Low-carbon cities: global trends and developments

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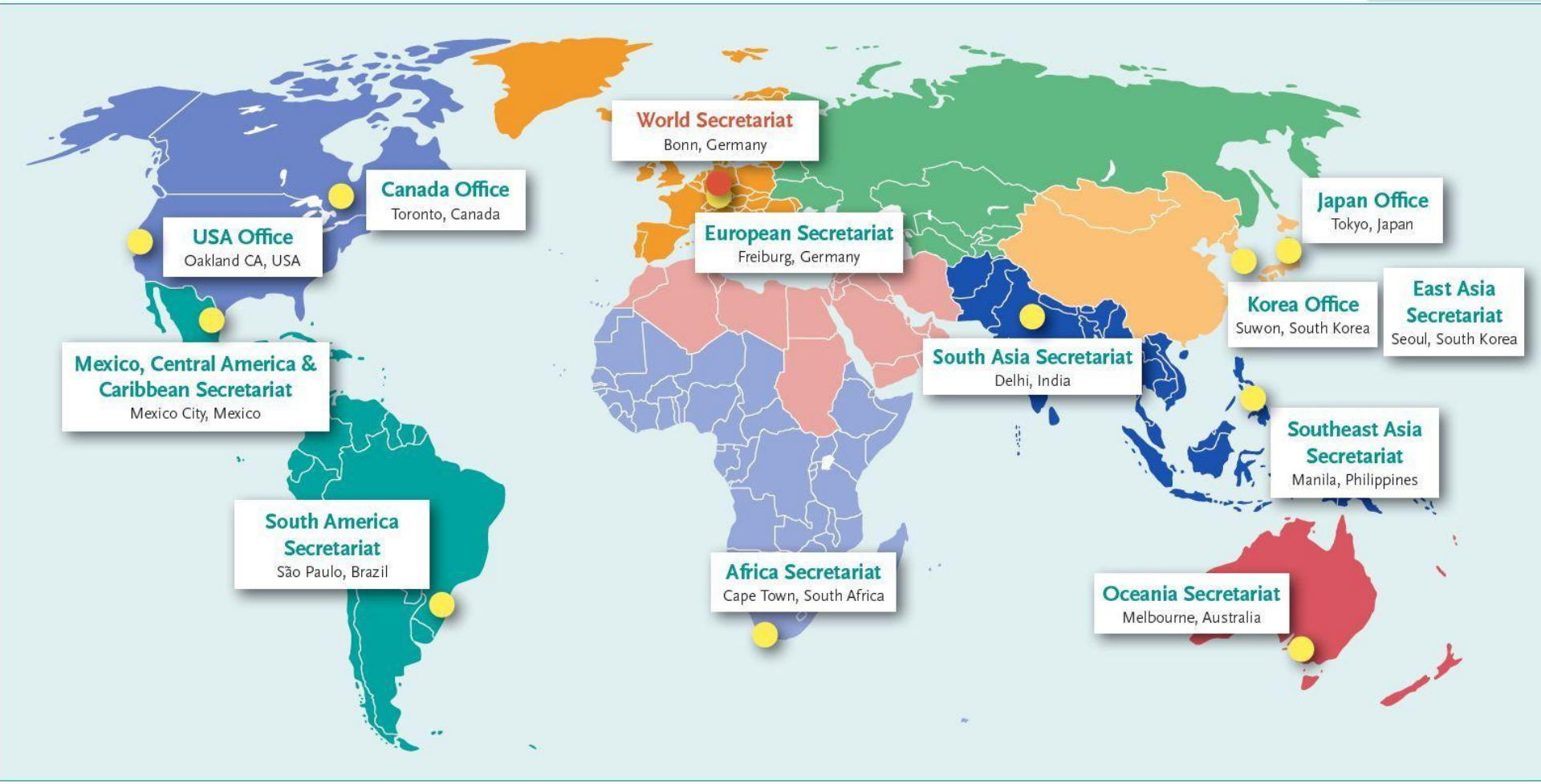
Introducing ICLEI

- **ICLEI - Local Governments for Sustainability** (ICLEI) is an international city network that advances **local sustainability**.
- Established in **1990** in New York **by cities, for cities**.
- **1000+ members** in **86 countries,** representing **660 million people** in mega-cities, super-cities, urban regions, large cities, small and medium-sized cities & towns.
- **Roles:**
  - **Membership organisation -** city exchange, advocacy, representation
  - **Thematic network** - multi-disciplinary technical expertise, tools, support for local governments

