

Optimizing renewables in Cities: successes, replication potential, challenges and solutions

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Maryke van Staden

Low-carbon Cities Program Manager / Director of Bonn Center
for Local Climate Action and Reporting

ICLEI World Secretariat, Bonn

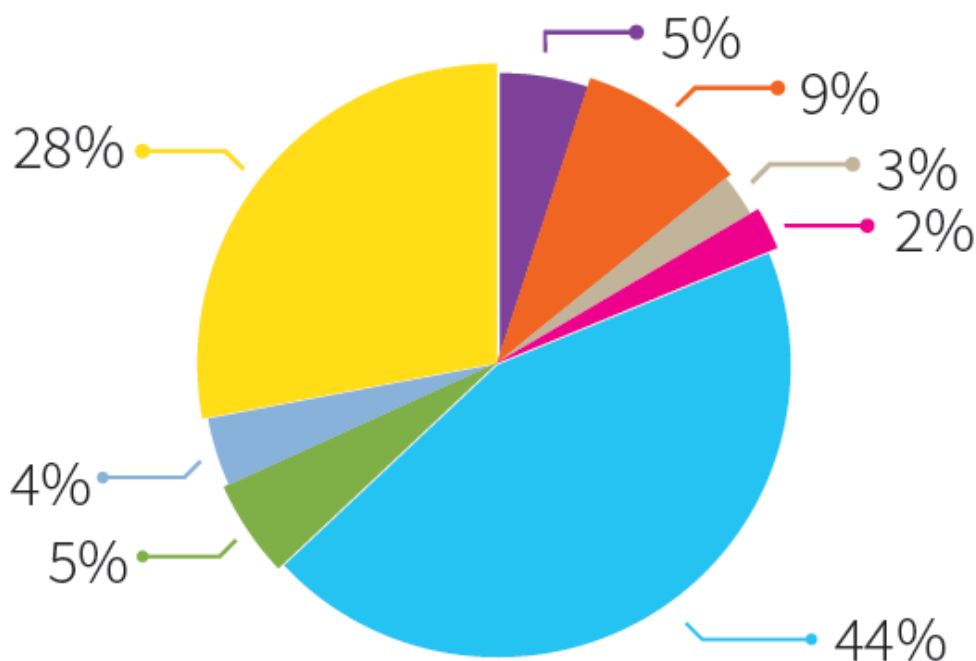
maryke.van.staden@iclei.org

Successes - Cities in action (i)

- **Many different motivations for Local Governments (LGs) to engage on RE:** sustainable development, climate change mitigation and adaptation, improved community resilience, access to energy, energy security, stimulate green urban economy, ...
 - Enter into **dialogue with LGs and focus on their interests when exploring national acceleration packages**
 - **LG lessons learned need to be more widely shared** – cases from cities are available
 - **Improved analysis** needed to understand replication potential.

Successes - Cities in action (ii)

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

Ongoing ICLEI case study collection

- Basket of RE projects identified by end of 2006, then allocated staff on a permanent basis to RE projects - **Nelson Mandela Bay, South Africa**
- Hybrid wind and solar PV system was installed at bus station as demonstration model - **Coimbatore, India**



Examples – IRENA case studies

- Green ecn dev strategy with RE industries, **Dezhou, China**
- RE potentials analysis for targeted policy intervention – **Chemnitz, Germany**
- Integrating RE targets into city planning – **Malmö, Sweden**
- LG regulation ordinances & laws to promote RE – **São Paulo, Brazil**
- PV-powered street lighting – **Nagpur, India**
- Stimulating RE through public & private procurement – **Austin, USA**
- Waste-to-energy for more effective landfill site management – **Belo Horizonte, Brazil**

Challenges (i)

- **Categorization of challenges:**
 - o Funding
 - o Institutional
 - o Technical/Human Capacity
 - o Perception
- Funding and Institutional: Local climate action and energy is mostly **voluntary** – no mandate = **no funds / competing priorities**.

Challenges (ii)

- **Technical / Human capacity and Perception Challenges:**
 - o Local leaders & technical municipal staff should be **empowered to better understand and explore low-carbon development (incl. RE, EE, energy savings):**
 - How to institutionalize in municipal structure and processes
 - How to conduct RE scenarios / select appropriate one
 - With whom to engage / how to optimize stakeholder engagement
 - How to enhance co-benefits for local community
 - Value of reporting

Challenges (iii)

- **Institutional and Capacity Challenges:**
 - Make LG process and projects **Measurable, Reportable, Verifiable (MRV)**.
 - ICLEI developed a comprehensive response in its **GreenClimateCities program**:
 - o developed **MRV for local climate process**
 - o **testing this** in Urban-LEDS project (cities from Brazil, India, Indonesia, South Africa)
 - o conducting GHG inventories using multi-lingual **Harmonized Emissions Analysis Tool *plus* (HEAT+)**
 - o reporting in **carbonn Cities Climate Registry**

Call (i)

- **Create enabling frameworks that actively support local climate / energy action led by local governments, including:**
 - o **Regular flow of up-to-date information** (policy, trends, technology options, sharing lessons, mistakes to avoid)
 - o **LG capacity to act:**
 - Mandate
 - Fair share of tax income to enable local action
 - Trained staff
 - o **Ease access to financing** – i.e. reduced admin for applications, credit worthiness, direct access to Climate Funds, ...

Call (ii)

- **Support existing programmes and activities – accelerate:**
 - i. **Earth Hour City Challenge** – stimulating competition between cities (national and international)
 - ii. **GreenClimateCities program with MRV process**
 - iii. **Strengthen regular reporting** as a mechanism to monitor developments and identify weak areas – **carbonn Cities Climate Registry**
 - iv. **Improve multi-governance coordination and synergies** through vertical integrated efforts – commitments, reporting, ...
- **Explore practical support at June Summit**

Links – Technical support

- GreenClimateCities program: www.iclei.org/gcc
- Global Protocol on Community-scale GHG Emissions (GPC): www.ghgprotocol.org/city-accounting
- HEAT+, GHG quantification and monitoring tool: <http://heat.iclei.org>
- Urban-LEDS project: www.urban-leds.org
- Procura+ Campaign, green public procurement: www.procuraplus.org
- Resilient Cities Congress series: <http://resilient-cities.iclei.org>
- Local Renewables Initiative and Conferences: www.local-renewables-conference.org



Links – Global processes

- Mexico City Pact: www.worldmayorscouncil.org/the-mexico-city-pact
- Durban Adaptation Charter: www.durbanadaptationcharter.org
- carbonn Cities Climate Registry (cCCR):
 - global reporting platform for local climate action for Mexico City Pact and Durban Adaptation Charter signatories, as well as other voluntary city actions www.citiesclimaterestry.org



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Links – Global climate advocacy

- Local Government and Municipal Authorities (LGMA) Constituency at the UNFCCC (ICLEI is the focal point)
- Local Government Climate Roadmap: www.iclei.org/climate-roadmap
- World Mayors Council on Climate Change (WMCCC): www.worldmayorscouncil.org



United Nations
Framework Convention on
Climate Change



Local Government
Climate Roadmap
Recognize • Engage • Empower



World Mayors
Council on
Climate Change