

# Urban Resilience in the SAARC Region

5th December 2022  
13:30 to 14:00 Hours

Emani Kumar  
Deputy Secretary General  
ICLEI – Local Governments for Sustainability



# Introducing ICLEI-Local Governments for Sustainability

- ❑ An international city network established in 1990 that advances local sustainability
- ❑ ICLEI is the leading global network of more than 2500 local and regional governments committed to sustainable urban development
- ❑ Active in 125+ countries, we influence sustainability policy and drive local action



**IMPACTING  
MORE  
THAN 25% OF  
PEOPLE LIVING  
IN CITIES**

**24 OFFICES  
WORLDWIDE**

# Introducing ICLEI South Asia

- ICLEI South Asia members and network cities: 100+
- ICLEI South Asia Head Office: Delhi
- Regional Offices: Dhaka, Kathmandu, Hyderabad
- State Offices: Coimbatore, Gandhinagar and Thane
- Project Offices: Siliguri, Chennai, Kochi, Lahual, Nagpur, Rajkot, Tiruchirapally, Tirunelveli, Vadodara, Shimla, Panaj and Udaipur
- 80+ professional staff including urban planners, energy managers, environmental planners, transportation engineers, ecologists and environmental engineers



# The Five ICLEI Pathways



**LOW EMISSION  
DEVELOPMENT**



**NATURE-BASED  
DEVELOPMENT**



**EQUITABLE  
AND PEOPLE-  
CENTERED  
DEVELOPMENT**



**RESILIENT  
DEVELOPMENT**



**CIRCULAR  
DEVELOPMENT**

The **FIVE ICLEI PATHWAYS** towards low emission, nature-based, equitable, resilient and circular development are designed to create **SYSTEMIC CHANGE**. The pathways are a framework for designing **INTEGRATED SOLUTIONS** that balance the patterns of human life and the built and natural environments.

# ICLEI South Asia promotes Urban Resilience in South Asian Cities through following technical interventions/ways

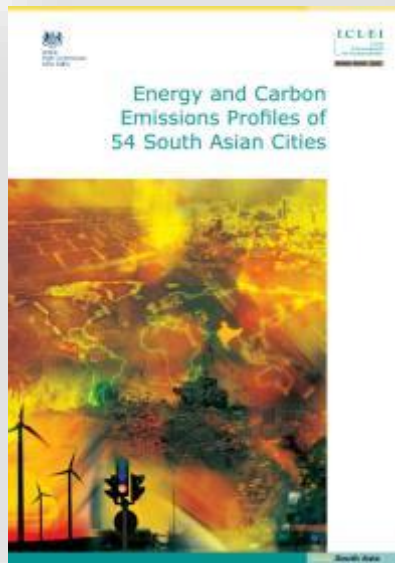


1. City Profile and Baseline Assessment (Energy Use and Greenhouse Gas Emission Inventories)
2. Systematic and Integrated Climate Action Planning Processes and Tools (ClimateResilientCITIES)
3. Climate Action Plans and City Resilience Strategies (CRS)
4. Urban Low Emission Development Strategies (URBAN-LEDS)
5. Holistic Solid Waste Management (SUNYA)
6. Promoting Climate Knowledge Brokering (CDKN-Knowledge Accelerator)
7. Greener and Resilient Recovery Solutions in Post Covid Economy (ReCAP21)
8. Urban Food Systems To Promote Nutritional and Food Security
9. Technical Support by Global Climate Action Partnership (GCAP) to Asian Countries (*formerly Asia LEDS Partnership*)
10. Open and Green Spaces, Nature Based Solutions, Urban Biodiversity
11. Transition Towards Sustainable Electric-Mobility
12. Promoting International Programs/Coalition e.g Making Cities Resilient 2030 (MCR2030), Global Covenant of Mayors (GCoM South Asia)

# ICLEI South Asia lead Action Planning Journey in South Asian Cities since 2009



## Energy Use and GHG Emissions Inventories



**54** South Asian Cities Emissions Profiles (Using Harmonised Emissions Analysis Tool (HEAT, <http://heat.iclei.org/>) of 5 Countries of South Asia (India, Bangladesh, Nepal, Bhutan and Sri Lanka)