ICLEI Offices



ICLEI‘s 8 City Agendas

1. Sustainable city
2. **Low-carbon city**
3. Disaster-and-climate-resilient city
4. Resource-efficient city
5. Biodiverse city
6. Green infrastructure
7. Green urban economy
8. Healthy & happy community

Low-carbon City

- Towards **low-emission and carbon-neutral** communities by reducing greenhouse gas emissions in a step-by-step process.
- Including impacts and benefits in other areas such as **air quality**, **emission development, green urban growth, quality of life, ...**.
- Many cities, towns, districts and provinces are engaging on this topic – **learn, share!**
- ICLEI‘s global Low-carbon City Agenda is coordinated by the Bonn Center for Local Climate Action and Reporting (carbonn Center) - **support for all cities**

Local governments in focus

- **Local governments should be empowered to better understand and explore low-carbon development**:
  - Why commit and act
  - What to commit to
  - How to engage in local climate action – process focus
  - With whom to engage – stakeholder engagement
  - How to optimize co-benefits for local community
  - What to monitor and report on / How to do this
  - How this connects to national and international systems and processes / Why this is relevant

carbon*n* Center: 3 Work Streams

ICLEI Local Governments for Sustainability

carbonn™ bonn center for local climate action and reporting

1. Technical support

Coordinating:

Low-carbon City Agenda

2. Global processes

Operating:

carbon*n* Cities Climate Registry

3. Advocacy

Conducting:

Global Climate Advocacy

Technical Support

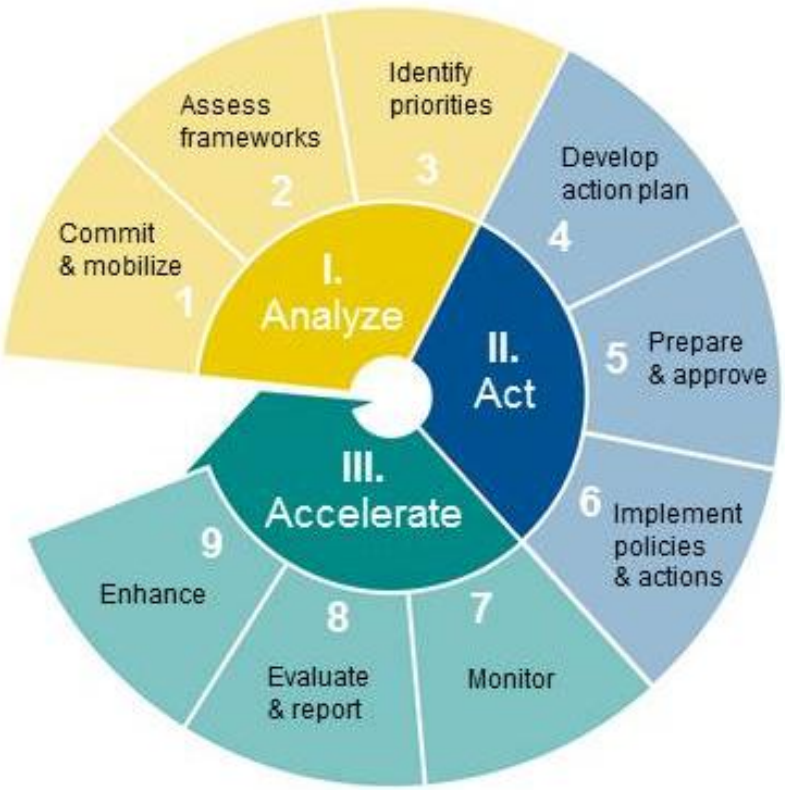
Climate change mitigation

and low-carbon development

Towards MRV

- **Measurable, Reportable, Verifiable (MRV)** - identified as key component in the Bali Action Plan (2007) in paragraphs 1(b)(i) and (ii).
- MRV is applicable to **mitigation actions** by non-annex parties, as well as the **technology, finance and capacity building support** from annex I parties.
- **Purpose:** To give confidence in data and the process that leads to results.
- ICLEI has developed a **process MRV for the GreenClimateCities program** - tested in Urban-LEDS project.

