



carbonn[®] Climate Registry 2015-2016 Digest

How Measurable, Reportable, Verifiable (MRV) Local Climate Action can raise the level of ambition in the Nationally Determined Contributions (NDCs).

Imprint

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The information contained in this publication is based on self-reported (mostly non-verified) data, as reported to the carbonn® Climate Registry (cCR), which has undergone a simple quality check by ICLEI by 21 October 2016. 15 Initiatives have contributed to the data collection process.

Profiles of the reporting jurisdictions are available at www.carbonn.org/data

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Ashok Sridharan
Lord Mayor of Bonn, Germany
and First Vice President of ICLEI

"The carbonn® Climate Registry has grown tremendously since its launch in 2010. With over 700 reporting jurisdictions representing 9% of the global population, the Registry sends a powerful signal that cities, towns and regions are rapidly advancing."

Executive summary and reporting highlights of 2015-2016

In this carbonⁿ® Climate Registry Digest of 2015-2016, we explore current reported trends on local and subnational climate action in a new global context. The Paris Agreement has entered into force and nations have submitted their Nationally Determined Contributions (NDCs), in the form of climate action plans that outline national strategies and goals. It is therefore timely to examine trends in local and subnational climate action and consider how public reporting can help connect local action to national climate action plans and collective global goals.

The carbonⁿ® Climate Registry (cCR) has been designed with this broader purpose in mind. Transparent and standardized reporting serves as an important advocacy tool when it comes to securing resources and establishing enabling frameworks for local and subnational climate action. It also provides direct value to local and subnational governments by offering with a clear framework for structuring their climate data, helping them to set strategic and data-driven climate targets and track their progress.

Each year, ICLEI takes stock of what local and subnational governments are doing to tackle climate change. This year, we look at not only reporting trends but also show the potential for local and subnational action to keep nations and the world on track towards national and global goals, if properly and formally supported and engaged as part of the Paris Agreement implementation process.

Key messages for 2016: Cities, towns, states and regions can help raise the level of ambition in combined global commitments.

The NDCs have created a new dimension in which subnational developments can flourish and accelerate, should supportive conditions be established. One of the major open questions is if and how city and regional level commitments, greenhouse gas (GHG) reduction developments (performance) and actions are as part of goal setting, progress tracking and implementation of the NDCs.

Local and subnational governments reporting to the cCR have committed to reducing their emissions by more than 1 gigaton of CO₂ equivalent (GtCO₂e) by 2020. This potential could make a significant difference when it comes to closing the gap between current national commitments, and the level of emissions reductions needed to keep the global temperature rise at or below two degrees Celsius, and trending towards 1.5 degrees as targeted in the Paris Agreement. We currently know, based on UNFCCC analyses, that in 2030, global emissions will be 22 GtCO₂e higher than the level needed to stay on track towards the 1.5-degree target and 15 GtCO₂e higher than the level needed for the 2-degree scenario.

Characteristics of reporting entities

The diversity of the types and sizes of local and subnational governments from the Global North and South, and the substance of action and reporting to the carbonn® Climate Registry, illustrate the potential for scaling up local climate action. These reporting entities include small communities such as Areatza, Spain, home to 1,227 inhabitants, megacities such as Jakarta, Indonesia, home to 9.6 million inhabitants and sub-national states such as the State of Minas Gerais, Brazil with a population of more than 20 million. This growing trend in reporting demonstrates the emerging interest among a diversity of local and subnational governments in voluntarily committing to tackle climate change and raise the level of ambition to address a global challenge.

We also showcase examples of leading governments of cities, towns, districts and regions – leaders in reporting, target-setting and action.

Focus on commitments and performance

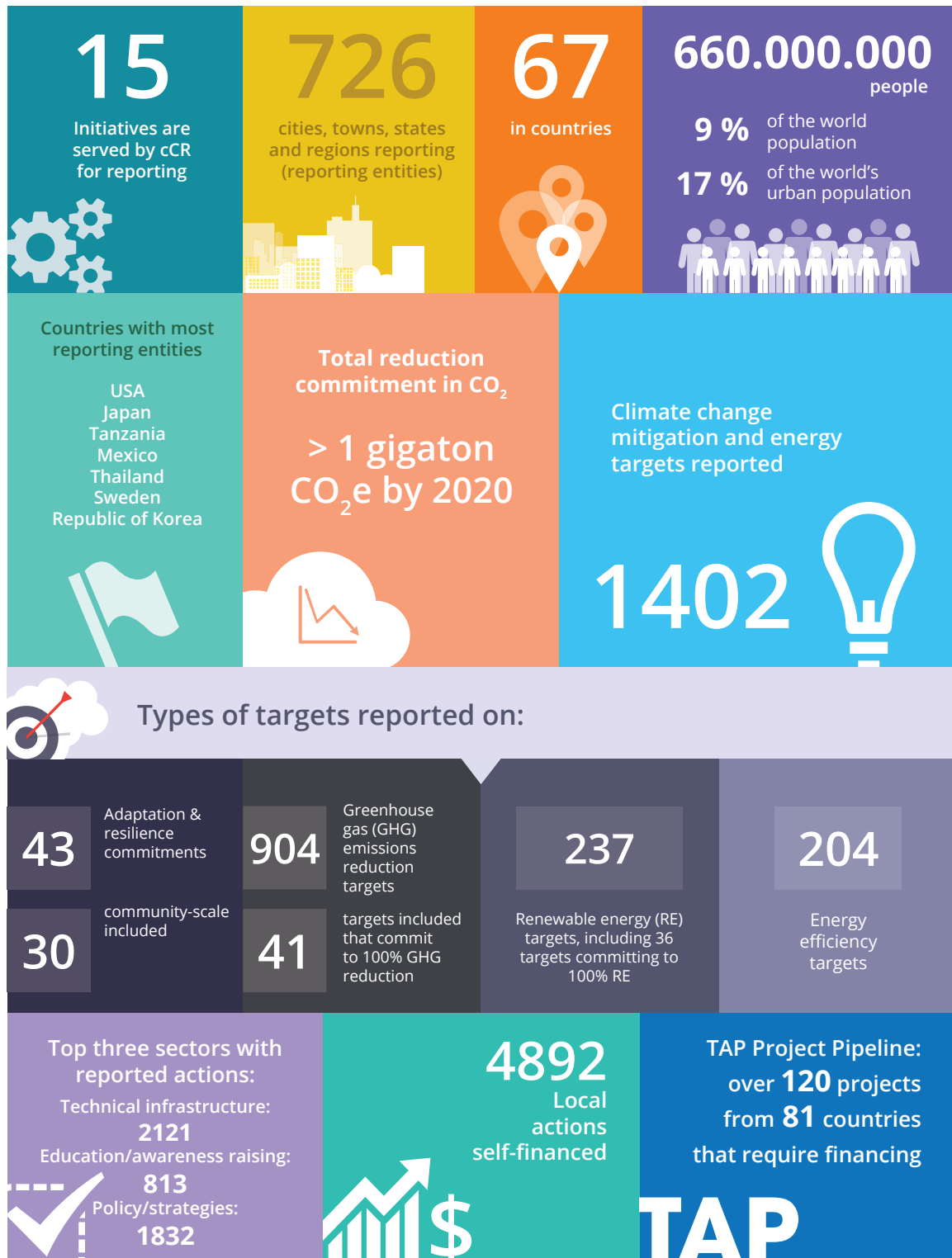
Local and subnational governments increasingly commit to tackling climate change and tracking progress, but is still mostly a voluntary activity. Different types of commitments and targets are reported, showing a diversity of approaches tailor-made to the local context. It is encouraged that targets are reported with a base year and a baseline against which progress can be measured, as well as a target year. Particular highlights include the combined GHG reduction commitments, the renewable energy (RE) targets, including targets committing to 100% RE as well as adaptation and resilience commitments, including community-scale, which is a new reporting area.

Tracking and understanding the impacts of local GHG emissions is critical. GHG emissions inventory results can be used for a variety of purposes. Specifically, this includes identifying problem areas, defining appropriate targets to reduce GHGs and tracking progress over time. The use of the Global Protocol for Community-scale GHG Emissions Inventories (GPC) is a newly reported trend, moving towards harmonized accounting and reporting of emissions.

View of Jakarta City, Indonesia



Aggregated data representing highlights reported through the carbonn® Climate Registry



Connecting local-national-global

Key message: Cities, towns, states and regions can help raise the level of combined global commitments. The lack of clarity on whether such local and sub-national commitments are part of the Nationally Determined Contributions (NDCs) needs to be addressed as a priority action area. This is necessary to determine if these could help offset any gaps created by the current level of commitment.

