

**SUBMISSION OF
ICLEI-LOCAL GOVERNMENTS FOR SUSTAINABILITY
FOR THE POLICY DIALOGUE on CDM
16.01.2012**

ICLEI – Local Governments for Sustainability welcomes the decision of CDM Executive Board to review past CDM experience and help ensure the readiness and positioning of the CDM to meet the challenges of the post-2012 period.

ICLEI is pleased to present the below submission.

- I. Role of Cities in Global Climate Mitigation
- II. Cities and Local Governments in CDM
- III. Challenges for Enhanced Engagement of Cities and Local Governments in CDM
- IV. Related Progress in UNFCCC/KP negotiations
- V. Proposals for Improvement
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I. Role of Cities in Global Climate Mitigation

The importance of cities in climate policy stems from the simple reality that they house more than half of global population, two-thirds of world energy use and over 70% of global energy use emissions. In the next 40 years, human civilization is expected to build the same level of urban capacity that has been built over the last 4000 years which might result that Cities will be expected to house more than two thirds of world energy use emissions by 2030.

Cities pivotal role is underlined by the Intergovernmental Panel on Climate Change (IPCC) scoping exercise for the Fifth Assessment Report, which identifies energy generation from fossil fuels for (residential and non-residential) buildings, vehicle use and industry as the main source of direct emissions from cities. Main sources of indirect emissions come from the generation of electricity for different purposes. These interact with urban density, urban form and the use of transport, but also with urbanization through land-use changes (e.g. deforestation), industrial processes (e.g. cement construction), and waste production along consumption patterns and lifestyles. The resulting infrastructure assets (buildings, roads, energy and water networks) have very long life times and subsequently inform future lock-in (e.g. urban sprawl), despite ongoing technical optimization and changes in lifestyle.

Greenhouse gas emissions reduction measures in the 'Buildings', 'Waste' and 'Transport' sectors offer substantial urban climate mitigation potential through the implementation of efficiency measures. These urban sectors, also known as the “low hanging fruits”, offer greenhouse gas abatement costs that yield long term economic returns even without their participation in carbon markets (graph 2). Cities and metropolitan regions have a tremendous potential in reducing or stabilizing greenhouse gas emissions, especially in rapidly growing and urbanizing countries, where the infrastructure and returns of the future is defined today.

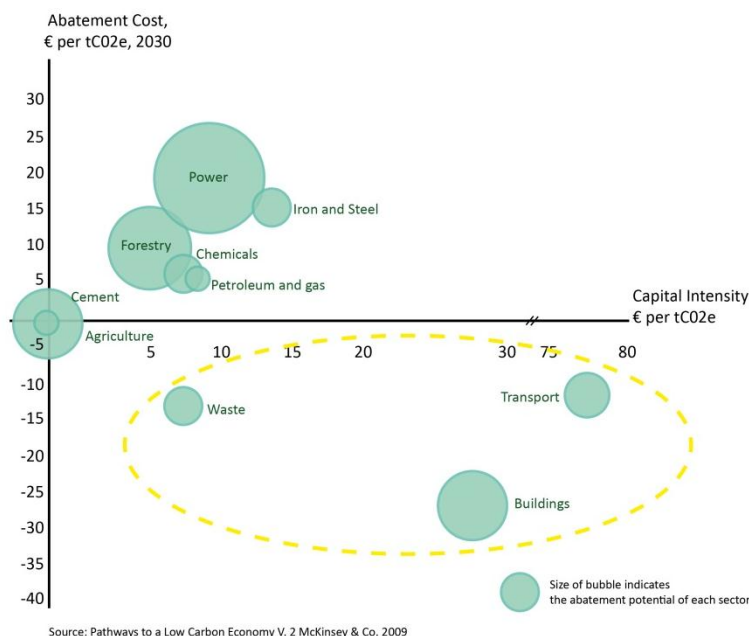


Fig.1 Pathways to Low Carbon Society, McKinsey , 2009¹

Nevertheless, the full potential of local and subnational action on climate mitigation is not appropriately exploited in the first 20 years of international climate regime, simply due to the fact that neither the UNFCCC nor its Kyoto Protocol contain any vision for action at this level of government.

