



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.”

01

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

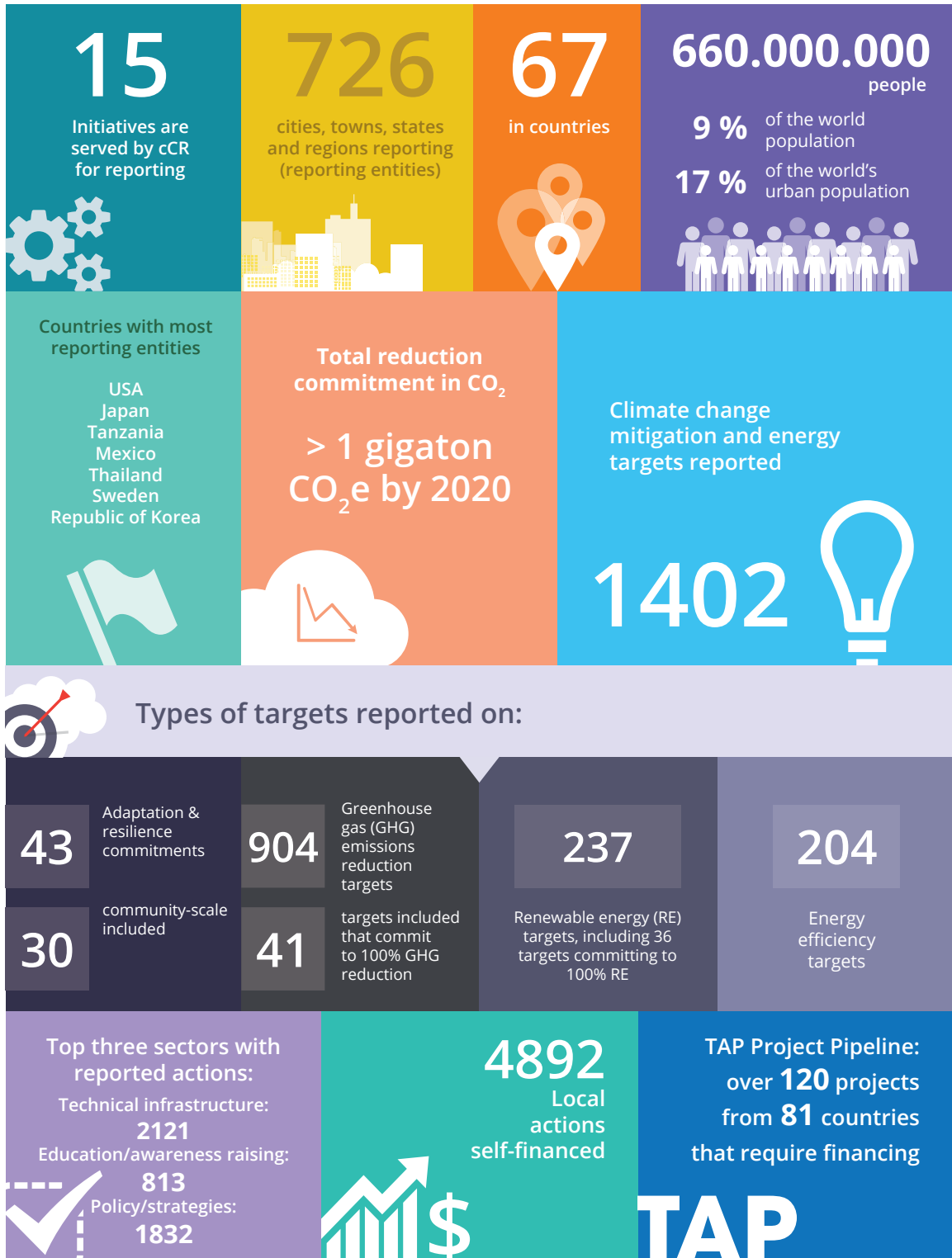
Local and subnational governments increasingly commit to tackling climate change and tracking progress, but is still mostly a voluntary activity. Different types of commitments and targets are reported, showing a diversity of approaches tailor-made to the local context. It is encouraged that targets 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