GreenClimateCities program



- Process for local governments (LGs):
  - for start-up / intermediate / advanced levels
  - in Global North and South
- Concise methodology, tailor-made for LGs
- Process, guidance and tools offered
- MRV approach for local climate action part of GCC program
- Network, peer exchange

ICLEI Local Governments for Sustainability

Reporting local climate action

Standards for local GHG inventories

GHG emissions accounting **software**

Reporting platforms

GPC

HEATplus HARMONIZED EMISSIONS ANALYSIS TOOL

carbonn CITIES CLIMATE REGISTRY

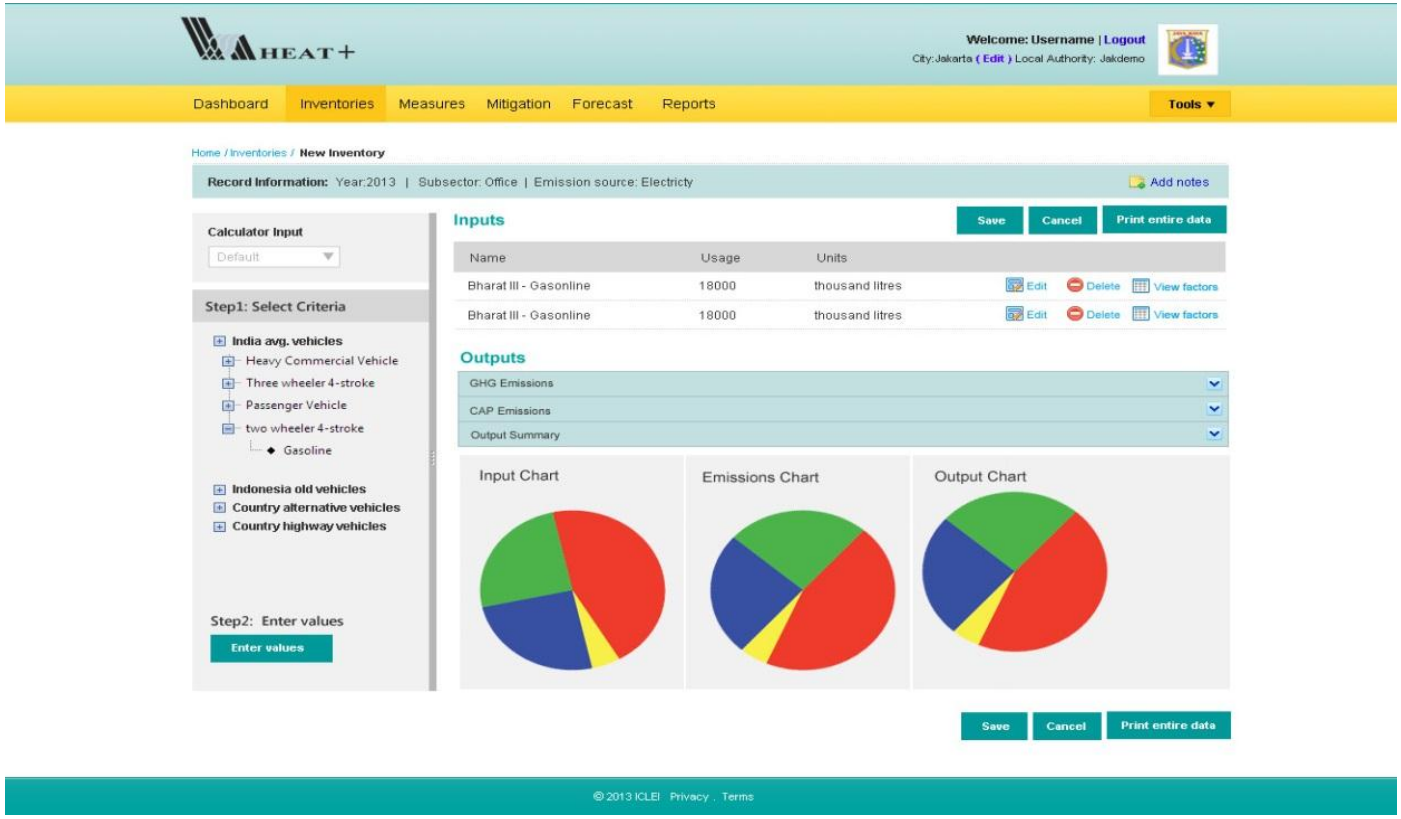
Protocols –city guidance

Global Protocol on Community-scale GHG Emissions (GPC)

- Moving towards a global standard for all local governments on GHG accounting – by scope, by sector, by gas
- Core partners: WRI (leads process, hosts Secretariat), C40 and ICLEI.
- Currently in review. GPC 2.0 to be launched before COP 20 in Lima.
- Training programme is planned for city staff dealing with this issue

Tools: GHG Inventory

Harmonized Emissions Analysis Tool *plus* (HEAT+):



Tools: Scenarios

Greenhouse Gas Regional Inventory Process (GRIP):

- GRIP scenario tool to **explore systems change** for energy / GHG reduction in community / region (e.g. how to reach 40% reduction by 2030).
- Developed by **Dr. Sebastian Carney**, Centre for Urban Resilience and Energy, Manchester University United Kingdom.
- GRIP is **rolled-out in partnership with ICLEI**, with selected staff as accredited trainers offering GRIP sessions to cities.