As the focal point of local governments and municipal authorities (LGMA) constituency at the UNFCCC since 1995, ICLEI pioneered the development Local Government Climate Roadmap, a broad and global coalition of local government networks, as a response to the Bali Action Plan of national governments adopted at the 13th Conference of the Parties to the UNFCCC that focus on the design of a new global climate regime in the post-2012 period. Local Government Climate Roadmap aimed to ensure that a global, strong and ambitious global climate regime should be designed and implemented in the post-2012 period where local and subnational governments are fully recognized, resourced and empowered.

In 2009, Copenhagen World Catalogue of Local Climate Commitments, that collected more than 3500 local climate commitments from cities all around the world, demonstrated that a more ambitious climate mitigation deal can be reached if local commitments are integrated into national plans.

Since 2010, cities and local governments have developed carbonn Cities Climate Registry (cCCR) as the local response to measurable, reportable, verifiable climate action. The 2011 Annual Report of cCCR compiled climate information of 51 cities from 19 countries, representing 83 million inhabitants that report 447 million t CO₂e/yr, 90 GHG inventories and 555 Actions. The report further shows that; cities demonstrate their willingness to

¹ ICLEI, 2010

quantify their actions and achievements, matter in terms of global GHG emissions, can help raise ambitions of global GHG reductions and commit their own resources to face the climate challenge.