02

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

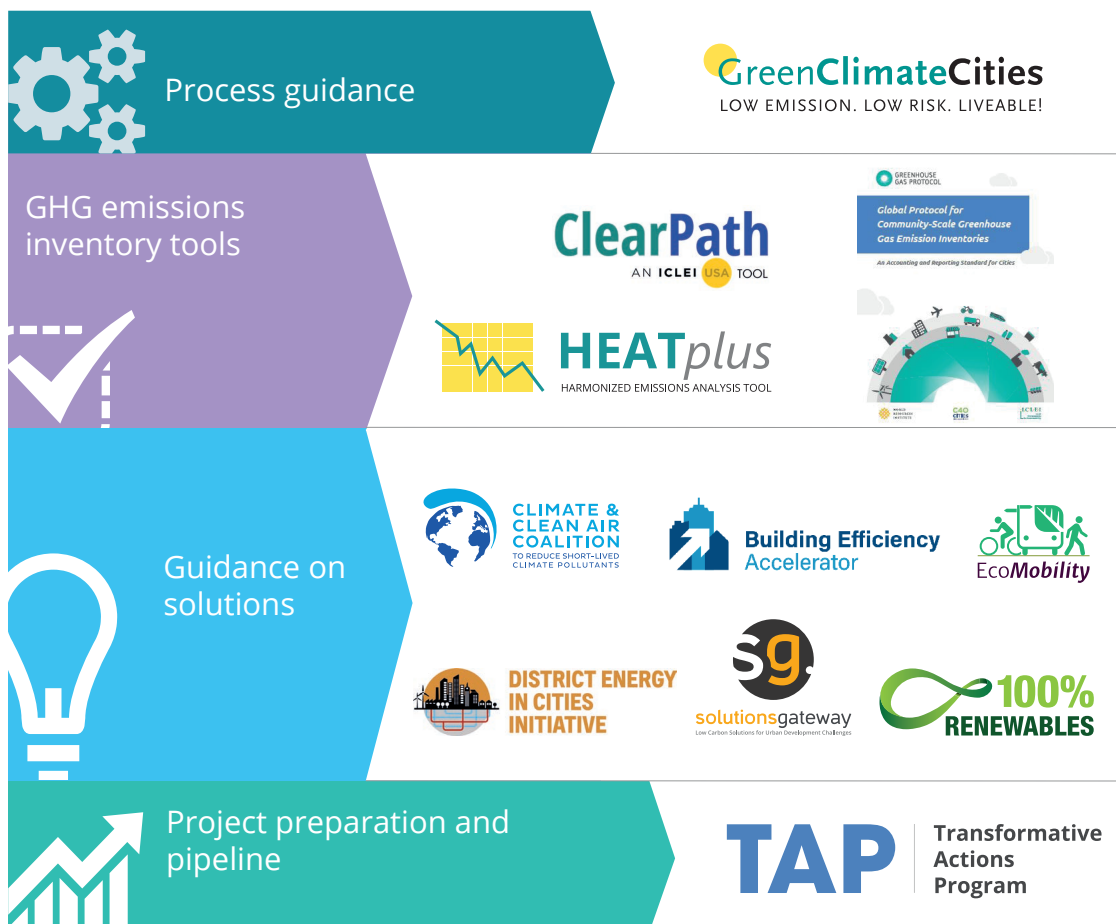
ICLEI, as Constituency focal point for the Local Governments and Municipal Authorities (LGMA) and as an LGMA member representing its network of local and subnational governments in the UNFCCC process, is advocating for enabling framework conditions for subnational jurisdictions and effective vertical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

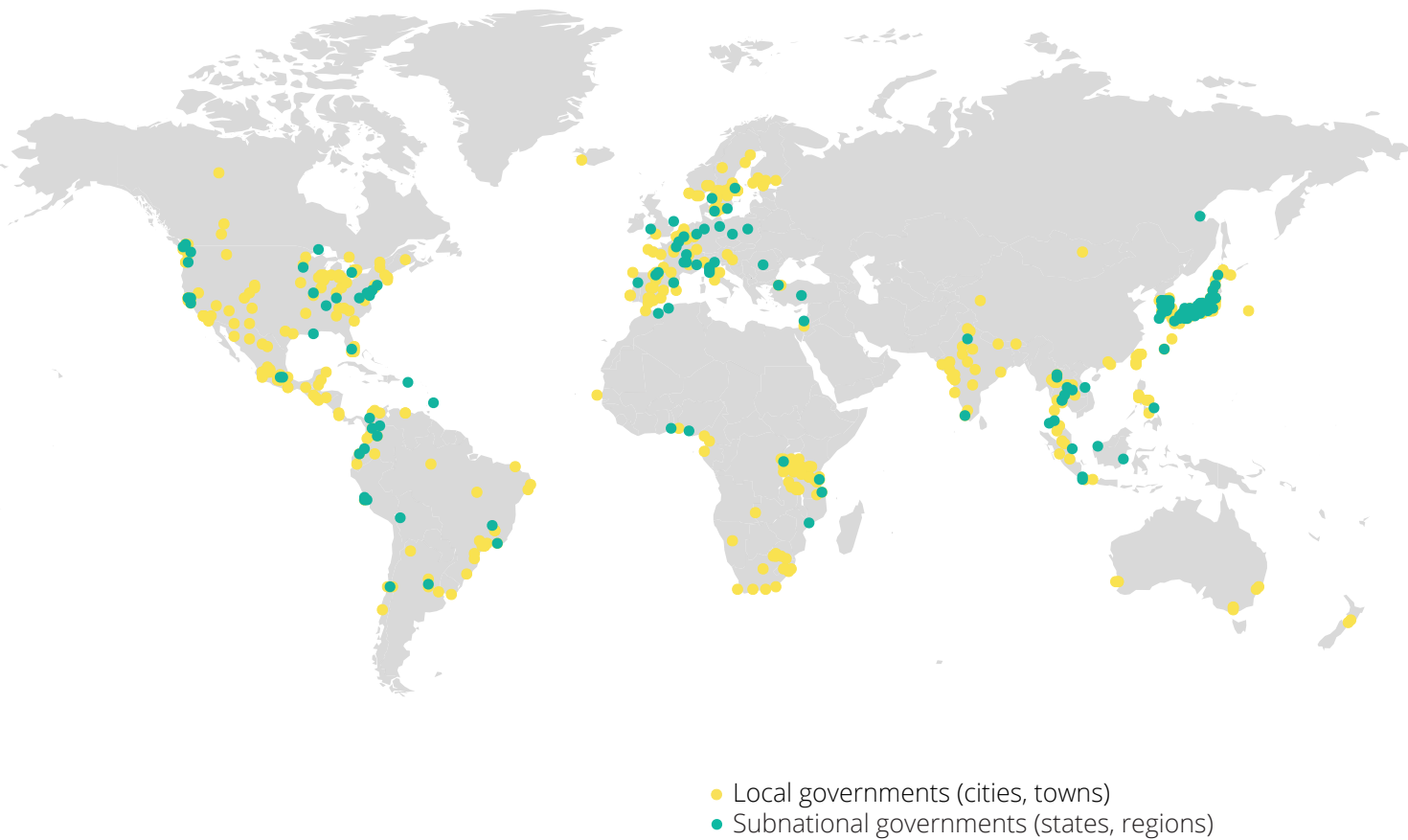
ICLEI's support package for local and subnational governments:



03

Map of local and subnational governments reporting

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

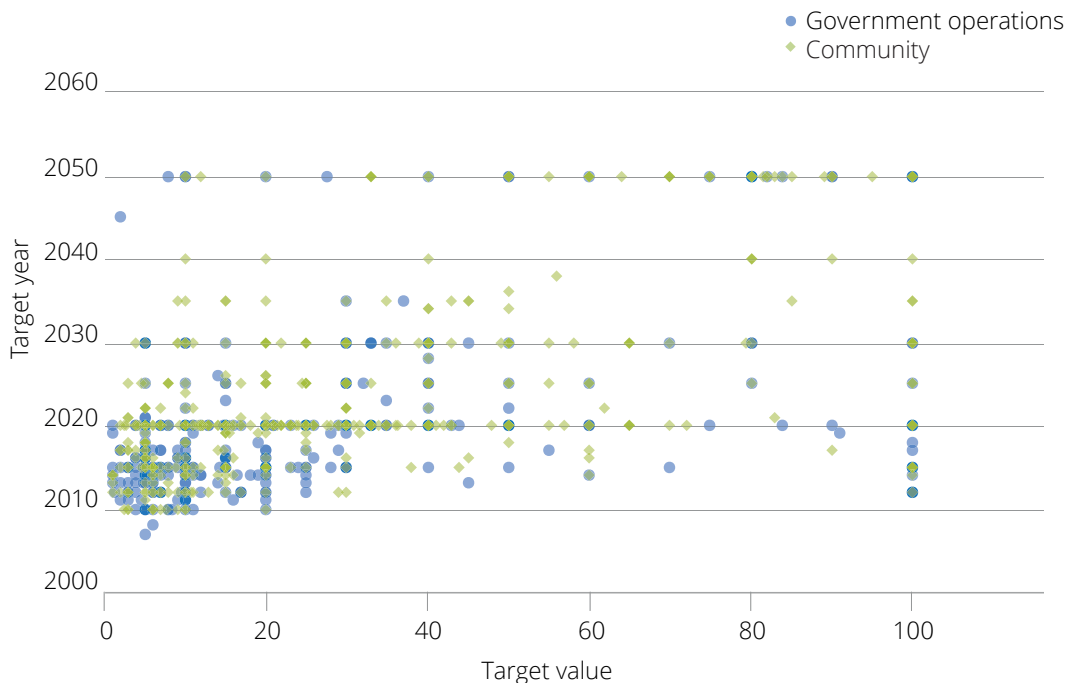


04

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.