## Cities Resilience Strategies and Action Plans



**40+** Asian Cities Prepared Cities Resilience Strategies (CRS) and action plans using ICLEI ACCCRN Process (IAP)

## Solar City Action Plans and Renewable Energy and Energy Efficiency Action Plans



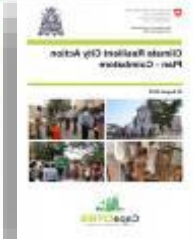
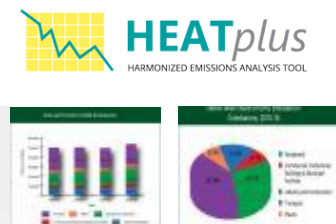
**15** Solar Cities Master Plan and supported in establishing Solar Cells (Lead Consultant to Government of India's flagship Solar Cities program)

# ClimateResilientCITIES

- First of its kind - Integrated Climate Change Mitigation and Adaptation Planning Methodology that also addresses bankability and implementation
- Builds on 20+ years of cumulative expertise
- Tested successfully in 20+ Asian cities (12+ South Asian cities)



City Profiling      GHG Emissions      Climate Risk and Vulnerability      Integrated Climate      Pilot Intervention      Large Project      Monitoring, Reporting &



## Climate Resilience Action Plans of South Asian Cities

**Rajkot: 14%**  
by 2022-23 from 2015  
levels



**Udaipur: 18%**  
by 2022-23 from 2015 levels



**\*Thane: 22 %**  
by 2025-26 over the  
2017-2018 baseline  
emissions



**Rajshahi: 9.64 %**  
by 2026-27 over the  
2017-2018 baseline  
emissions



**Coimbatore: 33%**  
by 2022-23 from 2015  
levels



**Siliguri: 14.8%**  
by 2022-23 from 2015  
levels



**Nagpur: 20 %**  
by 2025-26 over the  
2017-2018 baseline  
emissions



**Narayanganj: 12.6%**  
by 2026-27 over the 2018-  
2019 baseline emissions



**\*Kurunegala: 22%**  
by 2030 from 2016 levels



**\*Sarpang: 8 %**  
by 2030 from the  
projected emissions



Climate Action Plans are approved by local municipal councils.

\*Cities CAPs are submitted for council resolution.

# Urban Low Emission Development Strategies URBAN-LEDS (Phase II)



Integrated low emission and resilient development in more than 60 cities in 8 countries  
*(two countries in South Asia)*

Bangladesh:

- Model Cities: Rajshahi & Narayanganj
- Satellite Cities: Singra, Sirajganj, Faridpur, Mongla (peer learning and exchange)

India:

- Model Cities: Nagpur & Thane, Rajkot (learning and exchange)
- Satellite Cities: Coimbatore, Gwalior, Panaji, Pimpri-Chinchwad, Shimla (peer learning and exchange)



Climate Action Plan of Thane



Climate Action Plan of Rajshahi



Climate Action Plan of Nagpur



Climate Action Plan of Narayanganj



Study on Vertical Integration in Bangladesh



SPV Case Study



Thane Urban Flood Early Warning System



Energy audit in progress at the main administrative office building of the Rajshahi



Rajshahi Natural Asset map



Snapshot of bio-diverse plantation pilot at Kolpona-Talaimori, Rajshahi



Development of Children Centric Climate Resilient Park in Nagpur



Solar charge controller at public health centre in Narayanganj



RW at Netaji Nagar School RW at Saint Kabir School

# Holistic Waste Management support to South Asian Cities



- Baseline SWM Assessments and preparation of Holistic Solid waste management action plans : 20+ cities in South Asia
- SUNYA – Towards Zero Waste: Promoted source segregation, segregated transport and implementation of decentralised waste processing facilities - Udaipur, Coimbatore, Varanasi, Hyderabad, Kota, Shimla, Kishangarh, (India) Jaisalmer, Hetauda & Tansen (Nepal) among others
- Plastic Waste Strategy and Action Plan and implemented pilot projects in Hyderabad
- Identified and developed investment-ready potential projects on plastic waste management for Asian cities
- Trained and capacitated more than 500 municipal officials under Swachh Bharat Mission
- National expert for the Revision of CPHEEO Manual on Municipal Solid Waste Management, 2016





# CDKN-Knowledge Accelerator – Brokering Climate Knowledge in India, Nepal and Bangladesh



## Capacity building on climate resilience



- Training and capacity building of local governments on climate resilience planning: webinar series, training programmes, peer exchanges
- Reached out to more than 50 municipalities in the region
  - Well appreciated and generated great demand for further and more detailed training programmes
- Developed detailed training modules for local governments-climate resilience planning methodology
  - Published online-regularly accessed by municipalities in the region