No	City/Local Government Name	Country	Population	cCCR Reporting Elements					
				I. Reported GHG Emissions			II. # of Reported Commitments	III. # of Reported Actions and Action Plans	Signatory to the MXC Pact?
				Government Emissions (tCO ₂ e/yr)	Community Emissions (tCO ₂ e/yr)	Community per capita GHG Emissions (tCO ₂ e/cap.yr)			
1	Aguascalientes	Mexico	797,010	-	-	-	0	23	Yes
2	Aichi Prefecture	Japan	7,417,204	124,432	78,388,554	10,6	2	2	
3	Almada	Portugal	173,298	20,584	246,916	1,4	1	0	Yes
4	Amuwo Odofin Local Gov. Lagos State	Nigeria	1,500,000	-	-	-	1	1	
5	Bhubaneswar	India	837,737	11,436	971,473	1,2	0	3	
6	Bruxelles	Belgium	1,089,538	-	3,606,303	3,3	1	25	Yes
7	Buenos Aires	Argentina	2,890,151	789,664	14,877,048	5,1	0	35	Yes
8	Calgary	Canada	1,100,000	286,712	16,508,131	15,0	3	9	Yes
9	Cape Town	South Africa	3,700,000	219,672	19,949,346	5,4	6	7	Yes
10	City of Kawasaki	Japan	1,426,538	396,144	25,172,300	17,6	2	8	
11	City of Ligao	Philippines	108,109	-	-	-	0	17	Yes
12	City of Nagoya	Japan	2,266,249	682,583	15,989,000	7,1	2	5	Yes
13	City of North Little Rock	United States	62,304	13,383	1,038,747	16,7	1	17	Yes
14	City of North Vancouver	Canada	47,733	2,318	130,340	2,7	2	10	Yes
15	City of Paris	France	2,225,000	184,100	7,233,200	3,3	7	47	Yes
16	City of Richmond	Canada	188,100	-	-	-	1	0	
17	City of Sapporo	Japan	1,921,831	648,046	11,819,902	6,2	3	5	
18	City of Surrey	Canada	460,000	15,240	2,416,027	5,3	3	7	
19	City of Victoria	Canada	350,000	-	-	-	2	0	
20	Coimbatore	India	913,474	13,717	1,394,642	1,5	0	3	
21	Copenhagen	Denmark	528,208	97,000	2,510,035	4,8	1	7	Yes
22	Delta	Canada	100,000	7,102	917,329	9,2	2	25	Yes
23	District of West Vancouver	Canada	42,131	-	-	-	4	0	Yes
24	Durban	South Africa	3,500,000	1,074,884	21,094,816	6,0	2	50	Yes
25	Fujisawa City	Japan	413,685	-	2,896,773	7,0	1	2	Yes
26	Greater Vancouver Regional District	Canada	2,369,000	-	-	-	2	7	Yes
27	Hiroshima City	Japan	1,180,133	307,372	6,899,000	5,8	3	7	
28	Iida City	Japan	105,036	21,059	7,444,859	7,1	2	2	Yes
29	Itabashi city	Japan	535,759	24,168	1,947,457	3,6	2	9	Yes
30	Jeju Special Self-Governing Province	South Korea	600,000	-	-	-	1	25	Yes
31	Jerusalem	Israel	773,000	68,140	2,349,473	3,0	1	5	Yes
32	Kanagawa Prefectural Government	Japan	9,059,589	346,148	69,277,028	7,6	2	6	
33	Kitakyushu City	Japan	988,710	336,894	16,315,000	16,5	2	2	
34	Kumamoto City	Japan	723,111	199,547	4,245,000	5,9	4	5	
35	Kyoto City	Japan	1,473,656	394,000	6,185,000	4,2	3	5	Yes
36	Lautaro	Chile	35,236	-	-	-	3	8	Yes
37	Mexico City	Mexico	8,720,916	4,313,506	27,590,943	3,2	5	63	Yes
38	Nagpur	India	2,447,000	121,185	1,534,552	0,6	2	4	Yes
39	Nantes Metropole	France	580,000	-	2,076,210	3,6	1	7	Yes
40	Oeiras	Portugal	172,063	-	737,209	4,3	3	1	Yes
41	Okayama City	Japan	699,695	73,352	5,408,000	7,7	2	5	Yes
42	Palmerston North City Council	New Zealand	82,000	7,155	475,234	5,8	5	17	
43	Quezon City Government	Philippines	3,066,600	-	-	-	0	10	Yes
44	Quito Metropolitan District	Ecuador	2,239,191	-	17,892,303	8,0	1	9	Yes
45	Suwon City	South Korea	1,109,262	-	-	-	1	7	Yes
46	Sumida City	Japan	250,366	21,418	1,338,000	5,3	2	0	
47	Taipei	Chinese Taipei	2,618,772	-	15,960,500	6,1	1	19	Yes
48	The District of Maple Ridge	Canada	76,418	2,335	363,776	4,8	4	12	Yes
49	Tokyo Metropolitan Government	Japan	13,187,461	-	65,904,620	5,0	3	6	Yes
50	Ube City	Japan	173,953	45,345	6,068,863	34,9	3	3	
51	Yamanashi Prefectural Government	Japan	864,782	32,557	7,217,000	8,3	2	3	Yes
	TOTAL		83,232,840	10,901,198	446,509,609		107	555	

Table.1 Overview of information provided by cCCR Reporting Cities *

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* All information is based on non-verified data provided by city officials. Please refer to Section VI. Notes for full explanation of data compilations

Table.1 Overview of information provided by cCCR Reporting Cities

II. Cities and Local Governments in CDM²

Despite the given potential for greenhouse gas emission reductions in the urban sectors of buildings, waste, and transport, the number of urban projects these represent is only around 8.4% of all registered CDM projects (as of Sept. 2009). It demonstrates the remaining low engagement in urban areas with this mechanism. Notably, transport makes up only two registered CDM projects, both in urban areas. Methane avoidance and recovery projects comprise the largest share of CDM Projects in urban areas. Key factors that facilitate the feasibility of such projects include: the flexibility of project management due to the point source nature of landfill projects, global availability of technology and methodologies, flexibility of establishing public/private partnerships and the high global warming potential of methane gas. Brazil (36%), China (14%), Mexico (5%) and India (2%) are the main leading countries in the geographical distribution of urban CDM projects.

CDM (registered)		
	Urban	Total
Methane avoidance recover, utilization	(waste, waste to energy) 133	180
Energy efficiency	(households) 8	68
Transport	2	2
Other	n/a	1449
Total	143	1699
Percent of Total (Total)	8.4%	100%

Data Source: GES, Institute for Global Environmental Strategies, Sept 2009.