The Paris Agreement, agreed upon at the 2015 United Nations Climate Conference in Paris (COP21), entered into force on 4 November 2016, making it legally binding for nations. It lays a foundation for scaling up climate action, including mitigation, adaptation and resilience efforts. It also paves the way towards inclusive implementation, taking into account the importance of local and subnational governments in shaping and supporting progress towards its goals.

At the same time, there is a growing group of local and subnational governments around the globe committed to tackling climate change, and publicly reporting their commitments, performance and actions. It is now critical to understand how the trends they report connect and contribute to action at the national and international levels.

The cities, towns and regions reporting to the carbonn® Climate Registry (cCR) – 638 reporting entities from 67 countries – represent 660.000.000 citizens, roughly equivalent to the combined population of the United States of America, Indonesia and Thailand.

The combined GHG reduction commitments reported on the cCR – more than 1 gigaton of carbon dioxide equivalent (GtCO₂e) by 2020 can add substantially to the collective commitments in the national climate action plans, and the Nationally Determined Contributions (NDCs) submitted by national governments to the United Nations Framework Convention on Climate Change (UNFCCC) under the Paris Agreement. It is important to note as well that the scale of their contribution depends upon the extent to which individual NDCs already incorporate targets set by local and subnational governments.

In most cases, it is not clear whether the hereunder reported targets and achievements are already considered as part of the NDCs. Nevertheless, Parties to the UNFCCC were, and are, encouraged to include local and subnational governments in establishing and achieving NDCs, through an improved coordination and collaboration between all levels of government. This is referred to as “vertical integration”¹ and offers a wide range of elements to enhance cooperation and scaling climate action.

What we do know is that we need to see bolder and swifter action to keep the global temperature rise at or below 2 degrees Celsius, and trending towards 1.5 degrees, as targeted in the Paris Agreement. We are not yet on track toward either goal, and the contributions of local and subnational governments can indeed make a difference.

¹ “Vertical integration between different levels of government – from national to local – provides a platform for fruitful interaction, joint planning and coordination, all of which are essential to the mutual reinforcement of approaches for addressing climate change, sustainable energy planning, implementation and reporting..” - Refer to the ICLEI paper on vertical integration between levels of government to effectively address climate change - www.iclei.org/fileadmin/PUBLICATIONS/Briefing_Sheets/COP21/02_-_Briefing_Sheets_for_COP21_-_Vertical_Integration.pdf

In fact, recent analyses² by the UNFCCC show that current national commitments present this reality: in 2030, global emissions will be 22 GtCO₂e higher than the level needed to stay on track toward the 1.5-degree target and 15 GtCO₂e higher than the level needed for the 2-degree scenario.

Given this, the UNFCCC analysis also states that unless nations increase their ambitions before 2030, much greater emission reduction efforts than those established in national commitments are needed after 2025 and 2030 in order to hold the temperature rise to 2 degrees above pre-industrial levels.

This makes the case not only for greater national ambition, but also for the importance of both immediate local and subnational climate action, as well as longer term measures to help offset any gaps created by the current level of commitment.

The potential for expanding local and subnational climate action is vast. This will be explored and scaled up in a new initiative - the Global Covenant of Mayors for Climate & Energy. This is a newly merged initiative between the Compact of Mayors and the Covenant of Mayors, two of the world's primary city-led climate change and energy initiatives. It will be a new, first-of-its-kind global initiative of cities and local governments tackling climate change, creating the largest global coalition of cities and towns committed to climate leadership, building on the commitments of more than 7,100 cities from 119 countries and six continents, representing more than 600 million inhabitants, over 8% of the world's population.

Here the motivation to act is key, unfolding the multiple benefits of local climate action such as air quality improvement, job creation, etc. These are also captured in the cCR and can help shape arguments to convince others to engage.

Furthermore, where supported by strong national regulatory frameworks and financing mechanisms, local and subnational governments can achieve and even speed up mitigation and adaptation action.

2 <http://unfccc.int/resource/docs/2016/cop22/eng/02.pdf>

ICLEI as an advocacy and support agency

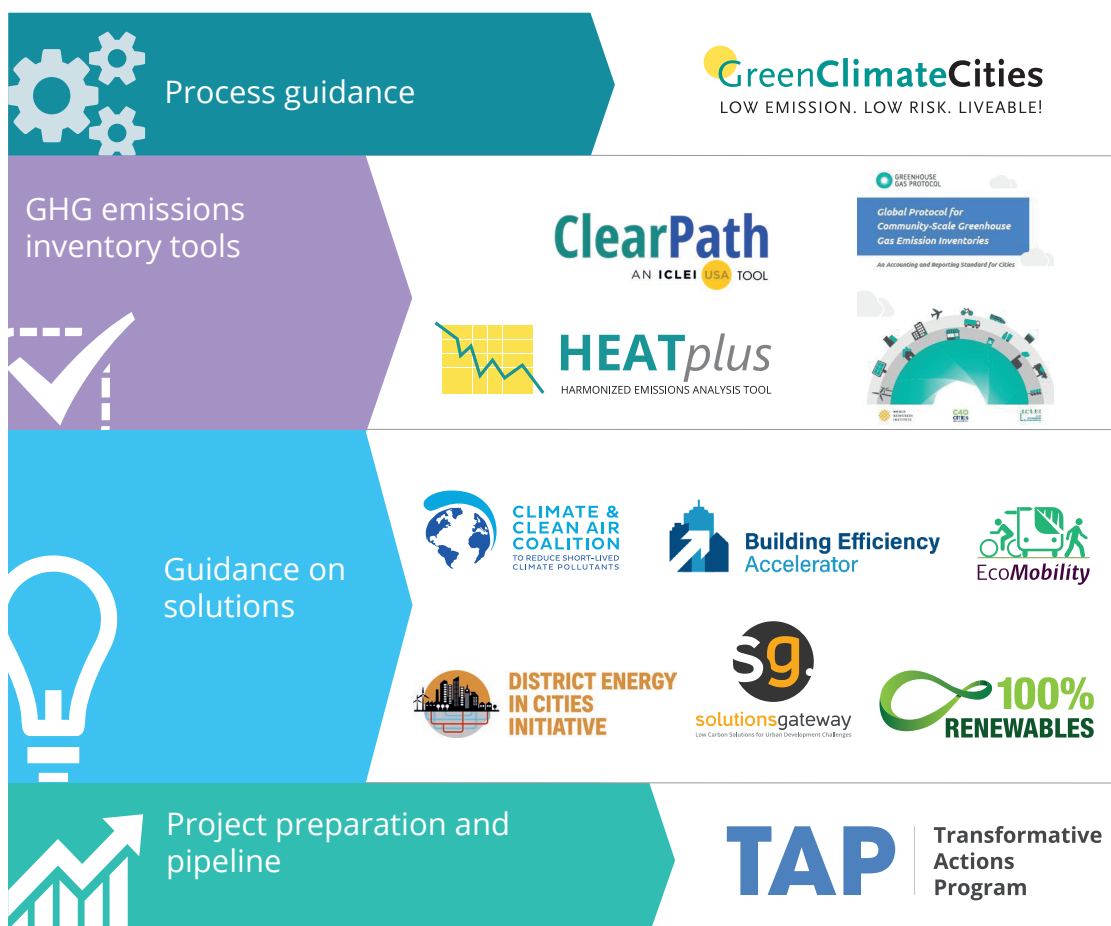
ICLEI, as Constituency focal point for the Local Governments and Municipal Authorities (LGMA) and as an LGMA member representing its network of local and subnational governments in the UNFCCC process, is advocating for enabling framework conditions for subnational jurisdictions and effective vertical integration that can help scale up climate action.