## Urban Heat Resilience



- Identification of heat resilience hot spots and heat thresholds in cities of Nepal and Bangladesh (Nepalgunj and Rajshahi)
- Guidance notes on early warning and early action on heat resilience in secondary cities
- Developed IEC materials for awareness generation on heat resilient actions



# CDKN-Knowledge Accelerator



## Knowledge Basis Projects



- Supported Climate Smart Agricultural practices (CSA) in Gandaki Province (Nepal)-in partnership with LIBIRD.
- Water forums for inclusive and equitable water governance in Dhulikhel and Dharan municipalities of Nepal-in partnership with SIAS-water forums included in municipal budget as a means of water governance system
- Evaluation of adaptation trials in Ganga-Brahmaputra-Meghna delta region to promote climate action and assess changes in adaptive capacity in local population-in partnership with BUET, Bangladesh

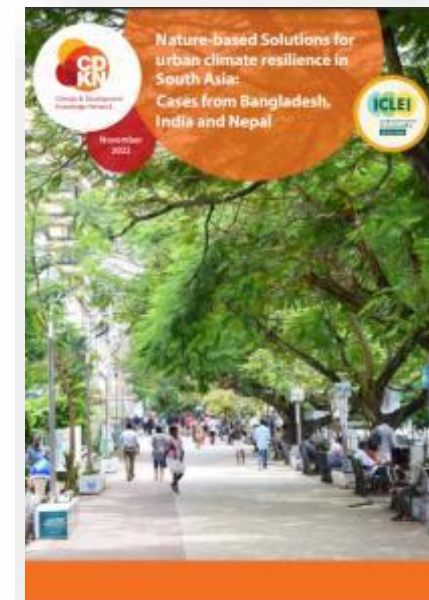
- ✓ Knowledge products-policy briefs, IEC materials, training materials on CSA; Manual for developing water forums (more than 20 products developed)
- ✓ Voluntary Local Review for Dhulikhel (Nepal) and Singra (Bangladesh)
- ✓ Training and capacity building of women farmers; local governments
- ✓ Handholding support to farmers to implement demonstration initiative on CSA; water forums
- ✓ Field survey, FGDs, model demonstration
- ✓ Webinars and consultation (more than 10)

# CDKN-Knowledge Accelerator

## Knowledge Products



- Climate Finance in Bangladesh, India and Nepal: A compendium of finance sources and instruments to support climate action -externally reviewed compendium of finance sources for countries India, Bangladesh and Nepal for climate action: Launched at COP 27
- Nature-based Solutions for urban climate resilience in South Asia: Cases from Bangladesh, India and Nepal-compendium of good practices on nature based solutions from India, Bangladesh and Nepal that can be replicated by local governments and partners in the region: Launched at COP 27



# Resilient Cities Action Package 2021 (ReCAP21) in Bangladesh



- Installation of Water ATM and Handwashing stations at four sites in Rajshahi City to benefit most the poor and vulnerable sections
- Bangladesh Resilient Recovery Training on 11<sup>th</sup> and 12<sup>th</sup> October 2021 (Trained 16 Cities officials from Rajshahi and Narayanganj)
- Guidebook on 'Green Recovery and Resilience in Cities'
- Organized the 'Talanoa Style High Level Dialogue for Climate Action in Bangladesh' on 25th November 2021
- Two local project proposals submitted to TAP project pipeline and secured seal of approval from TAP