Table.2 – Urban related CDM registered projects as of Sept 2009.

Local governments can, taking their and the local context into account, take on varied roles in CDM activities including as regulatory framework provider (active and passive), project facilitator and information provider, and as project participant (with/out partnership). Local governments can be key stakeholders to encourage and support urban CDM activities.

² ICLEI, 2010

Urban CDM Examples	Involvement in Project Activity (Role)	Role of Local Government	Description of involvement
TransMilenio, rapid bus system, Municipality of Bogota, Columbia	Local Regulations and Manager (Regulator, Manager)	Governing by authority (and leadership) as <i>Facilitator and Framework provider</i>	Regulates, plans, manages and controls the BRT system.
Methane recovery and power generation from sewage treatment plant, Surat Municipal Corporation, India	Project Owner/Proponent (Project Participant)	Governing by provision as <i>Project Participant</i>	Operator of municipal services.
Montalban Landfill Methane Recovery and Power Generation Project, Municipality of Rodriguez (Metro Manila), Philippines	Consultation (Representation of municipality)	Governing through enabling as <i>Facilitator and Information provider</i>	Representatives of the Municipality and members of the local community participated in the stakeholder consultation.
Quezon City Controlled Disposal Facility Biogas Emission Reduction Project, Quezon City, Philippines	Project Participant (together with Pangea Green Energy Philippines, Incorporated) (public private partnership)	Governing by provision as <i>Project Participant</i>	Owner and operator of the disposal facility. Local Government Unit responsible of management of disposal facility according to the Philippine laws, rules and regulations, ensure Pangea's uninterrupted implementation of the Project.
Small Thermoelectric Plant at ETE Arrudas Project, Municipality of Sabará, Brazil	Local regulations (Regulator, project approver)	Governing by authority as <i>Framework Provider</i>	As stakeholder received letters communicating the CDM project activity. Statement from Sabará Municipality with regards to compliance with local regulations.

Table.3 Examples of roles taken by local governments in selected urban CDM projects

Local governments as *Project Participants* can obviously use the generated funds when they invest in themselves and their municipal services, and drive investments from these financing options over the long term. This is particularly relevant for existing or expanding municipal services such as waste, sewage, landfill management, local energy production, but also transport and government and non-government buildings. However, this may redirect city policies and financial attention away from other priorities creating another layer of local bureaucracy, as well as depend upon national legislation and local legislation may enable local governments. There are also high transaction costs and high upfront investments required, which may be prohibitive for some local governments. Here public-private partnerships could be drawn upon or other forms of international financing.

Local governments as *Facilitators and Information Providers* could involve numerous functions. Local governments can act, as the examples illustrate, as consultation stakeholders, but also provide crucial information and data on the city. International business representatives in the interviews underlined how local governments are important in providing data, aligning coalitions and can act as implementation drivers. Local governments could so also actively encourage CDM activities in their city, bring relevant stakeholders, information and experiences together, and align and mobilize support. In public private partnerships they may also develop good communication strategies and communicate the urgency for mitigation action through for example viable CDM activities.

Local governments in many cases are already, indirect or directly, acting as *Framework Providers* through local legislation and regulations. This can be also considered as the most important and basic function of local governments, where they communicate and implement clear targets and develop development strategies. Then CDM activities should also be included in some form and manner. Local governments would need to find and move issues into regulatory frameworks that make it easier for CDMs to be a part of the urban economy. This may mean that local governments will, under circumstances, need to ensure that national governments negotiate the terms for a supportive framework where this is not provided.

By taking on such roles and driving positive change, local governments can actively support the resolution of remaining barriers, but also direct investments that can be part of a strategic urban development plan. Yet the relatively low number of registered urban CDM projects reminds of the barriers listed above.