With the successful conclusion of the Local Government Climate Roadmap at COP21 and the recognition of local and subnational governments through the Paris Agreement – the next phase of ICLEI's climate activities focuses on:

- » Guidance and solutions for climate change adaptation, resilience and low emission development
- » Access to finance
- » Connecting climate goals with the Sustainable Development Goals (SDGs) and other global sustainability frameworks

More on www.iclei.org

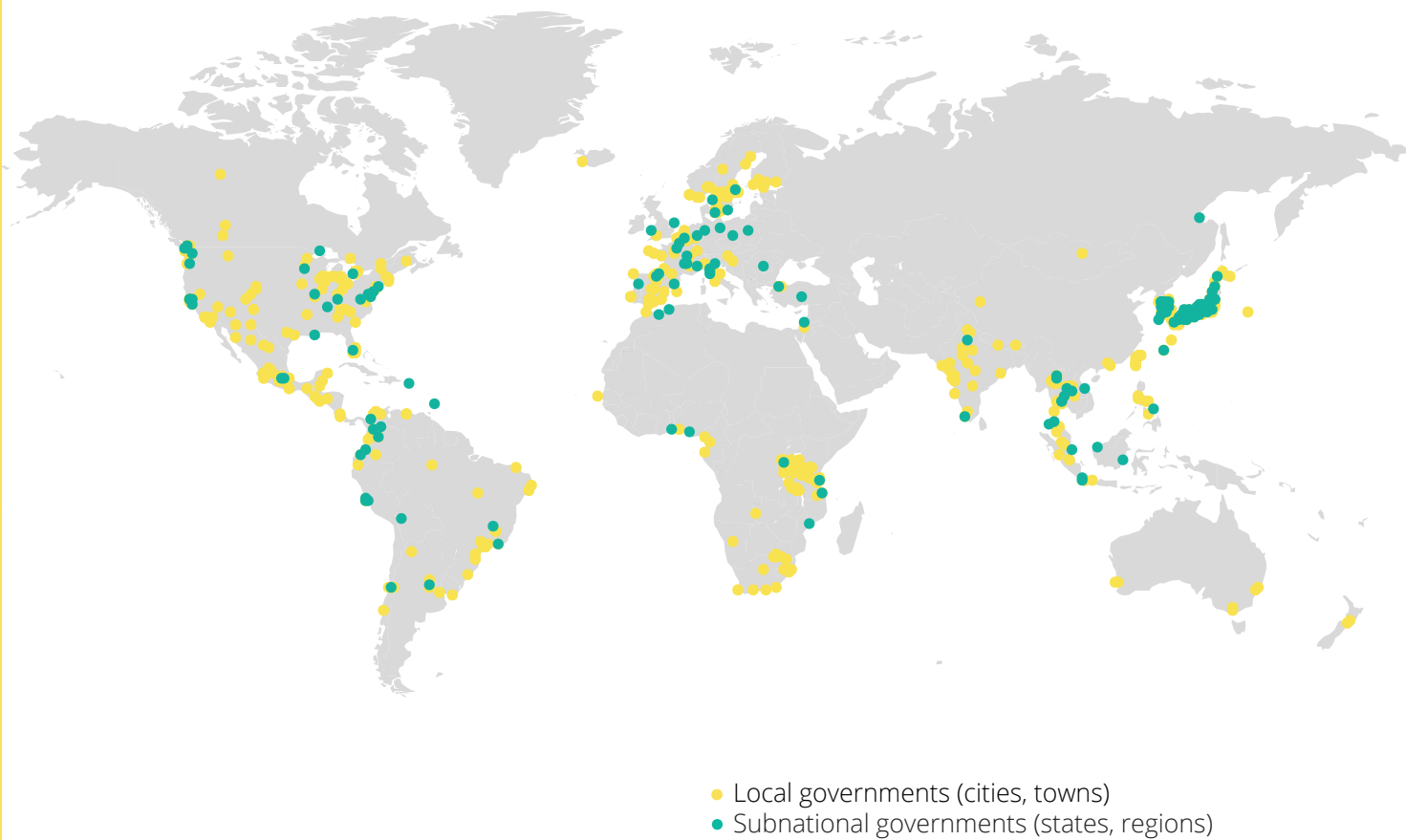
ICLEI's support package for local and subnational governments:



03

Map of local and subnational governments reporting

Map 1: Number of local and subnational governments per region reporting to the carbonn® Climate Registry.

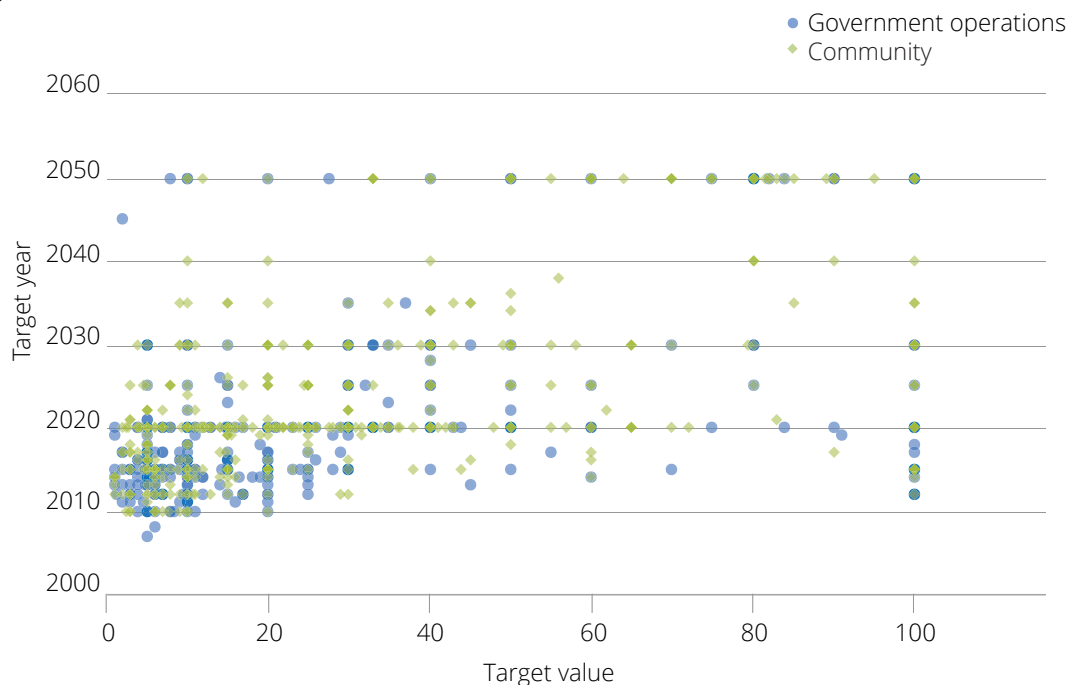


04

Commitments, performance and actions

Key message: A steadily increasing number of local and subnational governments is committed to tackling climate change through adaptation and mitigation, addressing both governmental operations as well as the community. We find that more ambitious mitigation targets are reported, including 100% targets, with new reporting on adaptation and resilience. Enabling national framework conditions will directly support scaling up local climate action.

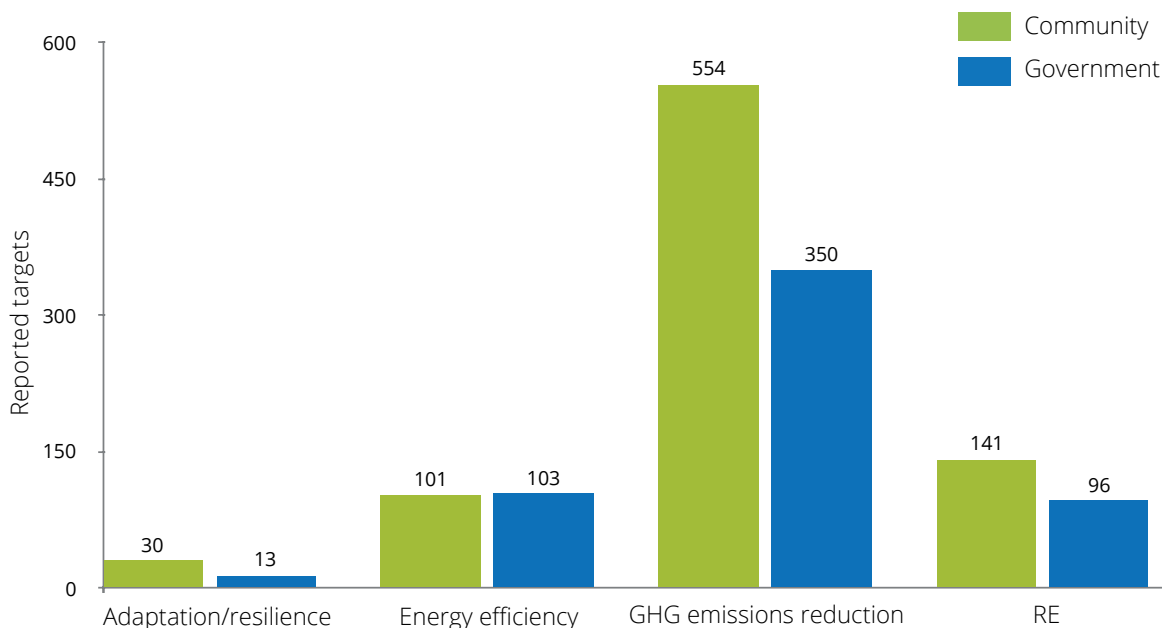
Graph 1: Reported commitments by target year and base year, a combination of adaptation and mitigation



The value of the commitments in the scatterplot above provides a good view of relative distribution of the ambition level of mitigation targets. It shows that the lower left (low targets, low target years) is still the predominant trend for targets, however, the empty spaces to the right and top of the graph are filling up as more ambitious (and necessary) targets surface. The 2050 and 100% borders (i.e. target value borders) are increasingly being claimed by the more visionary local and subnational governments, understanding that these targets are also necessary. It also shows that while community targets tend to adhere to the 2020 or 2050 pattern due to the political nature of those targets, local and subnational governments are more likely to set realistic, short to medium term government operations targets that follow their operational planning horizons.

