor vehicles - and convert them to efficient public spaces, like footpaths, cycle tracks and hawker zones. The On-street Parking Management Strategy for Coimbatore, devised by ICLEI South Asia in partnership with ITDP India, will help address parking issues in the city. The document includes recommendations on better management of parking demand and supply, regulations on highly congested streets, methodology to implement phase wise on-street parking management and effective pricing strategy for on-street parking, which is free of cost at present.

Coimbatore City Municipal Corporation has now started the process of implementing the on-street parking management system. ICLEI South Asia has conducted surveys highlighting the need for and the importance of a parking pricing among the general public and thus made the implementation of the strategy easier. This initiative acts as a first step towards resolving Coimbatore city's larger transport issues like public transport system etc.



# PUBLICATIONS AND TOOLS

## AsianCitiesAdapt: Learning Exchange – Main outcomes report



This document highlights the main outcomes and takeaways of the “AsianCitiesAdapt Learning Exchange” that took place in Cochin, India, on 30 and 31 October 2013. Central subjects of a range of expert presentations and lively discussions were the trends of a changing climate projected for the South and Southeast Asian region, their likely impacts on urban systems as well as a diverse set of options for local governments to prepare their cities for the challenges ahead.

## HEATplus – Harmonized Emissions Analysis Tool



ICLEI’s online GHG emissions inventory tool, HEAT+ helps local governments account for GHG emissions, Common Air Pollutants (CAP) and other Volatile Organic Compounds (VOC).

## ICLEI ACCCRN Process



This toolkit, prepared as part of our engagement with the Asian Cities Climate Change Resilience Network program aims at helping municipal governments develop City Resilience Strategies to cope with the growing impacts of climate change.

## Local governments championing adaptation to climate change - A primer for decision-makers in Asian cities



This primer deals with the challenge of governance and management in cities in times of climate change, thus addressing a key actor in climate adaptation - local governments.

# OUR SINCERE THANKS TO...

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## National Organisations

- Academy of Gandhian Studies - AGS (India)
- All India Institute of Local Self Governance (AIILSG)
- Anna University – Centre for Human Settlements
- ASE
- AVVAI - Village Welfare Society (India)
- Bureau of Energy Efficiency (BEE)
- Central University of Rajasthan (CURAJ)
- Centre for Environment Education (CEE)
- Centre for Good Governance
- Centre for Science and Environment (CSE)
- Commissionerate of Municipal Administration (CMA), Government of Tamil Nadu
- Environmental and Planning Coordination Organization
- Government of Andhra Pradesh
- India Water Partnership (IWP)
- Indian Heritage Cities Network- Foundation (IHCN-F)
- Indian Institute of Technology, Delhi (IIT)
- Infrastructure Development Finance Company Limited
- Innovative Transport Solutions (iTrans) Private limited (India)
- Local Self Government Department, Directorate Local Bodies, Government of Rajasthan
- Ministry of Environment and Forests (MoEF), Government of India
- Ministry of New and Renewable Energy (MNRE)
- Ministry of Urban Development (MoUD), Government of India
- National Institute of Urban Affairs (NIUA)
- Shakti Sustainable Energy Foundation/ Climate Works Foundation
- Tamil Nadu Electrical Inspectorate (TNEI)
- TARU Leading Edge Pvt. Ltd.
- Urban Development & Urban Housing Department, Government of Gujarat
- World Wildlife Fund (WWF) India



# OUR SINCERE THANKS TO...

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- China Dialogue
- Cities Development Initiative for Asia (CDIA)
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- German Environmental Ministry (BMU)
- German Federal Ministry for Economic Cooperation and Development (BMZ)
- German Federal Ministry of the Environment Nature Conservation and Nuclear Safety (BMU)
- GIZ (German Development Cooperation)
- Government of Nepal.
- ICLEI Africa Secretariat
- ICLEI European Secretariat
- ICLEI South America Secretariat
- ICLEI Southeast Asia Secretariat
- ICLEI World Secretariat
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- International Renewable Energy Agency (IRENA).
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- UN-HABITAT
- United States Agency for International Development (USAID)
- United States Department of State through the Asia Pacific Partnership
- USAID ADAPT Asia Pacific
- VVSG Association of Flemish Cities and Municipalities (Belgium)
- WISIONS of Sustainability

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