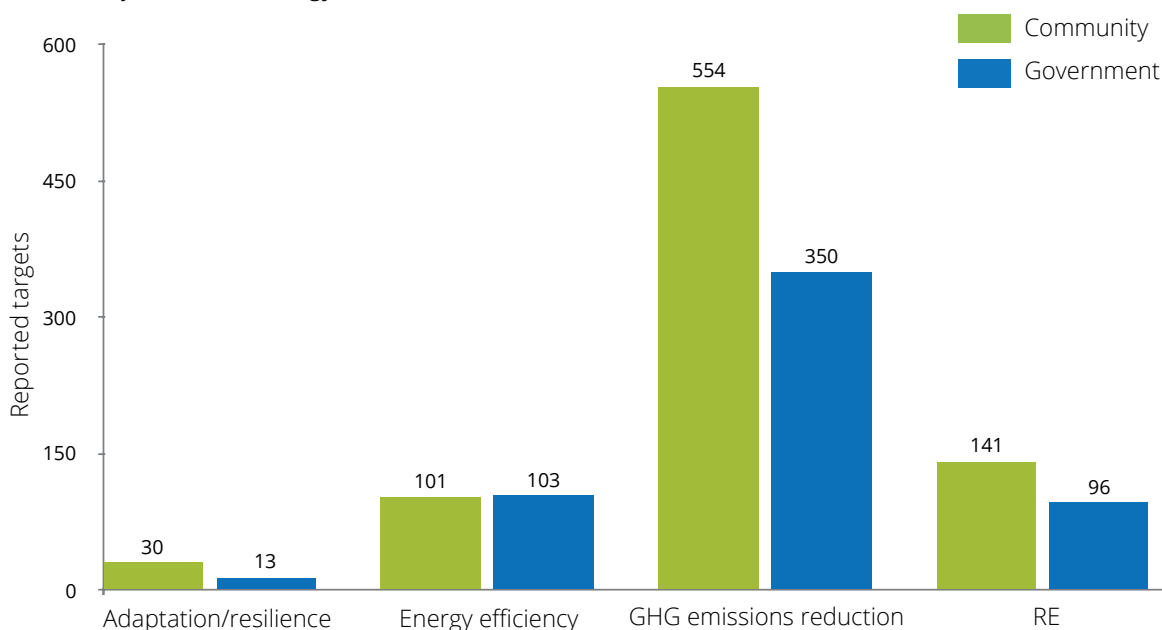
Graph 1: Reported commitments by target year and base year, a combination of adaptation and mitigation



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

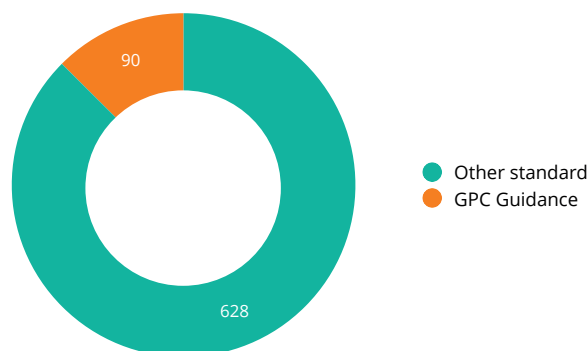
Champion cities		
City	Country	Renewable Energy target
Aspen	USA	100% RE electricity by 2015; achieved
Australian Capital Territory	Australia	100% RE electricity by 2020 (legislated)
Byron Shire	Australia	100% RE at community-scale by 2025
Inje County	South Korea	100% RE electricity by 2045
Jeju Province	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>

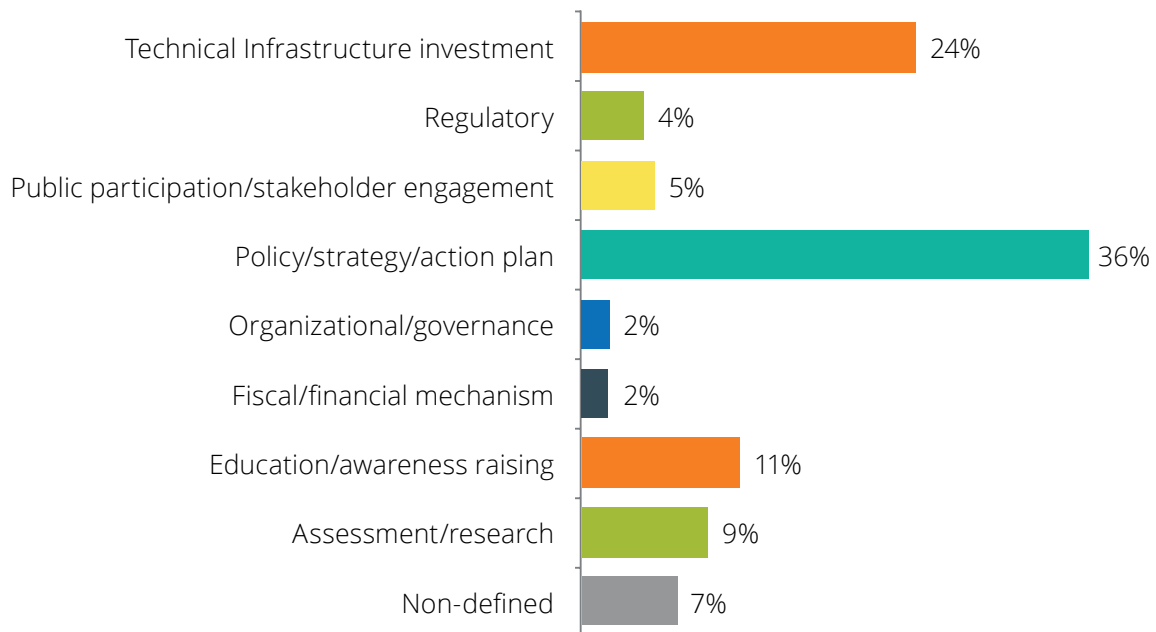
⁴ The Compact of Mayors uses the GPC as part of its robust reporting framework. The Compact of Mayors has released the 2016 report with aggregated data projections "CLIMATE LEADERSHIP AT THE LOCAL LEVEL: Global Impact of the Compact of Mayors".