By 2016, 1400 climate change commitments and targets were reported in the carbonn® Climate Registry (cCR). These include adaption and resilience commitments, targets addressing GHG reductions, energy efficiency (EE), the use of renewable energy (RE) as well as more specific sectoral targets (e.g. RE or EE in the built environment [buildings, districts], eco-mobility, improving biodiversity, green public procurement, etc.). These targets address either government operations, as an area of direct influence of the respective government (with implied easier and faster action options) or community-scale which is an inherently more complex activity area.

Graph 2: Variety and number of commitments and targets reported under the different scopes of action type captured in the carbonn® Climate Registry This graph shows the top three types of targets set are for government operations GHG reduction, community emissions reduction along with increase of renewable energy share.



Reporting on climate change adaptation and resilience is starting

Thirty (30) local governments have reported climate change adaptation and resilience commitments. This is a new feature added to the cCR to serve reporting requirements of the Compact of Mayors, Compact of States and Regions, Durban Adaptation Charter (DAC) and Resilient Communities for America (RC4A). These initiatives focus on adaptation and resilience as critical components of climate change, equal in importance to mitigation. They require local and subnational governments to state and track their commitments.

The reported data suggests that more attention should be paid to setting and reporting adaptation and resilience commitments.

List 1: First cities and towns reporting their climate change adaptation commitments

Name	Country	Name	Country
eThekweni Metropolitan Municipality	South Africa	Municipality of Bilbao	Spain
Cape Town Metropolitan Municipality	South Africa	Municipality of Bogotá	Colombia
City of Austin	United States	Municipality of Durango	Spain
City of Edmonton	Canada	Municipality of Granada	Spain
City of Helsinki	Finland	Municipality of Madrid	Spain
City of Parañaque	Philippines	Municipality of Palma	Spain
City of Paris	France	Municipality of Tolosa	Spain
Helsingborg Municipality	Sweden	Municipality of Vitoria-Gasteiz	Spain
Kaohsiung City Government	Chinese Taipei	Municipality of the Metropolitan District of Quito	Ecuador
Kuching North City Hall	Malaysia	New Taipei City Government	Chinese Taipei
Melaka Historic City Council	Malaysia	Penang Island City Council	Malaysia
Municipality of Amurrio	Spain	Petaling Jaya City Council	Malaysia
Municipality of Areatza	Spain	San Isidro Local Government	Peru
Municipality of Balmaseda	Spain	Shenzhen Municipal People's Government	China
Municipality of Belo Horizonte	Brazil	Toulouse Métropole	France

List 2: 100% renewable energy commitments

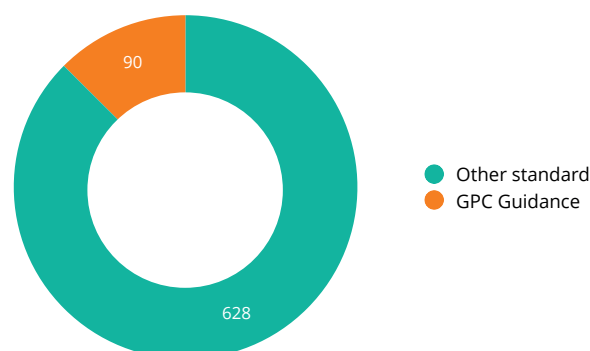
Champion cities		
City	Country	Renewable Energy target
Aspen	USA	100% RE electricity by 2015; achieved
Australian Capital Territory	Australia	100% RE electricity by 2020 (legislated)
Byron Shire	Australia	100% RE at community-scale by 2025
Inje County	South Korea	100% RE electricity by 2045
Jeju Province	South Korea	100% RE electricity and transport by 2030
Malmö	Sweden	100% RE at community-scale by 2030, including electricity, heating and transport
Vancouver	Canada	100% RE at community-scale by 2050, covering all sectors
Växjö	Sweden	100% RE at community-scale by 2030
Learning cities		
City	Country	Renewable Energy target
Pingtung County	Chinese Taipei	Learning city (8% RE by 2025)
Saanich, District of	Canada	Learning city (exploring 100%RE in Municipal Buildings by 2025)
Tshwane Metropolitan Municipality	South Africa	Learning city (50%RE at community-scale by 2030)

Moving towards standardized accounting and reporting

The Global Protocol for Community-scale GHG Emissions Inventories (GPC)³ was developed to harmonize GHG emissions accounting and reporting, specifically addressing the local level. Released at COP20 in Lima in December 2014, several leading local governments have started using the GPC and guidance provided.

Use of this protocol facilitates aggregation of the collective mitigation commitments of local and subnational governments in total and by sector. This better enables peer-to-peer comparisons as well as calculations that can feed into progress tracking for national and even global climate goals. It is being used by cities and towns of all sizes, with 90 inventories using the GPC reported on the cCR⁴, and 628 other inventories using a diversity of methodologies and standards.

Graph 3: Number of community inventories reported, including those following GPC guidance and other standards or methodologies.



³ <http://www.iclei.org/activities/agendas/low-carbon-city/gpc.html>

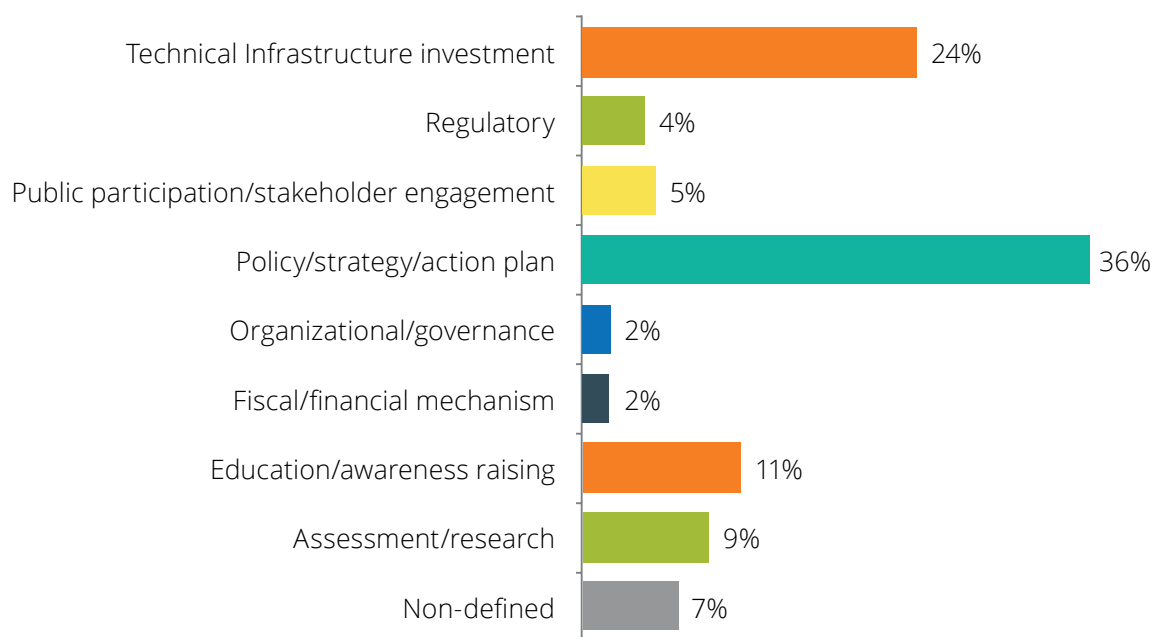
⁴ The Compact of Mayors uses the GPC as part of its robust reporting framework. The Compact of Mayors has released the 2016 report with aggregated data projections "CLIMATE LEADERSHIP AT THE LOCAL LEVEL: Global Impact of the Compact of Mayors".