Urban-LEDS project

- **Title:** Promoting Low Emission Urban Development Strategies in Emerging Economy Countries (Urban-LEDS)
- International **mitigation project** funded by EC
- **Duration:** March 2012 – August 2015
- **Main objective:** Enhance the transition to low-emission urban development in cities in emerging economy countries: **Brazil, India, Indonesia and South Africa.**
- Supported by 8 experienced **European cities.**
- **Implementation partners:**

Global processes

City-level commitment and reporting

City commitments

- Who commits on behalf of the city / local community?
- What do you commit to? What targets should you set?
- Should you address only climate change mitigation or also adaptation?

Mexico City Pact – cities commit

GLOBAL CITIES COVENANT ON CLIMATE
THE MEXICO CITY • PACT

1. **Reduce local greenhouse gas emissions** voluntarily
2. Adopt and implement **local climate mitigation measures** designed to achieve their voluntary reduction target
3. Develop **local adaptation strategies** to address the local impact of climate change
4. **Register emission inventories, commitments, climate mitigation and adaptation measures and actions in a measurable, reportable and verifiable (MRV) manner**
5. Seek the creation of **mechanisms that allow direct access to international funding** for local climate actions
6. …..

Different reporting platforms

National Governments

Local Governments

National overview, top-down data

Bottom-up data, can help to solidify national inventories: confirm, refine, identify gaps

carbon*n* Cities Climate Registry

- The **carbon*n* Cities Climate Registry (cCCR)** was launched at the World Mayors Summit on Climate in Mexico City on 21 November 2010

Source: cCCR 2013 data

Purpose of carbon*n* Registry

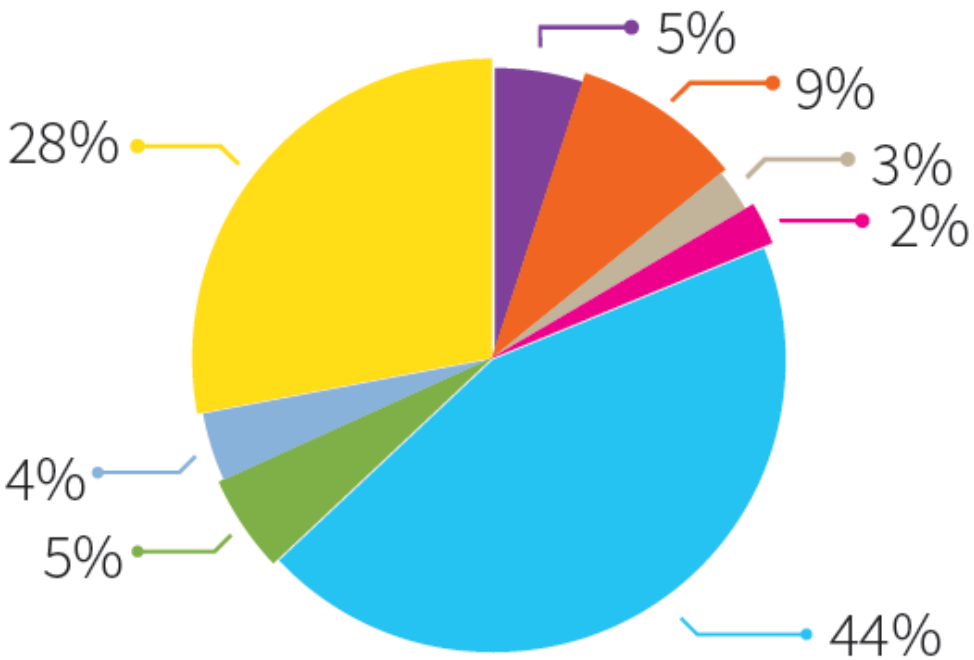
Credibility	Promotes **Transparency & Accountability** of commitments/targets and GHG developments
Verification	Improves **Measurable, Reportable, Verifiable (MRV)** local climate action
Recognition	Leaders are **recognised, promoted, used at events** to illustrate
Inspiration	**Thousands of entries** – mitigation and adaptation, diverse examples, ambitions shared

Towards measurable, reportable, verifiable local climate action

World´s largest global database of local climate action

(analysis based on reported information as of cCCR November 2013 Updates)

Actions



- More than 90% of all reported 4,000+ actions are either completed or in progress,
- More than 50% of these actions which are financed by municipal resources.
- Policy/strategy development (45%) and technical/ infrastructure investments (28%) are the most frequently reported actions in 2013 GHG inventories.