Taking action

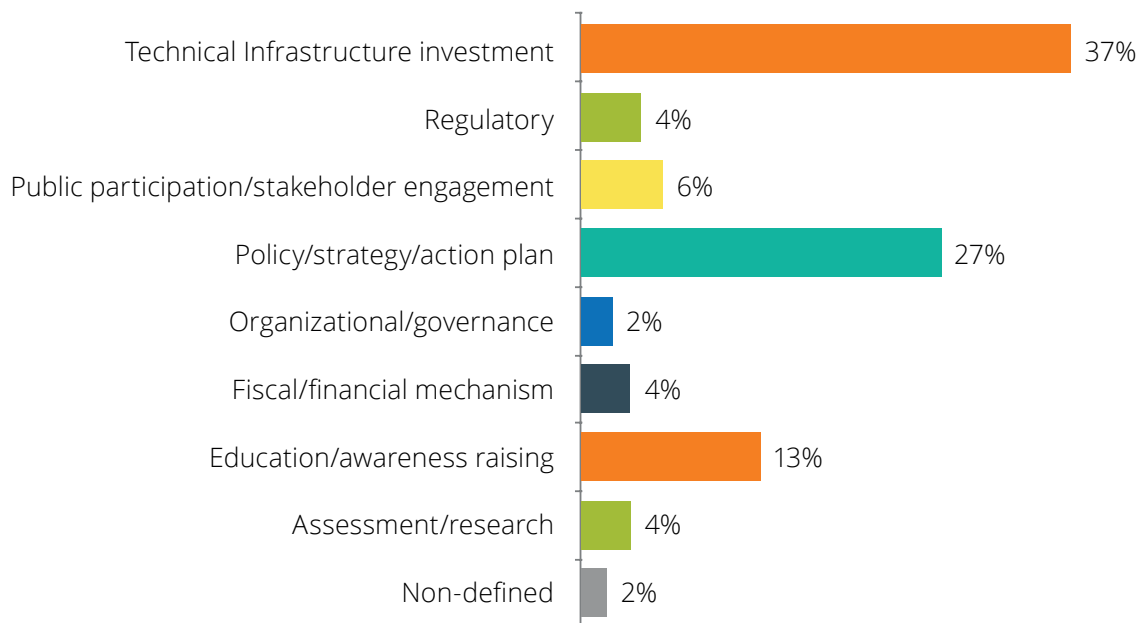
6287 actions were reported to the cCR with a wide range of co-benefits also identified.