Taking action

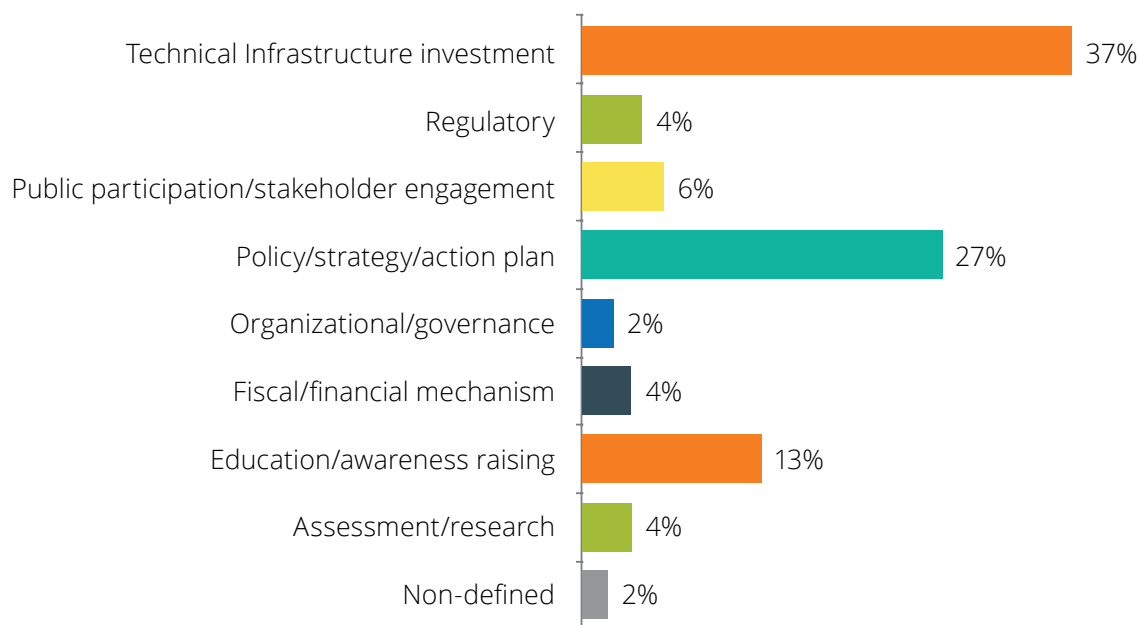
6287 actions were reported to the cCR with a wide range of co-benefits also identified.

Graph 4: Share of reported adaptation and mitigation actions in percentage

Adaptation



Mitigation



The graph shows the share of the total of actions taken in specific areas expressed in percentage. The actual value representing mitigation is much higher than adaptation, and using percentage provides a more balanced overview.

100% RE is a growing reality for cities and regions

By burning and depleting the world's natural resources, the conventional energy system using fossil fuels and nuclear power has led to multiple convergent existential crises, including climate change, air and water pollution, destruction of the oceans, the threat of mass extinction, water and food shortages, poverty, nuclear radiation problems, nuclear weapons proliferation, fuel decline, and geopolitical tension. However, the world's current climate and energy security issues are not caused by energy use in of itself, but rather by the fuels we are using. The accelerated transition to renewable energy sources, mostly abundant and free, also far less water-intensive than non-renewable energy, is a new trend also in reporting. Cities, towns and regions are increasingly exploring the transition to a renewable energy, making commitments, taking actions, allocating budget and monitoring their performance^{5,6}.

285 cities have reported 1154 renewable energy-related actions in the cCR. These cumulatively amount to at least 3,919 GigaWatt hour per year (GWh p/a) of estimated renewable energy generation (using data provided for 46 measures) and 1,880,204 GWh p/a of renewable energy consumption (total of 146 measures for which data is available). These RE actions correspond to 73.28 million tons of carbon dioxide equivalent (MtCO₂e) emission savings and could in theory amount to 83.09 MtCO₂e per year.

Scaling up - TAP the potential

As we have seen from the commitments of 638 local and subnational governments alone, the contributions that they can make in achieving national and global goals are substantial. This is also just represents a fraction of what may be possible if local and subnational governments receive proper support, enabling them to expand their commitments horizons, raise their ambitions and even begin committing to any target for the first time.

At this juncture, finance is an urgent and important issue that must be addressed if local and subnational climate action is to accelerate and be scaled up worldwide. At the present moment, climate finance is often inaccessible at the local and subnational levels or, where it is available, it is quite complex. Additionally, expertise and capacity development is necessary to build a strong pipeline of finance-ready climate projects.

Part of ICLEI's contribution to the Cities Climate Finance Leadership Alliance (CCFLA)⁷, the Transformative Actions Program (TAP)⁸ was launched in April 2015 to catalyze and improve capital flows to cities, towns and regions to accelerate low-carbon and resilient development. The TAP Project Pipeline and Platform support the development and implementation of climate projects to raise ambition at all levels and contribute to international climate goals. This is done in partnership with other organizations committed to easing access to finance to accelerate climate action, with a call on CCFLA members who are collaborating to mobilize investment in low-emission, climate-resilient urban infrastructure to engage with the TAP.

Eighty-seven (87) local and subnational governments from 41 countries submitted more than 120 TAP projects as proposed transformative actions that require financing. Of these 120 submissions, 81 came from developing countries (68%), 7 from least developed countries (LDCs) or small island states and the rest from the Global North. The total budget of these submitted TAP actions amounts to close to 884 million USD.

5 Global 100% RE Campaign website: <http://www.go100re.net/the-campaign/>

6 Without underestimating the importance of energy conservation and energy efficiency for the achievement of a 100% renewable energy future, this section focuses on the data that cities reported on renewable energy (RE).

7 <http://www.citiesclimatefinance.org/>

8 <http://www.tap-potential.org>

05

List of reporting cities, towns, states and regions

● Dots associated with each reporting city, town, state and region indicate initiatives in which they are engaged.

No	Name	Urban LEDs	Compact of Mayors	EHCC	100% RE	No	Name	Urban LEDs	Compact of Mayors	EHCC	100% RE
1	ACT Government		●		●	39	Bukombe District Council				
2	Adachi City					40	Byron Shire Council		●		●
3	Agglomeration Community of Plaine Commune					41	Cape Town Metropolitan Municipality		●	●	
4	Ahmedabad Municipal Corporation			●		42	Chacao Municipality				
5	Aichi Prefectural Government					43	Changwon City		●		
6	Akashi City					44	Chiang Mai City Municipality			●	
7	Akita City					45	Chiang Rai City Municipality			●	
8	Akita Prefectural Government					46	Chiangrai Municipality		●	●	
9	Amami City					47	Chiayi City Government				
10	Amuwo-Odofin Local Government Area					48	Chiba Prefectural Government				
11	Ansan		●			49	Chigasaki City				
12	Anyang City					50	Chiyoda City				
13	Aomori City					51	Chungcheongnam Provincial Government				
14	Aomori Prefectural Government					52	Chuo City				
15	Arendal Municipality		●	●		53	City & County of San Francisco		●		
16	Arusha City Council			●		54	City Council of Alfandega da Fé				
17	Asahikawa City					55	City Government of Calbayog		●		
18	Asan City					56	City Government of Pasig		●		
19	Atsugi City					57	City of Albany		●		
20	Autonomous City of Buenos Aires		●			58	City of Alton, ILL		●		
21	Autonomous Municipality of La Paz		●			59	City of Ann Arbor		●	●	
22	Bagamoyo District Council					60	City of Antioch			●	
23	Balikpapan City Government	●	●	●		61	City of Antwerp			●	
24	Bangkok Metropolitan Administration					62	City of Asheville			●	
25	Barbados Government Ministry of Education					63	City of Aspen		●		●
26	Basque Government					64	City of Atlanta		●	●	
27	Bhopal Municipal Corporation			●		65	City of Austin		●		
28	Bhubaneswar Municipal Corporation			●		66	City of Baltimore		●	●	
29	Bogor City Governemnt	●	●	●		67	City of Bandung		●	●	
30	Bologna	●	●			68	City of Barcelona		●		
31	Bordeaux Métropole			●		69	City of Beaverton		●	●	
32	Brest Métropole					70	City of Belmopan				
33	Bristol City Council					71	City of Benicia		●	●	
34	Broward County			●		72	City of Berkeley		●	●	
35	Brussels Capital Region		●	●		73	City of Berlin		●		
36	Buffalo City Metropolitan Municipality			●		74	City of Besançon			●	
37	Buhigwe District Council					75	City of Boston		●		
38	Bukoba District Council					76	City of Boulder		●	●	
						77	City of Burlington		●	●	
						78	City of Burnsville				
						79	City of Cagayan de Oro		●	●	
						80	City of Calgary		●	●	
						81	City of Catbalogan City		●		