III. Challenges for Enhanced Engagement of Cities and Local Governments in CDM

CDM project development may be challenging for local governments for a variety of reasons³

- From an economic perspective, CDM projects may still require upfront investments. Furthermore, project development involves significant transaction costs. This is partly due to its project by project approach.
- Institutional problems may be obstacles, too. “Bureaucratic red tape” in the realization of projects and “weak institutional capacity at city level” to undertake CDM projects, to integrate it into city priorities and to design supporting policies are reported regarding institutions on the local level
- Uncertainties about the CDM’s future beyond 2012, or changing methodologies are institutional barriers on the global level.
- Furthermore, CDM rules are stringent, and there is a “lack of programmatic approach”.
- Climate protection activities that would be important for the local level may not be feasible as CDM projects. For example, there are few approved methodologies in high priority urban sectors such as transport, and CDM projects in the building sector face challenges too.
- The complexity of the CDM procedure may be another obstacle for local governments. This does not only lead to high transaction costs, as explained above, but it also requires

³ Sippel-Michaleowa, 2009

project participants to acquire CDM specific expertise and capacity: A city’s capacity for the CDM is key to realize its benefits. However, local governments may lack the necessary manpower, as well as the technical know-how needed for project development, and they may have a slow learning curve for CDM rules.

- A political obstacle may be the “Incompatibility between [...] the nature of the political process (always a potential change of local government) and very long carbon project cycles”. This has been reported to create uncertainty regarding local government staff assigned to a CDM project. The problem is worse where political party interests lead to divergent positions on a CDM project.

Type of Barrier	Barrier	Explanation	Possibilities to overcome barriers
Economic	Upfront costs of CDM projects		Multilateral financing facility for municipalities, with payback in CERs after first issuance
Informational	Limited capacity of local bodies		Partnerships between CDM consultants and city governments, ICLEI CDM cell
Institutional	Uncertainty about CDM future post 2012		A good Copenhagen agreement!
Institutional	Limited feasibility of important project types	Lack of programmatic approach, few approved methodologies for transport/buildings/etc.	Top-down development of methodologies for urban sectors
Institutional	Complexity of CDM procedure	Leads to high transaction costs, requires expertise	Partnerships between CDM consultants and city governments, ICLEI CDM cell
Institutional	Length of project cycle	Incompability between nature of political process and project cycles	CDM EB to use part of its surplus to de-bottleneck the CDM process
Political/cultural	Lack of ownership	CDM seen as strange instrument parachuted from industrialized countries	Show in simple but drastic way how CDM can improve the daily life of citizens.

Table. 4 What hinders local governments in CDM?

Project Element	Conditions for Carbon Market Access & for Project Success
Project profitability and type/suitability	<ul style="list-style-type: none"> ✓ Suitable project types for city authorities ✓ Use of existing or simple methodologies/technologies ✓ Projected profitability
Co-benefits	<ul style="list-style-type: none"> ✓ Existence of high local co-benefits
Private sector engagement	<ul style="list-style-type: none"> ✓ Risk management through private sector engagement e.g. for technical expertise and financial risk management
Political will and strong multi-level governance	<ul style="list-style-type: none"> ✓ Local political support ✓ Alignment with national climate strategy ✓ Support from national or regional government for methodology and project development ✓ Engagement of international partners

Table. 5 Motivating factors⁴

⁴ OECD, 2010

IV. Related Progress in UNFCCC/KP negotiations

- a. **para 73.f in FCCC/AWGLCA/2009/INF.1:**
[Nationally Appropriate Mitigation Actions (NAMA)] actions may include but not limited actions at subnational and local level, in particular in cities and rural communities;
- b. **para 55.c of Dec2/CMP5 on Further Guidance to CDM**
Requests the secretariat to enhance its support to designated national authorities and the Designated National Authorities Forum by, inter alia: Developing and making publicly available studies on the potential of the clean development mechanism in the countries identified in paragraph 47 above, working in close cooperation with local authorities;
- c. **para. 7 of Dec1/COP16 as Cancun Outcomes**
Recognizes the need to engage a broad range of stakeholders at the global, regional, national and local levels, be they government, including subnational and local government, private business or civil society, including youth and persons with disability, and that gender equality and the effective participation of women and indigenous peoples are important for effective action on all aspects of climate change.
- d. **Para4b of Dec3/CMP6 on Further Guidance to CDM**
Also requests the Executive Board to reassess its existing regulations related to programmes of activities in order to Simplify the application of programmes of activities to activities applying multiple methods and technologies, including for possible city-wide programmes, while ensuring environmental integrity to the extent required by the Kyoto Protocol and decisions of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol;
- e. **Annex-4 of CDM EB Meeting at its 63rd meeting** “Standard for Application of Multiple CDM Methodologies for a Programme of Activities”
- f. **para. 46 (h) of Durban Outcomes (Report of AWGLCA)**
Invites developing country Parties to submit, as appropriate, to the secretariat information on **co-benefits for local sustainable development**, if information thereon exists; within individual nationally appropriate mitigation actions seeking international support