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	No	Name	Urban LEDs	Compact of Mayors	EHCC	100% RE
82	City of Charleston					132	City of Lahti				
83	City of Charlottesville					133	City of Lake Macquarie Council				
84	City of Chefchaouen					134	City of Lappeenranta				●
85	City of Chicago		●			135	City of Las Cruces				
86	City of Chula Vista		●	●		136	City of Las Vegas		●		
87	City of Cimahi					137	City of Libreville		●		
88	City of Cincinnati					138	City of Ligao				
89	City of Cleveland		●	●		139	City of Long Beach		●		
90	City of Coconut Creek					140	City of Los Altos				
91	City of Columbus		●	●		141	City of Los Angeles		●		
92	City of Colwood					142	City of Makati		●	●	
93	City of Copenhagen	●	●			143	City of Malmö		●		●
94	City of Cupertino		●			144	City of Mandurah		●		
95	City of Dakar		●			145	City of Manhattan Beach		●		
96	City of Des Moines		●			146	City of Maple Ridge				
97	City of Duluth		●			147	City of Martinez			●	
98	City of Easton		●			148	City of Mechelen				
99	City of Edmonton		●	●		149	City of Miami				
100	City of El Cerrito					150	City of Miami Beach		●		
101	City of Emeryville		●			151	City of Milwaukee		●		
102	City of Espoo		●			152	City of Minneapolis		●		
103	City of Evanston		●	●		153	City of Montréal		●		
104	City of Flagstaff					154	City of Mouscron				
105	City of Flint					155	City of Naga		●	●	
106	City of Forlì					156	City of Namur				
107	City of Fort Collins					157	City of New Orleans		●		
108	City of Foster City					158	City of New York		●		
109	City of Fredericton					159	City of North Little Rock				
110	City of Freiburg im Breisgau					160	City of North Vancouver		●	●	
111	City of Fremont		●			161	City of Oakland		●	●	
112	City of Ghent					162	City of Olympia		●		
113	City of Göteborg		●	●		163	City of Orléans				
114	City of Grand Rapids		●	●		164	City of Palm Springs		●	●	
115	City of Grande-Synthe		●			165	City of Parañaque		●	●	
116	City of Graz					166	City of Paris		●	●	
117	City of Greater Sudbury					167	City of Philadelphia		●		
118	City of Grenoble					168	City of Phuket		●	●	
119	City of Hawthorne					169	City of Pittsburg		●		
120	City of Hayward					170	City of Portland		●		
121	City of Helsinki	●	●			171	City of Providence		●		
122	City of Hillsboro					172	City of Puerto Leguizamo				
123	City of Houston		●			173	City of Quezon City		●	●	
124	City of Jambi		●			174	City of Reykjavík		●		
125	City of Janesville					175	City of Richmond		●	●	
126	City of Johannesburg Metropolitan Municipality		●	●		176	City of Rock Hill				
127	City of Joondalup		●			177	City of Rome		●		
128	City of Keene					178	City of San Rafael		●		
129	City of Kenosha					179	City of Santa Cruz		●		
130	City of Knoxville		●			180	City of Santa Fe		●		
131	City of Koprivnica					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	eThekwini 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	No	Name	Urban LEDs	Compact of Mayors	EHCC	100% RE
271	Hokkaido Prefectural Government					319	Koto City				
272	Hokuto City					320	Kristianstad Municipality				●
273	Huay Kao Kum Municipality			●		321	Kuching North City Hall				●
274	Huddinge Municipality					322	Kumamoto City				
275	Huê City People's Committee			●		323	Kurashiki City				
276	Hyogo Prefectural Government					324	Kurume City				
277	Iida City					325	Kushiro City				
278	Ikungi District Council					326	KwaDukuza Local Municipality	●	●	●	
279	Ileje District Council					327	Kyela District Council				
280	Incheon	●				328	Kyoto City				
281	Iramba District Council					329	Kyoto Prefectural Government				
282	Ishikawa Prefectural Government					330	Lampang City Municipality		●		
283	Istanbul Metropolitan Municipality	●				331	Lexington-Fayette Urban County Government				●
284	Itabashi City					332	Lindi Municipal Council				
285	Iwaki City					333	Linköping Municipality		●		
286	Jaipur Municipal Corporation					334	Lørenskog Municipality				
287	Jeju Special Self-Governing Provincial Government				●	335	Lund Municipality		●	●	
288	Jeollanam Province					336	Ma'alot-Tarshiha Municipality				
289	Jerusalem Municipality					337	Ma'alot-Tarshiha Municipality				
290	Kagawa Prefectural Government					338	Mae Raeng Municipality				
291	Kakogawa City					339	Maebashi City				
292	Kanagawa Prefectural Government					340	Magu District Council				
293	Kaohsiung City Government	●				341	Manyoni District Council				
294	Karlstad Municipality			●		342	Map Ammarit Municipality				
295	Kasumigaura City					343	Masasi Town Council				
296	Kawagoe City					344	Maswa District Council				
297	Kawaguchi City					345	Matsuyama City				
298	Kawasaki City					346	Mbeya District Council				
299	Khon Kaen Municipality	●		●		347	Mbombela Local Municipality				
300	Khun Han Municipality					348	Mbozi District Council				
301	King County	●		●		349	Meguro City				
302	Kinondoni Municipal Council					350	Melaka Historic City Council				●
303	Kisarawe District Council					351	Melbourne City Council		●		
304	Kita City					352	Metro Vancouver		●		
305	Kitakyushu City	●				353	Metropolis of Lyon				
306	Kitamoto City					354	Metropolitan Area of Valle de Aburrá				
307	Kiteto District Council					355	Metropolitan Area of Valle de Aburrá				
308	Klaeng Town Municipality					356	Metropolitan City of Florence		●		
309	Kobe City					357	Metropolitan City of Venice				
310	Kochi Municipal Corporation					358	Metropolitan District of Caracas		●		
311	Kochi Prefectural Government					359	Metropolitan Government of Nashville and Davidson County				
312	Kochi-konan City					360	Metropolitan Municipality of Lima		●		
313	Kofu City					361	Mie Prefectural Government				
314	Kokkruat Municipality	●		●		362	Minato City				
315	Komoro City					363	Mito City				
316	Kongwa District Council					364	Miyagi Prefectural Government				
317	Koriyama City					365	Miyazaki City				
318	Kota Municipal Corporation				●						