No	Name	Urban LEDs	Compact of Mayors	EHCC	100% RE
82	City of Charleston			●	
83	City of Charlottesville			●	
84	City of Chefchaouen				
85	City of Chicago	●		●	
86	City of Chula Vista	●		●	
87	City of Cimahi			●	
88	City of Cincinnati			●	
89	City of Cleveland	●		●	
90	City of Coconut Creek			●	
91	City of Columbus	●		●	
92	City of Colwood			●	
93	City of Copenhagen	●	●	●	
94	City of Cupertino		●		
95	City of Dakar		●		
96	City of Des Moines		●		
97	City of Duluth		●	●	
98	City of Easton		●		
99	City of Edmonton		●	●	
100	City of El Cerrito			●	
101	City of Emeryville		●		
102	City of Espoo		●	●	
103	City of Evanston		●	●	
104	City of Flagstaff			●	
105	City of Flint			●	
106	City of Forlì			●	
107	City of Fort Collins				
108	City of Foster City			●	
109	City of Fredericton			●	
110	City of Freiburg im Breisgau				
111	City of Fremont		●	●	
112	City of Ghent			●	
113	City of Göteborg		●	●	
114	City of Grand Rapids		●	●	
115	City of Grande-Synthe		●		
116	City of Graz				
117	City of Greater Sudbury			●	
118	City of Grenoble			●	
119	City of Hawthorne			●	
120	City of Hayward			●	
121	City of Helsinki	●	●		
122	City of Hillsboro			●	
123	City of Houston		●	●	
124	City of Jambi		●		
125	City of Janesville			●	
126	City of Johannesburg Metropolitan Municipality		●	●	
127	City of Joondalup		●		
128	City of Keene			●	
129	City of Kenosha			●	
130	City of Knoxville		●	●	
131	City of Koprivnica				

No	Name	Urban LEDs	Compact of Mayors	EHCC	100% RE
132	City of Lahti			●	
133	City of Lake Macquarie Council				
134	City of Lappeenranta			●	
135	City of Las Cruces			●	
136	City of Las Vegas		●	●	
137	City of Libreville		●		
138	City of Ligao				
139	City of Long Beach		●		
140	City of Los Altos			●	
141	City of Los Angeles		●		
142	City of Makati		●	●	
143	City of Malmö		●	●	●
144	City of Mandurah		●		
145	City of Manhattan Beach		●	●	
146	City of Maple Ridge				
147	City of Martinez			●	
148	City of Mechelen			●	
149	City of Miami			●	
150	City of Miami Beach		●		
151	City of Milwaukee		●		
152	City of Minneapolis		●	●	
153	City of Montréal		●	●	
154	City of Mouscron			●	
155	City of Naga		●	●	
156	City of Namur			●	
157	City of New Orleans		●		
158	City of New York		●		
159	City of North Little Rock				
160	City of North Vancouver		●	●	
161	City of Oakland		●	●	
162	City of Olympia		●		
163	City of Orléans				
164	City of Palm Springs		●	●	
165	City of Parañaque		●	●	
166	City of Paris		●	●	
167	City of Philadelphia		●	●	
168	City of Phuket		●	●	
169	City of Pittsburg		●		
170	City of Portland		●		
171	City of Providence		●	●	
172	City of Puerto Leguizamo			●	
173	City of Quezon City		●	●	
174	City of Reykjavík		●		
175	City of Richmond		●	●	
176	City of Rock Hill			●	
177	City of Rome		●	●	
178	City of San Rafael		●	●	
179	City of Santa Cruz		●		
180	City of Santa Fe		●	●	
181	City of Santa Monica		●	●	
182	City of Santa Rosa		●	●	

No	Name	Urban LEDs	Compact of Mayors	EHCC	100% RE	No	Name	Urban LEDs	Compact of Mayors	EHCC	100% RE
183	City of Seattle		•	•		229	eThekweni Metropolitan Municipality		•	•	
184	City of Semarang			•		230	European Metropolis of Lille			•	
185	City of Southfield			•		231	Federal City of Bonn				
186	City of Stockholm	•		•		232	Federal District of Mexico		•		
187	City of Subiaco					233	Fuji City				
188	City of Sunnyvale			•		234	Fujinomiya City				
189	City of Surrey	•		•		235	Fujisawa City				
190	City of Sydney	•				236	Fukui Prefectural Government				
191	City of Tacoma	•		•		237	Fukuoka City				
192	City of Tampere			•		238	Fukushima Prefectural Government				
193	City of the Hague	•				239	Funabashi City				
194	City of Thimphu	•				240	Gairo District Council				
195	City of Tsevie					241	Gandhinagar Municipal Corporation			•	
196	City of Tshwane Metropolitan Municipality	•		•		242	Gangdong District				
197	City of Tucson			•		243	Gangneung City			•	
198	City of Turku	•				244	Gangwon Provincial Government				
199	City of University City	•		•		245	Gävle Municipality			•	
200	City of Urbana	•				246	General Council of Seine-Saint-Denis				
201	City of Vancouver	•		•	•	247	George Municipality			•	
202	City of Victoria	•				248	Gifu Prefectural Government				
203	City of Waukesha			•		249	Government of Khabarovsk krai				
204	City of West Palm Beach	•		•		250	Greater Hyderabad Municipal Corporation			•	
205	City of Windhoek	•				251	Greater Manchester Combined Authority				
206	City of Yellowknife			•		252	Guangzhou Municipal People's Government				
207	Cochin Municipal Corporation			•		253	Gunma Prefectural Government				
208	Coimbatore City Municipal Corporation	•		•		254	Gwalior Municipal Corporation	•	•	•	
209	Consolidated Municipality of Carson City			•		255	Gwangju Metropolitan City				
210	Corporation of Delta			•		256	Gyeonggi Province				
211	Corporation of the City of Panaji	•	•	•		257	Gyeongsangbuk Provincial Government				
212	Daegu Metropolitan City		•			258	Gyeongsangnam Provincial Government				
213	Dar es Salaam Local Government Authorities					259	Hakodate City				
214	Deerfield Beach	•				260	Hamamatsu City				
215	Dehradun Municipal Corporation			•		261	Haninge Municipality			•	
216	Delta State Government					262	Hanover	•			
217	District Municipality of Chancay					263	Hat Yai City Municipality			•	
218	District Municipality of Miraflores			•		264	Helsingborg Municipality			•	
219	District of North Cowichan					265	Hetauda Sub Metropolitan City				
220	District of Saanich			•		266	Himeji City				
221	District of West Vancouver					267	Hirakata City				
222	Dobong District					268	Hiroshima City		•		
223	Douala Urban Community	•				269	Hiroshima Prefectural Government				
224	Ebolowa Urban Community					270	Høje-Taastrup Municipality		•		
225	Edogawa City										
226	Ehime Prefectural Government										
227	Ekurhuleni Metropolitan Municipality			•							
228	Eskilstuna Municipality	•		•							

No	Name	Urban LEDs	Compact of Mayors	EHCC	100% RE
271	Hokkaido Prefectural Government				
272	Hokuto City				
273	Huay Kao Kum Municipality			●	
274	Huddinge Municipality			●	
275	Huế City People's Committee			●	
276	Hyogo Prefectural Government				
277	Iida City				
278	Ikungi District Council				
279	Ileje District Council				
280	Incheon	●			
281	Iramba District Council				
282	Ishikawa Prefectural Government				
283	Istanbul Metropolitan Municipality	●			
284	Itabashi City				
285	Iwaki City				
286	Jaipur Municipal Corporation			●	
287	Jeju Special Self-Governing Provincial Government				●
288	Jeollanam Province				
289	Jerusalem Municipality				
290	Kagawa Prefectural Government				
291	Kakogawa City				
292	Kanagawa Prefectural Government				
293	Kaohsiung City Government	●			
294	Karlstad Municipality			●	
295	Kasumigaura City				
296	Kawagoe City				
297	Kawaguchi City				
298	Kawasaki City				
299	Khon Kaen Municipality	●		●	
300	Khun Han Municipality			●	
301	King County	●		●	
302	Kinondoni Municipal Council				
303	Kisarawe District Council				
304	Kita City				
305	Kitakyushu City	●			
306	Kitamoto City				
307	Kiteto District Council				
308	Klaeng Town Municipality			●	
309	Kobe City				
310	Kochi Municipal Corporation				
311	Kochi Prefectural Government				
312	Kochi-konan City				
313	Kofu City				
314	Kokkruat Municipality	●		●	
315	Komoro City				
316	Kongwa District Council				
317	Koriyama City				
318	Kota Municipal Corporation			●	