*Talanoa Style High Level Dialogue for Climate Action in Bangladesh*



Site 1: Shah Mokhdum Darga



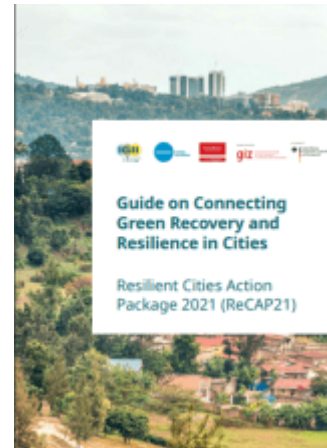
Site 2: Kamruzzaman Park



Site 3: Lokkipur Mor



Site 4: MotiChottor



# Climate Resilient Inclusive Smart Cities (CRISC) project

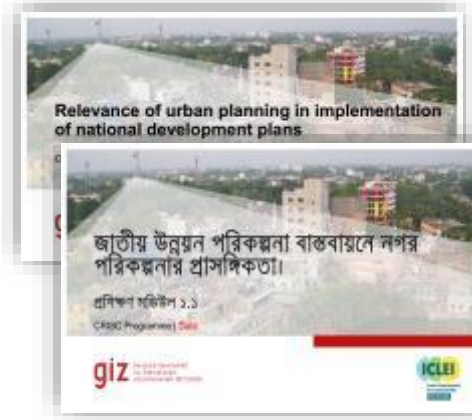
- Develop climate resilient and inclusive urban development plans for selected cities in Bangladesh. ICLEI SA Cities involved in training for local and national actors, policy dialogue, peer to peer exchanges
- Project cities: Sirajganj and Satkhira Municipality of Bangladesh (Rajshahi, Barishal, Khulna)
- Developed training modules: Module 1.1: Relevance of Urban Planning in Implementation of National Development Plans; Module 2.2: Technical Understanding of Climate Change Adaptation in Cities; and Module 3.1: Localizing Sustainable Development Goals in Cities: Social Inclusion
- Towards achieving the German Development Cooperation's (GDC) goal for the Government of Bangladesh (GoB)  
Training in Sirajganj and Satkhira, March 2022



Federal Ministry  
for Economic Cooperation  
and Development



Deutsche Gesellschaft  
für Internationale  
Zusammenarbeit (GIZ) GmbH



Power point presentations  
in English and Bengali



Training  
Handout in  
Bengali



Trainers  
Handbook  
in English

City Exchange Event on Development and Implementation of Climate Action Plan for Rajshahi and Site visits in November 2022



# Urban Food Systems in Asia



Food and Agriculture  
Organization of the  
United Nations



Improving urban food systems and their impacts on the food choice, dietary patterns and the state of food security and nutrition among the urban residents in India, Sri Lanka and Maldives

## Project Location



Colombo, Sri Lanka



Pune, India



Male, Maldives

Phase 1: Surveys with city planners/municipal officials to learn about policies and actions in cities (47 interviews)

Phase 2: Surveys with urban food suppliers to learn about challenges that suppliers face along the food chain (45 interviews)

Phase 3: Surveys with urban households (700+ families)



Two Stakeholder Consultation to present the survey findings (Feb 2019)