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366	Miyoshi City					414	Municipality of Correa			●	
367	Mkalama District Council					415	Municipality of Cosquin			●	
368	Mkuranga District Council					416	Municipality of Cozumel				
369	Mogale City Local Municipality	●				417	Municipality of Crespo			●	
370	Monduli District Council					418	Municipality of Cuatro Ciénagas de Carranza				
371	Mongu Municipal Council					419	Municipality of Cuautla				
372	Mornington Peninsula Shire Council		●			420	Municipality of Cuenca				
373	Morogoro Municipal Council					421	Municipality of Cuernavaca			●	
374	Moshi Municipal Council					422	Municipality of Curitiba	●		●	
375	Mpwapwa District Council					423	Municipality of Daireaux			●	
376	Msunduzi Local Municipality				●	424	Municipality of Diadema			●	
377	Mtwara Urban District Council					425	Municipality of Donostia / San Sebastián			●	●
378	Municipal Council of the City of Quelimane		●			426	Municipality of Durango			●	●
379	Municipality of A Coruña					427	Municipality of Emilia			●	
380	Municipality of Aguascalientes					428	Municipality of Errenteria			●	●
381	Municipality of Almada	●	●			429	Municipality of Fortaleza	●		●	●
382	Municipality of Amacuzac					430	Municipality of Funes			●	
383	Municipality of Amurrio		●	●		431	Municipality of General Alvear			●	
384	Municipality of Ancona					432	Municipality of Gitega				
385	Municipality of Areatza		●	●		433	Municipality of Godoy Cruz			●	
386	Municipality of Arias		●			434	Municipality of Granada				●
387	Municipality of Armenia				●	435	Municipality of Guadalajara				
388	Municipality of Armstrong		●			436	Municipality of Guaminí			●	
389	Municipality of Atlatlahucan					437	Municipality of Guarulhos			●	
390	Municipality of Atotonilco de Tula					438	Municipality of Guatemala			●	
391	Municipality of Axochiapan					439	Municipality of Hermosillo				
392	Municipality of Bacalar					440	Municipality of Herrera			●	
393	Municipality of Balmaseda		●	●		441	Municipality of Jaén				●
394	Municipality of Bariloche		●			442	Municipality of Joinville			●	
395	Municipality of Barranquilla				●	443	Municipality of Jojutla				
396	Municipality of Belo Horizonte	●	●	●		444	Municipality of Jonacatepec				
397	Municipality of Betim	●	●	●		445	Municipality of Juana Koslay			●	
398	Municipality of Bilbao		●			446	Municipality of Kadıköy				
399	Municipality of Bogotá		●	●		447	Municipality of La Rioja			●	
400	Municipality of Bucaramanga					448	Municipality of Las Flores			●	
401	Municipality of Camilo Aldao		●			449	Municipality of Lautaro				
402	Municipality of Campinas					450	Municipality of Legazpi			●	●
403	Municipality of Campinas				●	451	Municipality of León de los Aldama			●	
404	Municipality of Carcarañá		●			452	Municipality of Libertador San Martín			●	
405	Municipality of Carlos Tejedor		●			453	Municipality of Lisbon			●	
406	Municipality of Cartagena de Indias					454	Municipality of Llambi Campbell			●	
407	Municipality of Caseros		●			455	Municipality of Londrina			●	
408	Municipality of Chacabuco		●			456	Municipality of Los Molinos			●	
409	Municipality of Chaclacayo					457	Municipality of Los Molles			●	
410	Municipality of Chañar Ladeado		●			458	Municipality of Los Sargentos			●	
411	Municipality of Chihuahua		●			459	Municipality of Maceió				
412	Municipality of Contagem					460	Municipality of Madrid			●	●
413	Municipality of Córdoba		●			461	Municipality of Malabrigo			●	

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462	Municipality of Málaga					508	Municipality of São José dos Campos	●			
463	Municipality of Manaus					509	Municipality of São Paulo	●	●		
464	Municipality of Mar Chiquita	●				510	Municipality of Sierra Mojada				
465	Municipality of Maringá	●				511	Municipality of Soria			●	
466	Municipality of Mazatepec					512	Municipality of Sorocaba	●	●	●	
467	Municipality of Medellín	●				513	Municipality of Tafi Viejo		●		
468	Municipality of Mellac					514	Municipality of Tapalqué		●		
469	Municipality of Mendiolaza	●				515	Municipality of Tecalitlan				
470	Municipality of Monte Vera	●				516	Municipality of Tepoztlán				
471	Municipality of Murcia			●		517	Municipality of the City of San Salvador				
472	Municipality of Naucalpan de Juárez					518	Municipality of the City of Santa Ana				
473	Municipality of Nevşehir					519	Municipality of the Metropolitan District of Quito	●	●		
474	Municipality of Nogoyá	●				520	Municipality of the Tourist Resort of Itu	●			
475	Municipality of Oaxaca de Juárez					521	Municipality of Tlacotepec de Benito Juarez				
476	Municipality of Oeiras					522	Municipality of Tlalnepantla de Baz	●			
477	Municipality of Palma			●		523	Municipality of Tolar Grande	●			
478	Municipality of Palmas		●	●		524	Municipality of Tolosa	●	●		
479	Municipality of Porto Alegre	●	●	●		525	Municipality of Toluca de Lerdo	●		●	
480	Municipality of Puebla		●			526	Municipality of Torrejón de Ardoz				
481	Municipality of Quilpue					527	Municipality of Tres Isletas	●			
482	Municipality of Rafaela		●			528	Municipality of Uranga	●			
483	Municipality of Recife	●	●	●		529	Municipality of Valencia			●	
484	Municipality of Recoleta		●			530	Municipality of Valle Hermoso	●			
485	Municipality of Rio de Janeiro	●	●	●		531	Municipality of Valledupar	●			
486	Municipality of Rio Primero		●			532	Municipality of Villa de Zaachila				
487	Municipality of Rivadavia		●			533	Municipality of Villa di Serio				
488	Municipality of Rosario		●			534	Municipality of Villa Elisa	●			
489	Municipality of Rosario del Tala		●			535	Municipality of Villa General Belgrano	●			
490	Municipality of Salamanca					536	Municipality of Villa Pehuenia	●			
491	Municipality of Salliqueló		●			537	Municipality of Villavicencio			●	
492	Municipality of Salta		●			538	Municipality of Villeurbanne	●			
493	Municipality of San Carlos		●			539	Municipality of Vitoria-Gasteiz	●	●		
494	Municipality of San Carlos			●		540	Municipality of Winifreda	●			
495	Municipality of San Carlos Sud		●			541	Municipality of Wrocław	●			
496	Municipality of San Cristóbal de las Casas					542	Municipality of Xalapa-Enríquez				
497	Municipality of San Jerónimo de Montería			●		543	Municipality of Yalova				
498	Municipality of San Jorge		●			544	Municipality of Yautepec de Zaragoza				
499	Municipality of San José		●			545	Municipality of Yurécuaro				
500	Municipality of San Juan de Pasto			●		546	Municipality of Zapopan				
501	Municipality of San Miguel		●			547	Municipio de Cayey	●			
502	Municipality of San Pedro Tlaquepaque					548	Musanze District Government			●	
503	Municipality of San Rafael de Heredia		●			549	Musashino City				
504	Municipality of Santa Fe de la Vera Cruz					550	Musoma District Council				
505	Municipality of Santiago		●								
506	Municipality of Santiago de Cali		●	●							
507	Municipality of São Carlos										