V. Proposals for Improvement

- a. Engagement of local and subnational as governmental stakeholders
 - i. Effective, direct and sustainable participation of LGMA constituency in CDM Executive Board and the DNA Forum meetings
 - ii. Establish efficient dialogues between local governments and DNAs
- b. Increased emphasis on “sustainable urban development benefits”, in the selection of CDM projects
- c. Extending provisions of Annex-4 of CDM-EB 63rd Meeting beyond PoA to large scale CDM projects, as appropriate, in order to ensure development of methodologies for Urban CDM Programmes
- d. Ensuring clarity and guidance for projects between CDM, NAMA portfolios and subnational/domestic emission trading mechanisms
- e. Creating an enabling framework for City-to-City Partnerships, including but not limited to innovative issues like:
 - i. City-to-City supports between North-South and South-South cities to project implementation
 - ii. Creation of local government emission units (LGEU) and its transfer between North-South and South-South cities
- f. Engaging local government led initiatives like carbon Cities Climate Registry and International Local Government GHG Emissions Analysis Protocol (IEAP), to processes and activities of CDM EB, DNA and DNA Forums, as appropriate, to support implementation of above proposals

VI. References

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Arikan Y., “2011 Annual Report of carbon Cities Climate Registry”, Bonn Center for Local Climate Action and Reporting, 2011.

VII. About ICLEI

ICLEI – Local Governments for Sustainability is an international association of more than 1200 local governments as well as national and regional local government organizations who have made a commitment to sustainable development. ICLEI has Special Consultative Status with the UN Economic and Social Council and coordinates local government representation in several UN processes related to Agenda 21, CSD and the Habitat Agenda. ICLEI is the only local government network with observer status at all three Rio Conventions (UNFCCC- climate change, UNCCD- desertification, UNCBD-biodiversity) as well as being an observer to the Intergovernmental Panel on Climate Change (IPCC), International Standardization Organization (ISO) Technical Committee on GHG and first local government network to partner with the Nairobi Work Programme of the UNFCCC on impacts, vulnerability and adaptation to climate change.

ICLEI was accredited at the UNFCCC Secretariat as an observer organization in 1995 and has been the focal point for Local Governments and Municipal Authorities Constituency (LGMA) ever since. In parallel to the conferences of the Parties, ICLEI hosted Municipal Leaders Summits on Climate Change in 1995, 1997 and 2005 and lead the Local Government Climate Roadmap since 2007, organized Local Government Climate Sessions in 2007 and 2008, Local Government Climate Lounge in 2009, supported World Mayors Summit on Climate in Mexico City in 2010 and organized Local Government Climate Forum in Durban in 2011 including Durban Local Government Convention.

Throughout these processes, ICLEI attracted thousands of local government delegations to the COP sessions, contributed to negotiations through submissions and interventions and facilitated effective involvement of the LGMA Constituency. The LGMA Constituency steadily increased to a membership of 14 active organizations as of 2010.

ICLEI pioneered Cities for Climate Protection Campaign as largest and longlasting global network of local climate action, developed dedicated softwares for accounting and reporting of local GHG emissions (i.e. Harmonized Emissions Analysis Tool – HEAT) and released International Local Government GHG Emissions Analysis Protocol (IEAP).

ICLEI convenes the Resilient Cities Congress as the World Forum on Cities and Adaptation and hosts the Secretariat of the World Mayors Council on Climate Change, as well as the Bonn Center for Local Climate Action and Reporting – carbonn.