Colombo, Sri Lanka

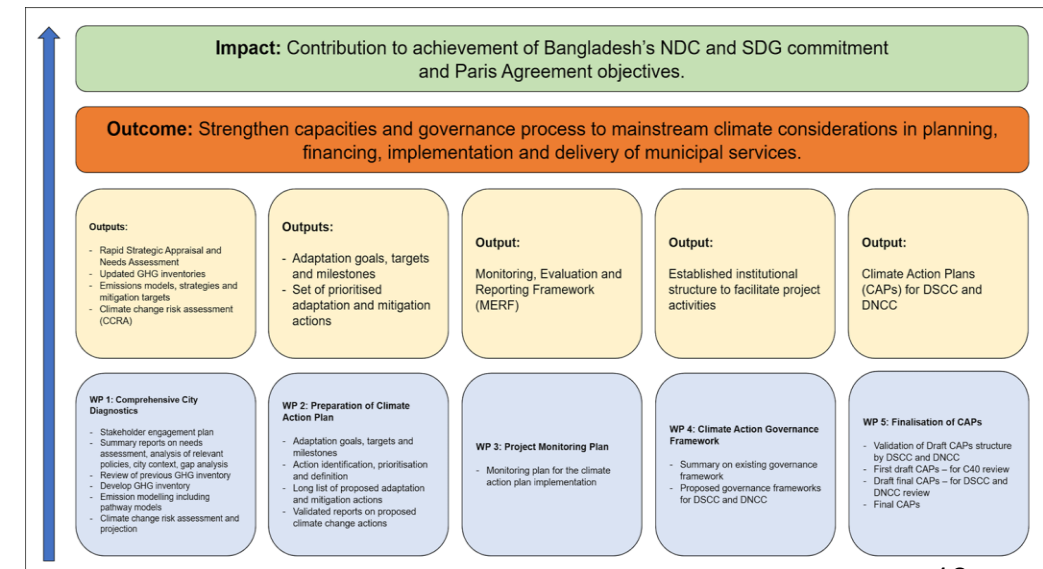


Male, Maldives

# Developing Climate Action Plans (CAPs) for Dhaka North and South City Corporations, Bangladesh



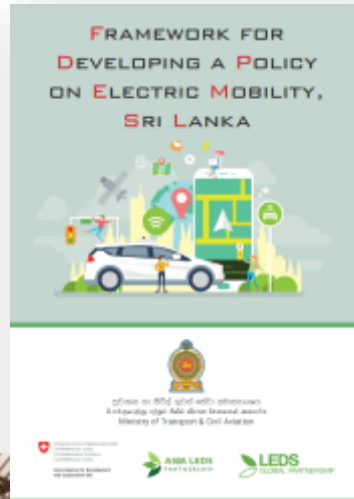
- Develop GHG inventories for DNCC and DSCC
- Develop city-wide emission projections and pathway models for 2030/2050 scenarios
- Climate Risk and Vulnerability Assessments (CRVAs)
- Identify and prioritise climate adaptation and mitigation targets
- Develop monitoring, governance and implementation plans for CAPs
- Develop Climate Action Plans (CAPs) for Dhaka North and South City



# Technical Support by Global Climate Action Partnership (GCAP) to Asian Countries (*formerly Asia LEDS Partnership*)



## Framework for Development A Policy on Electric Mobility, Sri Lanka



Stakeholder consultation meeting on framework for national electric mobility policy, Sri Lanka on 27 August 2019 and 11<sup>th</sup> November 2019

## Bhutan: scoping of pre-BRTS, Thimphu city



## SNI CoP Webinar series

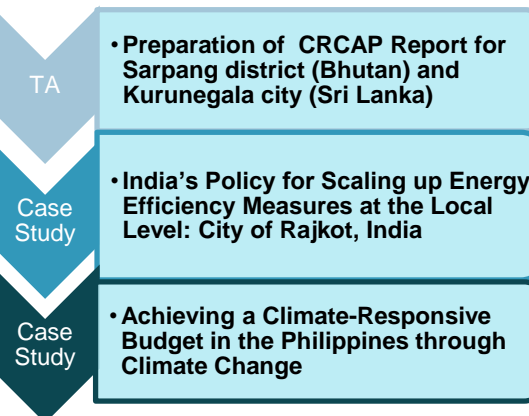
- a) Climate planning (19 Jan 2022)
- a) Prioritization and structuring of projects (25 Jan 2022)
- b) Measurement, Reporting and Verification (MRV) guidance for sub-national governments (27 Jan 2022)



First Shared Learning Dialogue for CRCAP preparation Kurunegala city, 11 July 2019



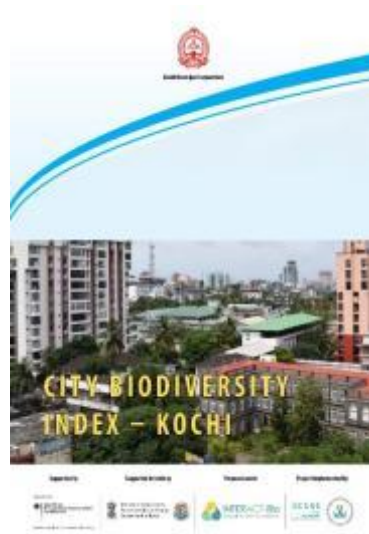
CRCAP training, Bhutan, 7-8 October 2019 Participants from Gelephu city and Sarpang district



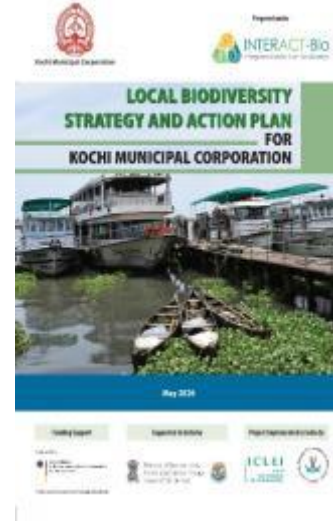
# Urban Biodiversity Projects in South Asian Cities