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551	Na Kaeo Municipality					600	Pong Municipality				●
552	Nagahama City					601	Port Phillip City Council		●		
553	Nagareyama City					602	Province of Oran				
554	Nagasaki Prefectural Government					603	Province of Pichincha		●		
555	Nagoya City					604	Province of Siena				
556	Nagpur Municipal Corporation	●	●			605	Province of Torino				
557	Naha City					606	Provincial Government of Barcelona				
558	Nakano City					607	Pune Municipal Corporation				●
559	Nang Lae Municipality					608	Pyeongchang County Government				
560	Nantes Métropole		●			609	Rajkot Municipal Corporation	●	●	●	
561	Nara City					610	Regional Council of Nord-Pas-de-Calais				
562	Nashik City Corporation					611	Regional Municipality of Waterloo				
563	Nelson Mandela Bay Metropolitan Municipality (Port Elizabeth)	●	●			612	Republic of Singapore				●
564	Nerima City					613	Ringerike Municipality				
565	New Delhi District					614	Rong Kwang Municipality				
566	New Taipei City Government		●			615	Säffle Municipality				
567	Neyagawa City					616	Sagamihara City				
568	Nihonmatsu City					617	Saitama City		●		
569	Niigata City					618	Saitama Prefectural Government				
570	Niigata Prefectural Government					619	Sakai City				
571	Nishinomiya					620	Saldanha Bay	●			
572	Nkasi District Council					621	San Carlos City		●	●	
573	Nong Samrong Town Municipality					622	San Isidro Local Government				●
574	Nonthaburi City Municipality					623	Sandnes Municipality				
575	Nyagatare District Government			●		624	Santa Cruz County		●		
576	Nyarugenge District			●		625	Santiago Metropolitan Region		●		
577	Odawara City					626	Sapporo City		●		
578	Oita Prefectural Government					627	Sasebo City				
579	Okayama City					628	SEBERANG PERAI MUNICIPAL COUNCIL		●		
580	Okazaki City					629	Sejong Special Autonomous City				
581	Okinawa Prefectural Government					630	Sendai City		●		
582	Örebro Municipality			●		631	Seongbuk District				
583	Oriental Region					632	Seoul Metropolitan Government		●		
584	Osaka Prefectural Government					633	Setagaya City				
585	Osan City					634	Settsu City				
586	Oslo Municipality		●			635	Shah Alam City Council				
587	Östersund Municipality		●			636	Shenzhen Municipal People's Government				●
588	Ota City					637	Shibuya City				
589	Otsu City					638	Shiga Prefectural Government				
590	Palmerston North City Council		●			639	Shimane Prefectural Government				
591	Penang Island City Council			●		640	Shimla Municipal Corporation	●	●	●	
592	Penrith City Council		●			641	Shimokawa Town				
593	Petalang Jaya City Council			●		642	Shimonoseki City				
594	Phanat Nikhom Municipality			●		643	Shinjuku City				
595	Phanomsarakhm Municipality		●	●		644	Shiyanga District Council				
596	Pimpri Chinchwad Municipal Corporation	●	●			645	Shizuoka City				
597	Pingtung County Government					646	Shizuoka Prefectural Government				
598	Piteå Municipality			●							
599	Pitești Municipality										

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