- Assessment /Research
- Education / Awareness Raising
- Fiscal / Financial mechanism
- Organizational / Governance
- Policy / Strategies / Action Plans
- Public Participation / Stakeholder engagement
- Regulatory
- Technical / Infrastructure investment

Global Climate Advocacy

Strategic Context

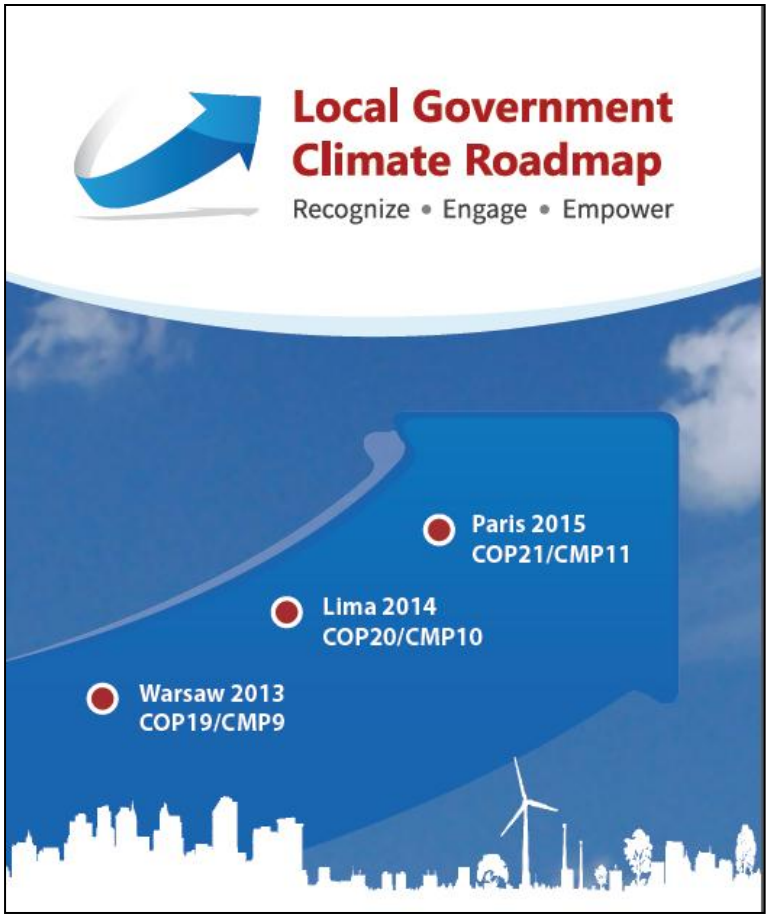
Global Climate Advocacy

International process is led by United Nations Framework Convention on Climate Change (UNFCCC):

- ICLEI is focal point for the Local Government and Municipal Authorities (LGMA) **Constituency at the UNFCCC**

- **Cities are now in focus in this process**: Cities Forum, Mayor-ministerial dialogues, Good practice sharing with national governments

Local Government Climate Roadmap (Phase II) 2013 - 2015



Mission: *Engaging LGs in the new global climate regime*

Strategy: *Partnerships for Action at all levels*

- Strengthening Global / Regional / National initiatives by scaling up and harmonizing
- Establishing **Friends of Cities** at the UNFCCC
- Synergies with outside-UNFCCC processes focusing on urbanization
- Enhancing finance for local climate action

Climate Roadmap purpose

Local Government Climate Roadmap
Recognize • Engage • Empower

- **Recognize**
- **Engage**
- **Empower**

→ **Local Governments (LGs)**

Friends of Cities group was created to improve dialogue between national and otherlevels of government. Meet at UN climate negotiations.

Summary

- **Local and sub-national governments are important actors.**
- Cities, regions and rural areas need to **work together** and with national government on climate change – **horizontal and vertical cooperation**
- **Processes and technical support are available** –from city networks, energy agencies, consultants, …
- **Important for local and sub-national governments to be <u>engaged in Paris 2015 Outcome</u>**
- Importance of working with **Friends of Cities,** broad coalition from both Annex-I and non Annex-I countries
- **Join global reporting** via carbon*n* Cities Climate Registry

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