No	Name	Urban LEDs	Compact of Mayors	EHCC	100% RE
319	Koto City				
320	Kristianstad Municipality			●	
321	Kuching North City Hall			●	
322	Kumamoto City				
323	Kurashiki City				
324	Kurume City				
325	Kushiro City				
326	KwaDukuza Local Municipality	●	●	●	
327	Kyela District Council				
328	Kyoto City				
329	Kyoto Prefectural Government				
330	Lampang City Municipality			●	●
331	Lexington-Fayette Urban County Government				●
332	Lindi Municipal Council				
333	Linköping Municipality			●	
334	Lørenskog Municipality				●
335	Lund Municipality			●	●
336	Ma'alot-Tarshiha Municipality				
337	Ma'alot-Tarshiha Municipality				
338	Mae Raeng Municipality				●
339	Maebashi City				
340	Magu District Council				
341	Manyoni District Council				
342	Map Ammarit Municipality				●
343	Masasi Town Council				
344	Maswa District Council				
345	Matsuyama City				
346	Mbeya District Council				
347	Mbombela Local Municipality				
348	Mbozi District Council				
349	Meguro City				
350	Melaka Historic City Council				●
351	Melbourne City Council			●	
352	Metro Vancouver			●	
353	Metropolis of Lyon				
354	Metropolitan Area of Valle de Aburrá				
355	Metropolitan City of Florence			●	
356	Metropolitan City of Venice				●
357	Metropolitan District of Caracas			●	
358	Metropolitan Government of Nashville and Davidson County				●
359	Metropolitan Municipality of Lima			●	
360	Mie Prefectural Government				
361	Minato City				
362	Mito City				
363	Miyagi Prefectural Government				
364	Miyazaki City				
365	Miyoshi City				
366	Mkalama District Council				

No	Name	Urban LEDs	Compact of Mayors	EHCC	100% RE
367	Mkuranga District Council				
368	Mogale City Local Municipality	●			
369	Monduli District Council				
370	Mongu Municipal Council				
371	Mornington Peninsula Shire Council		●		
372	Morogoro Municipal Council				
373	Moshi Municipal Council			●	
374	Mpwapwa District Council				
375	Msunduzi Local Municipality			●	
376	Mtwara Urban District Council				
377	Municipal Council of the City of Quelimane		●		
378	Municipality of A Coruña			●	
379	Municipality of Aguascalientes			●	
380	Municipality of Almada	●	●		
381	Municipality of Amacuzac				
382	Municipality of Amurrio		●	●	
383	Municipality of Ancona			●	
384	Municipality of Areatza		●	●	
385	Municipality of Arias		●		
386	Municipality of Armenia			●	
387	Municipality of Armstrong		●		
388	Municipality of Atlatláhuca				
389	Municipality of Atotonilco de Tula				
390	Municipality of Axochiapan				
391	Municipality of Bacalar			●	
392	Municipality of Balmaseda		●	●	
393	Municipality of Bariloche		●		
394	Municipality of Barranquilla			●	
395	Municipality of Belo Horizonte	●	●	●	
396	Municipality of Betim	●	●	●	
397	Municipality of Bilbao		●		
398	Municipality of Bogotá		●	●	
399	Municipality of Bucaramanga				
400	Municipality of Camilo Aldao		●		
401	Municipality of Campinas			●	
402	Municipality of Carcarañá		●		
403	Municipality of Carlos Tejedor		●		
404	Municipality of Cartagena de Indias			●	
405	Municipality of Caseros		●		
406	Municipality of Chacabuco		●		
407	Municipality of Chaclacayo				
408	Municipality of Chañar Ladeado		●		
409	Municipality of Chihuahua		●		
410	Municipality of Contagem				
411	Municipality of Córdoba		●	●	
412	Municipality of Correa		●		
413	Municipality of Cosquín		●		
414	Municipality of Cozumel				

No	Name	Urban LEDs	Compact of Mayors	EHCC	100% RE
415	Municipality of Crespo		●		
416	Municipality of Cuatro Ciénagas de Carranza				
417	Municipality of Cuautla				
418	Municipality of Cuenca				
419	Municipality of Cuernavaca		●		
420	Municipality of Curitiba	●	●		
421	Municipality of Daireaux		●		
422	Municipality of Diadema		●		
423	Municipality of Donostia / San Sebastián		●	●	
424	Municipality of Durango		●	●	
425	Municipality of Emilia		●		
426	Municipality of Erretera		●	●	
427	Municipality of Fortaleza	●	●	●	
428	Municipality of Funes		●		
429	Municipality of General Alvear		●		
430	Municipality of Gitega				
431	Municipality of Godoy Cruz		●		
432	Municipality of Granada			●	
433	Municipality of Guadalajara			●	
434	Municipality of Guaminí		●		
435	Municipality of Guarulhos		●		
436	Municipality of Guatemala		●		
437	Municipality of Hermosillo			●	
438	Municipality of Herrera		●		
439	Municipality of Jaén			●	
440	Municipality of Joinville		●		
441	Municipality of Jojutla				
442	Municipality of Jonacatepec				
443	Municipality of Juana Koslay		●		
444	Municipality of Kadıköy				
445	Municipality of La Rioja		●		
446	Municipality of Las Flores		●		
447	Municipality of Lautaro				
448	Municipality of Legazpi		●	●	
449	Municipality of León de los Aldama		●	●	
450	Municipality of Libertador San Martín		●		
451	Municipality of Lisbon		●		
452	Municipality of Llambi Campbell		●		
453	Municipality of Londrina		●		
454	Municipality of Los Molinos		●		
455	Municipality of Los Molles		●		
456	Municipality of Los Sargentos		●		
457	Municipality of Maceió			●	
458	Municipality of Madrid		●	●	
459	Municipality of Malabrigo		●		
460	Municipality of Málaga				
461	Municipality of Manaus			●	
462	Municipality of Mar Chiquita		●		

No	Name	Urban LEDs	Compact of Mayors	EHCC	100% RE
463	Municipality of Maringá		•		
464	Municipality of Mazatepec				
465	Municipality of Medellín		•	•	
466	Municipality of Mellac				
467	Municipality of Mendiolaza		•		
468	Municipality of Monte Vera		•		
469	Municipality of Murcia			•	
470	Municipality of Naucalpan de Juárez				
471	Municipality of Nevşehir				
472	Municipality of Nogoyá		•		
473	Municipality of Oaxaca de Juárez			•	
474	Municipality of Oeiras				
475	Municipality of Palma			•	
476	Municipality of Palmas		•	•	
477	Municipality of Porto Alegre	•	•	•	
478	Municipality of Puebla		•		
479	Municipality of Quilpue				
480	Municipality of Rafaela		•		
481	Municipality of Recife	•	•	•	
482	Municipality of Recoleta		•		
483	Municipality of Rio de Janeiro	•	•	•	
484	Municipality of Rio Primero		•		
485	Municipality of Rivadavia		•		
486	Municipality of Rosario		•		
487	Municipality of Rosario del Tala		•		
488	Municipality of Salamanca			•	
489	Municipality of Salliqueló		•		
490	Municipality of Salta		•		
491	Municipality of San Carlos		•	•	
492	Municipality of San Carlos Sud		•		
493	Municipality of San Cristóbal de las Casas				
494	Municipality of San Jerónimo de Montería			•	
495	Municipality of San Jorge		•		
496	Municipality of San José		•		
497	Municipality of San Juan de Pasto			•	
498	Municipality of San Miguel		•		
499	Municipality of San Pedro Tlaquepaque				
500	Municipality of San Rafael de Heredia		•		
501	Municipality of Santa Fe de la Vera Cruz				
502	Municipality of Santiago		•		
503	Municipality of Santiago de Cali		•	•	
504	Municipality of São Carlos				
505	Municipality of São José dos Campos		•		
506	Municipality of São Paulo		•	•	
507	Municipality of Sierra Mojada				