Urban Biodiversity Map



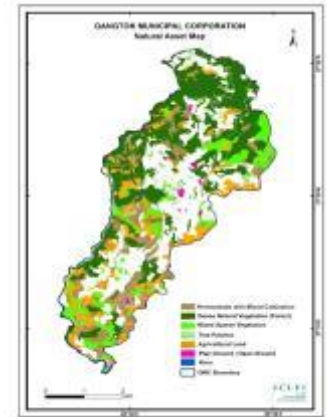
City Biodiversity Index



Biodiversity Strategy Action Plan



Home Gardens-  
Ecosystem Services



Natural Asset Map



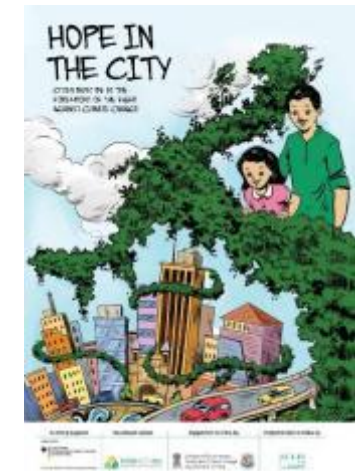
Investment Case on  
Mangrove Conservation



Pollinator Garden



Nature Interpretation  
Centre



Environmental  
Education

# Cities Dialogue on “Accelerated Transition Towards Sustainable E-Mobility in India” from 13th – 14th October 2022 in Delhi, India



- Discussion around EV uptake patterns, identifying and prioritising high-impact modes for electrification, strategic expansion of charging infrastructure, and sustainable electrification of cities freight.
- Cities dialogue brought together total 140 participants including representatives from 18 Indian cities, 6 state government agencies, 11 public transport operators and national government officials, sectoral experts along with representatives from advocacy groups and the private sector.



City Governments Officials  
with EV Pledge



Market Dialogue between  
Cities, Financiers and E-  
Bus Manufacturers



Site Visit to Electric Buses of Delhi Government



Site visit to 100% E-Bus  
Charging Depot

# Global Covenant of Mayors for Climate & Energy (GCoM) South Asia

GCoM Cities: Globally 12,629 cities (36 in South Asia, 29 in India)

GCoM Committed cities work towards compliance with the GCoM framework, benefiting from direct support from ICLEI and other GCoM partners in the form of technical assistance, training, advisory support and analysis and peer-to-peer learning programs. As part of their commitments, signatories:

- Develop a greenhouse gas emissions inventory and report their results.
- Assess climate risks and vulnerabilities and report their results.
- Define ambitious climate change mitigation targets.
- Develop integrated climate action plans to meet their stated targets and goals.
- Implement planned measures to reach targets and goals.
- Monitor and measure progress on a regular basis
- Report on CDP-ICLEI Track

ICLEI South Asia as a GCoM South Asia Technical Coordinator provide following services to GCoM Signatories

- Technical support to GCoM network, local governments, and relevant stakeholders in South Asia
- Contribute to the GCoM Asia technical assistance for CAPs review, development, and reporting
- Management of the GCoM knowledge platform functions
- Organisation of GCoM Asia webinar series
- Establish and follow-up dialogue with International Financial Institutions (IFI), donors and commercial banks on possibilities to finance projects arising from the cooperation, especially through the TAP platform

Website: <https://covenantofmayors-southasia.eu/>

GCoM South Asia Technical Coordinator Email: [gcomcoordinator@icleisouthasia.org](mailto:gcomcoordinator@icleisouthasia.org)

# Making Cities Resilient 2030 (MCR2030)



Making  
Cities  
Resilient



MCR2030 is a unique cross-stakeholder initiative for improving local resilience through advocacy, sharing knowledge and experiences, establishing mutually reinforcing city-to-city learning networks, injecting technical expertise, connecting multiple layers of government and building partnerships.

**Stage A: Cities Know better**  
**Stage B: Cities Plan Better**  
**Stage C: Cities Implement Better**

**Access to various tools and resources:**

1,473

MCR2030 cities  
Join Now

457,763,260 72

People living in MCR2030 cities  
MCR2030 countries and territories

667

Stage A cities

338

Stage B cities

468

Stage C cities

Incheon Metropolitan City is the Republic of Korea's third largest city, host to UNDRR and other United Nations organizations in the Republic of Korea as well as the Green Climate Fund. Incheon is a recognized Making Cities Resilient 2030 Resilience Hub



**Sign up here:**

**<https://mcr2030dashboard.undrr.org>** 23

# Support – from process to projects



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# Thank You !

**Emani Kumar**  
**Deputy Secretary General**  
**ICLEI Local Governments for Sustainability**



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