No	Name	Urban LEDs	Compact of Mayors	EHCC	100% RE
508	Municipality of Soria			•	
509	Municipality of Sorocaba	•	•	•	
510	Municipality of Tafi Viejo		•		
511	Municipality of Tapalqué		•		
512	Municipality of Tecalitlan				
513	Municipality of Tepoztlán				
514	Municipality of the City of San Salvador				
515	Municipality of the City of Santa Ana				
516	Municipality of the Metropolitan District of Quito		•	•	
517	Municipality of the Tourist Resort of Itu		•		
518	Municipality of Tlacotepec de Benito Juárez				
519	Municipality of Tlalnepantla de Baz		•		
520	Municipality of Tolar Grande		•		
521	Municipality of Tolosa		•	•	
522	Municipality of Toluca de Lerdo		•		
523	Municipality of Torrejón de Ardoz			•	
524	Municipality of Tres Isletas		•		
525	Municipality of Uranga		•		
526	Municipality of Valencia			•	
527	Municipality of Valle Hermoso		•		
528	Municipality of Valledupar		•	•	
529	Municipality of Villa de Zaachila				
530	Municipality of Villa di Serio			•	
531	Municipality of Villa Elisa		•		
532	Municipality of Villa General Belgrano		•		
533	Municipality of Villa Pehuenia		•		
534	Municipality of Villavicencio			•	
535	Municipality of Villeurbanne		•		
536	Municipality of Vitoria-Gasteiz		•	•	
537	Municipality of Winifreda		•		
538	Municipality of Wrocław		•		
539	Municipality of Xalapa-Enríquez				
540	Municipality of Yalova				
541	Municipality of Yautepec de Zaragoza				
542	Municipality of Yurécuaro				
543	Municipality of Zapopan				
544	Municipio de Cayey		•		
545	Musanze District Government			•	
546	Musashino City				
547	Musoma District Council				
548	Na Kaeo Municipality			•	
549	Nagahama City				
550	Nagareyama City				
551	Nagasaki Prefectural Government				

No	Name	Urban LEDs	Compact of Mayors	EHCC	100% RE
552	Nagoya City				
553	Nagpur Municipal Corporation	•	•	•	
554	Naha City				
555	Nakano City				
556	Nang Lae Municipality			•	
557	Nantes Métropole		•	•	
558	Nara City				
559	Nashik City Corporation			•	
560	Nelson Mandela Bay Metropolitan Municipality (Port Elizabeth)	•	•	•	
561	Nerima City				
562	New Delhi District				
563	New Taipei City Government		•		
564	Neyagawa City				
565	Nihonmatsu City				
566	Niigata City				
567	Niigata Prefectural Government				
568	Nishinomiya				
569	Nkasi District Council				
570	Nong Samrong Town Municipality			•	
571	Nonthaburi City Municipality			•	
572	Nyagatare District Government			•	
573	Nyarugenge District			•	
574	Odawara City				
575	Oita Prefectural Government				
576	Okayama City				
577	Okazaki City				
578	Okinawa Prefectural Government				
579	Örebro Municipality			•	
580	Oriental Region				
581	Osaka Prefectural Government				
582	Osan City				
583	Oslo Municipality		•	•	
584	Östersund Municipality		•	•	
585	Ota City				
586	Otsu City				
587	Palmerston North City Council		•		
588	Penang Island City Council			•	
589	Penrith City Council		•		
590	Petalang Jaya City Council			•	
591	Phanat Nikhom Municipality			•	
592	Phanomsarakham Municipality		•	•	
593	Pimpri Chinchwad Municipal Corporation	•	•	•	
594	Pingtung County Government				
595	Pitești Municipality			•	
596	Pitești Municipality				
597	Pong Municipality			•	
598	Port Phillip City Council		•		
599	Province of Oran				
600	Province of Pichincha		•		

No	Name	Urban LEDs	Compact of Mayors	EHCC	100% RE
601	Province of Siena			•	
602	Province of Torino				
603	Provincial Government of Barcelona				
604	Pune Municipal Corporation			•	
605	Pyeongchang County Government			•	
606	Rajkot Municipal Corporation	•	•	•	
607	Regional Council of Nord-Pas-de-Calais				
608	Regional Municipality of Waterloo			•	
609	Republic of Singapore			•	
610	Ringerike Municipality			•	
611	Rong Kwang Municipality			•	
612	Säffle Municipality			•	
613	Sagamihara City				
614	Saitama City		•		
615	Saitama Prefectural Government				
616	Sakai City				
617	Saldanha Bay	•			
618	San Carlos City		•	•	
619	San Isidro Local Government			•	
620	Sandnes Municipality			•	
621	Santa Cruz County		•		
622	Santiago Metropolitan Region		•		
623	Sapporo City		•		
624	Sasebo City				
625	SEBERANG PERAI MUNICIPAL COUNCIL		•		
626	Sejong Special Autonomous City				
627	Sendai City		•		
628	Seongbuk District				
629	Seoul Metropolitan Government		•	•	
630	Setagaya City				
631	Settsu City				
632	Shah Alam City Council			•	
633	Shenzhen Municipal People's Government			•	
634	Shibuya City				
635	Shiga Prefectural Government				
636	Shimane Prefectural Government				
637	Shimla Municipal Corporation	•	•	•	
638	Shimokawa Town				
639	Shimonoseki City				
640	Shinjuku City				
641	Shiyanga District Council				
642	Shizuoka City				
643	Shizuoka Prefectural Government				
644	Sigtuna kommun				
645	Siha District Council				
646	Sikhio Town Municipality			•	
647	Sisaket Town Municipality			•	

No	Name	Urban LEDs	Compact of Mayors	EHCC	100% RE
648	Södertälje Municipality			●	
649	Sol Plaatje Local Municipality	●			
650	Sollentuna Municipality			●	
651	Special Capital Region of Jakarta		●	●	
652	State of Minas Gerais				
653	State of Nordrhein-Westfalen				
654	State of Rio de Janeiro				
655	Stavanger Municipality			●	
656	Steve Tshwete Local Municipality	●	●		
657	Suita City				
658	Sumida City		●		
659	Surat Municipal Corporation			●	
660	Suwon City		●	●	
661	Tabora Municipal Council				
662	Täby Municipality			●	
663	Taichung City Government		●		
664	Tainan City Government		●		
665	Taipei City Government		●		
666	Taito City				
667	Takarazuka City				
668	Takatsuki City				
669	Taoyuan City Government		●		
670	Tegucigalpa, Municipality of the Central District		●		
671	Thane Municipal Corporation	●		●	
672	The City of Thunder Bay		●		
673	The Municipal Council of Vacoas-Phoenix		●		
674	Thungsong Municipality		●	●	
675	Tokorozawa City				
676	Tokushima City				
677	Tokyo Metropolitan Government		●		
678	Tottori City				
679	Tottori Prefectural Government				
680	Toulouse Métropole			●	
681	Town of Ajax			●	
682	Town of Blacksburg		●		
683	Town of Caledon			●	
684	Town of Dedham			●	
685	Town of Halton Hills		●		
686	Town of Morristown			●	
687	Town of Oakville		●		
688	Township of Hamilton		●	●	
689	Toyama City		●		
690	Toyama Prefectural Government				
691	Toyonaka City				
692	Trollhättan Municipality			●	
693	Tsukuba City				
694	Ube City				
695	Ulaanbaatar City				
696	Ulsan Metropolitan City				

No	Name	Urban LEDs	Compact of Mayors	EHCC	100% RE
697	Umeå Municipality			●	
698	uMhlathuze Local Municipality	●	●		
699	Umong Municipality			●	
700	Upplands Väsby Municipality			●	
701	Uppsala Municipality		●	●	
702	Ushetu Division Council				
703	Utsunomiya City				
704	Vårgårda Municipality			●	
705	Västerås Municipality		●	●	
706	Växjö Municipality		●	●	●
707	Village of Oak Park			●	
708	Village of Pinecrest		●	●	
709	Wakayama Prefectural Government				
710	Wanju County Government				
711	Warsaw	●	●		
712	Wellington City Council		●		
713	Welsh Government				
714	Wonju City			●	
715	Yamagata Prefectural Government				
716	Yamaguchi City				
717	Yamaguchi Prefectural Government				
718	Yamanashi Prefectural Government				
719	Yao City				
720	Yasothon Municipality			●	
721	Yeosu City			●	
722	Yokohama City		●		
723	Yokosuka City				
TOTAL		31	288	125	7
Share in %		4,27	39,7	17,2	0,96

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